

COUNTY OF TULARE  
RESOURCE MANAGEMENT AGENCY



5961 South Mooney Boulevard  
Visalia, CA 93277

**Three Rivers Hampton Inn and Suites  
Three Rivers, CA**

Draft Environmental Impact Report  
SCH# 2020110016

March 2021

Prepared by:  
County of Tulare Resource Management Agency  
Economic Development and Planning Branch  
Environmental Planning Division

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## Appendices

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- “*Air Quality & Greenhouse Gas Assessment, Three Rivers Hampton Inn and Suites Project, Tulare County, California*” prepared by ECORP Consulting, Inc., July 2020 (Updated October 2020).

### Appendix B: Biological Resources Assessment

- “*Biological Resources Assessment, Hampton Inn and Suites Three Rivers, Tulare County, California*” prepared by ECORP Consulting, Inc., August 19, 2020
- “*Hampton Inn and Suites, Three Rivers, Tulare County, California – Special-Status Plant Survey*” prepared by ECORP Consulting, Inc., July 6, 2020

### Appendix C: Cultural and Tribal Cultural Resources

- “*Cultural Resources Inventory Report, Hampton Inn and Suites Three Rivers, Tulare County, California*” prepared by ECORP Consulting, Inc., June 2020. **(Confidential)**

### Appendix D: Noise Impact Assessment

- “*Noise Impact Assessment, Three Rivers Hampton Inn and Suites Project, Tulare County, California*” prepared by ECORP Consulting, Inc., August 2020.

### Appendix E: Traffic Impact Study

- “*Three Rivers Hampton Inn & Suites Traffic Impact Study Report*” prepared by VRPA Technologies, Inc., June 2020.

### Appendix F: Wastewater Treatment

- “*Hampton Inn & Suites Report of Waste Discharge Technical Report*” prepared by ALD General Engineering, Inc., October 14, 2020.

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- Notice of Preparation
- Scoping Meeting
- Agency Comment Letters Received

## Executive Summary

This Draft Environmental Impact Report (Draft EIR, DEIR, or EIR) concludes that the proposed Three Rivers Hampton Inn & Suites Project (“Project” or “Proposed Project”) would result in a ***Less Than Significant Impact*** to any resource.

The proposed Project includes the development a 3-story hotel and associated site improvements on an approximately 2.80-acre site at 40758 Sierra Drive, immediately south of the existing Comfort Inn & Suites, located along the eastern side of State Route 198 (SR 198) in Three Rivers, an unincorporated area of Tulare County. The proposed Project will have one access/egress point from SR 198. A driveway road is proposed from SR 198/Sierra Drive west of the proposed Project’s location. This driveway will be situated within an existing 30-foot wide access easement. The hotel will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.) and an outdoor swimming pool and a cabana building. The proposed Project includes 108 standard parking stalls (six (6) of which will be handicap accessible stalls). Utilities include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration).

The DEIR has been prepared consistent with the California Environmental Quality Act (CEQA). Its intent is to inform the public and the Tulare County Planning Commission and Tulare County Board of Supervisors of the potential environmental impacts the proposed Project could have on resources as specified in the CEQA Guidelines. This DEIR, in its entirety, addresses and discloses potential environmental effects associated with construction and operation of the proposed Project, including direct, indirect, and cumulative impacts in the following resource areas:

Aesthetics	Mineral Resources
Agriculture and Forestry Resources	Noise
Air Quality	Population and Housing
Biological Resources	Public Services
Cultural Resources	Recreation
Energy	Transportation/Traffic
Geology and Soils	Utilities-and Service Systems
Greenhouse Gas Emissions	Tribal Cultural Resources
Hazards and Hazardous Materials	Wildfire
Hydrology and Water Quality	Mandatory Findings of Significance
Land Use and Planning	

Although the Mandatory Findings of Significance is not a resource per se, it is required as it essentially provides a summary conclusion of the Project’s potential on Long Term Impacts; Cumulative Impacts; and Impacts to Species, Historical Resources, and on Human Beings. It is at this discussion where the EIR concludes that there would be no significant adverse environmental impacts as a result of this Project.

CEQA requires that local government agencies, prior to taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. An EIR is a public disclosure document designed to provide local and state governmental agency decision makers with an objective analysis of potential environmental consequences to support informed decision-making. This DEIR (**State of California Clearinghouse # 2020110016**) has been prepared by Tulare County in accordance with CEQA Guidelines Sections 15120 through 15131 and Section 15161 regulating EIRs to i) evaluate the environmental consequences of the Project, ii) to discuss alternatives to the proposed Project, and iii) to propose mitigation measures that will offset, minimize or avoid identified significant environmental impacts. This document focuses on issues determined to be potentially significant as discussed in the Initial Study and the public scoping process completed for this Project, as well as comments received on the Notice of Preparation (NOP) circulated by Tulare County in November 2020. Pursuant to CEQA Guidelines Section 15082, the NOP for the proposed Project was circulated for review and comment on November 2, 2020 and circulated for a 30-day comment period ending December 2, 2020. A Scoping Meeting was duly noticed and held on November 5, 2020, during the NOP comment period, at Tulare County RMA Main Conference Room at 5961 South Mooney Boulevard, Visalia, CA to solicit input on the scope of the EIR. No comments were received during this meeting (see Appendix “G” of this DEIR).

## **PROJECT DESCRIPTION**

The Applicant is pursuing a Building Permit through Tulare County for the establishment of a 3-story, 105-guest room hotel and associated site improvements including a 108-stall parking lot, an outdoor swimming pool and a cabana building, septic system, and on-site storm drainage system. The proposed Project is consistent with the Tulare County General Plan, the Three Rivers Community Plan, and with current Zoning classification.

## **PROJECT LOCATION**

The proposed Project will be located in the Sierra Nevada foothills, approximately 50 miles southeast of the City of Fresno, 20 miles northeast of the City of Visalia, and 70 miles northeast of the City of Bakersfield. The proposed Project will be located at located along California State Route 198 in Three Rivers, California on approximately 2.80 acres. Assessor's Parcel Number 068-080-010. The site is currently designated within Urban Development Boundaries in the Tulare County General Plan and existing zoning is designated C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone). The site is currently vacant and surrounded by the commercial use (Comfort Inn & Suites) to the north, an undeveloped/vacant lot to the east, scattered rural residential and above ground propane storage tanks to the south, and two rural residences, undeveloped/vacant land, and the Kaweah River to the west. The site is within the Kaweah 7.5 Minute USGS Quadrangle and lies within Section 26, Township 17S, Range 28E, MDBM. The coordinates of the proposed Project site are 35° 25' 27.31" N, 118° 54' 55.84" W.

## PROJECT ELEMENTS

Hotel Facilities: As noted earlier, the proposed Project is consistent with the Tulare County General Plan, the Three Rivers Community Plan, and with the current Zoning classification. The proposed Project includes a 3-story hotel and associated site improvements on the existing parcel with access from SR 198. A driveway road is proposed from SR 198/Sierra Drive west of the proposed Project's location within an existing 30-foot wide access easement. The hotel will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.) and an outdoor swimming pool and a cabana building. The proposed Project is anticipated to have 12 employees, 70 customers, 1 delivery, and 1 shipment per day, for an average total of 825 daily vehicle trips. Figures 2-1 through 2-5 show the Project Vicinity, Aerial View of the Site, Existing Zoning, Overall Site Plan and Floor Plan; respectively

Parking Facilities: Consistent with Tulare County parking requirements, the proposed Project includes 108 standard parking stalls (six (6) of which will be handicap accessible stalls).

Propane: The applicant will use an on-site propane tank. The propane tank will be refilled on a routine basis using a propane tanker truck that pumps fuel directly into the propane tank.

Electricity: The proposed Project will utilize electricity provided by Southern California Edison.

Water and Sewer: A new water well for domestic uses will be utilized. well. Utilities include a on-site septic tank with filter and dripline system will be utilized for wastewater generated by the proposed Project.

Storm Drainage: Storm drainage will be retained on-site (with an option for biofiltration). On-site storm drainage will be routed to swales located at the western part of site.

Landscaping: The proposed hotel will be approximately 34'-8" in height and will be setback approximately 300 feet from Sierra Drive/SR 198 and screened with vegetation (trees and shrubs) to effectively minimize line-of-sight views from the public right-of-way. A map of the landscaping plan is provided in **Figure 3.1-1**.

## PROJECT OBJECTIVES

- Tulare County General Plan Policy ED-3.1 (Diverse Economic Base) encourages the development of a diversified economic base by continuing to promote agriculture, recreation services, and commerce, and by expanding its efforts to encourage industrial development including the development of energy resources; ED-5.7 (Foothills) encourages additional recreational and visitor-serving development in the Sierra and foothills in areas such as Three Rivers and Springville as gateway communities; and LU-4.4 (Travel-Oriented Tourist Commercial Uses) requires travel-oriented tourist commercial uses (for example, entertainment, commercial recreation, lodging, fuel) to be used in areas where traffic patterns are oriented to major arterials and highways. The



proposed Project consists of commercial development that is allowed by-right and is not only consistent with the existing zoning classification, but also the existing land use designation as contained in the Tulare County General Plan 2030 Update.

- The proposed Project would implement many Three Rivers Community Plan goals, objectives, and policies. Following are some of the more significant: Objective 1.1 Development Compatibility: Ensure compliance with the Community Plan to ensure compatibility between and within new and existing development. Policy 1.1.2 Mixed Uses to ensure that development to accommodate growth includes a balanced mix of residential, commercial, and public uses that enhance the community's economic vitality while maintaining its rural character and quality of life. Policy: 1.2.1 New Development Compatibility to ensure that the size, type, and scale of new development in Three Rivers is compatible with the rural character of the community. Policy 1.2.13 SL-3.3 Highway Commercial wherein the County shall require highway commercial uses to be located and designed to reduce their visual impact on the travel experience along State scenic highways and County scenic routes. Goal 2: Economic Vitality: A strong, diversified economic environment within Three Rivers which is consistent with the rural and visual atmosphere of the community. Policy 2.1.4 Highway-Oriented Commercial Development to maintain existing commercial areas along SR 198 to the extent feasible for highway-oriented commercial development. Objective 2.2 Business Attraction, Expansion, and Retention: To promote business growth and industry diversification and maintain a favorable business climate and a supportive economic foundation. In summary, the proposed Project is consistent with and implements these and many other Three Rivers Community Plan goals, objectives, and policies.
- The Project would accommodate visitors/tourists to the Three Rivers area by implementing the following: Objective 1.1 Development Compatibility, Policy 1.1.4 Compatible Commercial Establishments, to encourage compatible commercial establishments necessary to serve residents and tourists that are commensurate with the scale and intensity of the community, preserve the environment, and which do not have to the extent feasible, significant traffic, light, noise or visual impacts to the community. Goal 2: Economic Vitality, Policy 2.1.5 ED-5.4 Recreational Accommodations, wherein the County shall support the development of visitor-serving attractions and accommodations in unincorporated areas near natural amenities and resources that would not be diminished by tourist activities. Policy 2.1.8 ED-5.7 Foothills wherein the County shall encourage additional recreational and visitor-serving development in the Sierra and foothills in areas such as Three Rivers. The proposed Project's proximity to SR 198 and Sequoia-Kings Canyon National Parks) is ideally suited to accommodate the proposed Three Rivers Hampton Inn & Suites project.
- The proposed Project is intended to implement Applicant's strategic business plan by planning, designing, constructing, and operating a facility which is economically, technologically, and environmentally feasible.

## **TULARE COUNTY OBJECTIVES**

Tulare County's General Plan Policies that are applicable to the proposed Project's purpose and objectives are included in each CEQA Checklist Resource chapter contained in Chapters 3-1 thru 3-20. One hundred eighty-three (183) General Policies apply to this Project; following is a summary of some of those policies:

AG-1.1	Primary Land Use
AG-1.7	Preservation of Agricultural Lands
AQ-1.1	Cooperation with Other Agencies
AQ-1.2	Cooperation with Local Jurisdictions
AQ-1.3	Cumulative Air Quality Impacts
AQ-1.4	Air Quality Land Use Compatibility
AQ-1.5	California Environmental Quality Act (CEQA) Compliance
AQ-1.7	Support Statewide Climate Change Solutions
AQ-1.8	Greenhouse Gas Emissions Reduction Plan/Climate Action Plan
AQ-1.9	Support Off-Site Measures to Reduce Greenhouse Gas Emissions
ED-2.2	Land Requirements
ED-3.1	Diverse Economic Base
ERM-1.1	Protection of Rare and Endangered Species
ERM-1.2	Development in Environmentally Sensitive Areas
ERM-1.15	Minimize Lighting Impacts
ERM-1.16	Cooperate with Wildlife Agencies
ERM-4.1	Energy Conservation and Efficiency Measures
ERM-4.3	Local and State Programs
ERM-4.4	Promote Energy Conservation Awareness
ERM-5.5	Collocated Facilities
ERM-6.1	Evaluation of Cultural and Archaeological Resources
ERM-6.2	Protection of Resources with Potential State or Federal Designations
ERM-6.3	Alteration of Sites with Identified Cultural Resources
ERM-6.4	Mitigation
ERM-6.8	Solicit Input from Local Native Americans
ERM-6.9	Confidentiality of Archaeological Sites
ERM-6.10	Grading Cultural Resources Sites
HS-2.4	Structure Siting
HS-2.8	Alquist-Priolo Act Compliance
HS-6.1	New Building Fire Hazards
HS-6.8	Private Water Supply
HS-7.1	Coordinate Emergency Response - Services with Government Agencies
HS-8.3	Noise Sensitive Land Uses
HS-8.13	Noise Analysis
HS-8.19	Construction Noise Control
LU-5.3	Storage Screening
LU-5.4	Compatibility with Surrounding Land Use
LU-5.5	Access

LU-7.6	Screening
PF-4.14	Compatible Project Design
PFS-2.3	Well Testing
PFS-3.1	Private Sewage Disposal Standards
PFS-4.3	Development Requirements
PFS-4.4	Stormwater Retention Facilities
PFS-4.5	Detention/Retention Basins Design
PFS-4.7	NPDES Enforcement
PFS-7.1	Fire Protection
PFS-7.2	Fire Protection Standards
PFS-7.3	Visible Signage for Roads and Buildings
PFS-7.5	Fire Staffing and Response Time Standards
PFS-7.9	Sheriff Response Time
SL-1.1	Natural Landscapes
SL-1.2	Working Landscapes
TC-1.15	Traffic Impact Study
TC-1.16	County Level Of Service (LOS) Standards
WR-2.1	Protect Water Quality
WR-2.2	National Pollutant Discharge Elimination System (NDPES) Enforcement
WR-2.3	Best Management Practices (BMPs)
WR-2.4	Construction Site Sediment Control
WR-2.5	Major Drainage Management
WR-2.6	Degraded Water Resources
WR-2.8	Point Source Control
WR-3.3	Adequate Water Availability
WR-3.5	Use of Native and Drought Tolerant Landscaping
WR-3.6	Water Use Efficiency
WR-3.10	Diversion of Surface Water

## **PROJECT BENEFITS**

As detailed in Chapter 2, the Project will result in multiple Project Benefits. The Project will provide the following public and private benefits to Tulare County.

- 1) The Project will facilitate the availability of overnight accommodations for visitors/tourists in the Three Rivers area by making available 105 rooms.
- 2) The Project will directly create approximately 12 new, full-time jobs for Tulare County residents.
- 3) With the availability of up to 105 rooms, visitors/tourists would not have to drive to Visalia (or other communities) thereby reducing vehicle miles travelled. As such, air quality emissions, greenhouse gas emissions, and energy (in the form of gasoline/diesel usage) would be reduced.

- 4) Tulare County's General Plan and Three Rivers Community Plan Policies that are consistent with the Project's purpose and objectives are included in each CEQA Checklist Resource chapter contained in Chapters 3-1 thru 3-21. One hundred eighty-three (183) General Policies apply to this Project.
- 5) The proposed Project would generate sales taxes, transit occupancy taxes, and result in an overall increase in property valuation at the site.

## **SUMMARY OF CHAPTERS**

### ***Chapter 1 Introduction***

The County of Tulare is proposing the Three Rivers Hampton Inn & Suites Project to allow the development of a 105-guest room, 3-story hotel, and associated site improvements on an existing parcel with one access/egress point from State Route (SR) 198/Sierra Drive. The Project site is located within the Three Rivers Community Urban Development Bounty. The proposed Project lies within Section 26, Township 17S, Range 28E, M.D.B. & M. The site is currently zoned C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone).

**Local Regulatory Context:** The Tulare County General Plan Update 2030 was adopted on August 28, 2012. As part of the General Plan, an EIR and background report were prepared. The General Plan background report contained contextual environmental analysis for the General Plan. The Three Rivers Community Plan 2018 Update (Community Plan) was adopted on June 26, 2018. The major objective of Three Rivers Community Plan was to develop a plan that accurately reflects the needs and priorities of the community and of its residents, businesses, and employers and provide new opportunities to provide economic development to provide services in the community while preserving its historical rural character and valuable natural resources. The proposed Project is consistent with the Tulare County General Plan, the Three Rivers Community Plan, and with current Zoning classification.

**Identification of Potentially Significant Impacts:** Indicates that the EIR must identify potentially significant impacts consistent with CEQA Guidelines Section 15002 (h).

**Consideration of Significant Impacts:** Indicates that the EIR must consider significant impacts consistent with CEQA Guidelines Section 15126.2.

**Mitigation Measures:** Indicates that the EIR is required to contain mitigation measures consistent with CEQA Guidelines Section 15126.4.

**Environmental Review Process:** Summarizes steps taken prior to release of the Draft EIR such as the Notice of Preparation, Scoping Meeting, and comments received from persons and/or agencies in response to the Notice of Preparation.

## ***Chapter 2 Project Description, Objectives, and Environmental Setting***

As noted earlier, the Three Rivers Hampton Inn & Suites Project is a proposed plan for development of a 105-guest room, 3-story hotel on a total of 2.8 acres, and includes a driveway from SR 198/Sierra Drive west of the proposed Project's location within a 30-foot wide easement, an outdoor swimming pool and a cabana building, 108-stall parking lot (six (6) of which will be handicap accessible stalls ), septic tank with filter and dripline system, a new domestic well, and on-site storm drainage.

In summary, Chapter 2 contains the following:

- **Project Location:** The proposed Project will be located at 40758 Sierra Drive, immediately south of the existing Comfort Inn & Suites, located along the eastern side of Sierra Drive/State Route 198, in Three Rivers.
- **Vicinity of Project Site:** The proposed Project will be located in the Sierra Nevada foothills, approximately 50 miles southeast of the City of Fresno, 30 miles northeast of the City of Visalia, and 70 miles northeast of the City of Bakersfield. The site is surrounded by the commercial use (Comfort Inn & Suites) to the north, an undeveloped/vacant lot to the east, scattered rural residential and above ground propane storage tanks to the south, and two rural residences, undeveloped/vacant land, and the Kaweah River to the west. (See **Figures 2-1** and **2-2**).
- **Project Description** (baseline conditions information pertinent to the proposed Project): Describes the existing land use and the improvements proposed with the development of the hotel.
- **Project Objectives and Benefits:** See earlier discussion or Chapter 2.
- **Regulatory Setting:** Applicable statutes, rules, regulations, standards, policies, etc. of the County of Tulare, local or special districts, utilities, and State and Federal governments.

## ***Chapter 3 Impact Analysis of Resources***

The CEQA Guidelines include a Checklist of resources that must be addressed in an EIR. These resources are listed on page ES-1. There are 20 specific Resources and Mandatory Findings of Significance discussed in detail in Chapter 3. The Resources are discussed in separate sections of Chapter 3 and each section is structured as follows:

- Summary of Findings;
- Introduction, including Thresholds of Significance;
- Environmental Settings;
- Regulatory Settings such as applicable Federal, State, and Local laws, statutes, rules, regulations, and policies;

- Impact Evaluation including Project Impacts, Cumulative Impacts, Mitigation Measures, and Conclusion;
- Definitions and Acronyms; and
- References.

Some resources required expertise to evaluate the Project's potential for impacts. As such, qualified experts prepared studies, evaluations, assessments, modeling, search results, etc. (studies/technical memoranda/search results; i.e.; supporting documents) to quantify and/or qualify potential resource impacts. The supporting documents are contained in Appendices "A" through "F". Among the studies are: Appendix "A" includes "*Air Quality & Greenhouse Gas Assessment, Three Rivers Hampton Inn and Suites Project, Tulare County, California*;" Appendix "B" includes "*Biological Resources Assessment, Hampton Inn and Suites Three Rivers, Tulare County, California*" and "*Hampton Inn and Suites, Three Rivers, Tulare County, California – Special-Status Plant Survey*;" Appendix "C" includes "*Cultural Resources Inventory Report, Hampton Inn and Suites Three Rivers, Tulare County, California*;" Appendix "D" includes "*Noise Impact Assessment, Three Rivers Hampton Inn and Suites Project, Tulare County, California*;" Appendix "E" includes "*Three Rivers Hampton Inn & Suites Traffic Impact Study Report*;" Appendix "F" includes "*Hampton Inn & Suites Report of Waste Discharge Technical Report*;" and Appendix "G" includes Notice of Preparation, Public Scoping Meeting, and Agency Comment Letters Received.

#### ***Chapter 4 Summary of Cumulative Impacts***

A critically important component of an EIR is the Cumulative Impacts discussion. Chapter 5 discusses a Cumulative Impact Analysis under CEQA. Including Past, Present, Probable Future Projects; and a Summary of Cumulative Impacts. Whereas a project in and of itself may not result in an adverse environmental impact, its cumulative effects may. Therefore the CEQA Guidelines require a discussion of cumulative impacts per Section 15130. The Discussion of Cumulative Impacts defines cumulative impacts per Section 15355 - "Cumulative impacts" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

With the exception of Air Quality, Greenhouse Gas Emissions, Biological, and Hydrological Resources, Chapter 5 defines Tulare County as the geographic extent of the impact analysis. The geographic area is considered the appropriate extent because:

- 1) The proposed Project is geographically located in Tulare County and the County of Tulare is the Lead Agency; and
- 2) Tulare County General Plan and Three Rivers Community Plan 2018 Update policies apply to the proposed Project.

The basis for the other Resource-specific cumulative impact analyses includes:

- Air Quality and Greenhouse Gas Emissions are based on the San Joaquin Valley Air Basin;

- Biological Resources are based on the San Joaquin Valley, the state of California, and the western United States;
- Hydrology is based on the Tulare County and the Kaweah River Watershed;
- Land Use Impacts are based on the County of Tulare 2030 General Plan and Three Rivers Community Plan 2018 Update; and
- Mandatory Findings of Significance are based on the San Joaquin Valley, the state of California, and the western United States

The Summary of Cumulative Impacts section discusses mitigable and immittigable impacts. Checklist Item criteria that would result in no impacts or less than significant impacts are discussed in Chapter 3 and are not reiterated in Chapter 4. As noted in Chapter 4, there are no Significant and Unavoidable Impacts; and Less Than Significant Impacts With Mitigation are summarized in **Table 4-2** (Checklist Items with Less Than Significant Impacts with Mitigation). There are a number of cumulative impacts that do not need mitigation; these impacts are listed in **Table 4-3** (Checklist Items with Less Than Significant Impacts). Chapter 8 contains a complete list of Mitigation Measures to be implemented as part of the proposed Project.

### ***Chapter 5 Alternatives***

CEQA Guidelines Section 15126.6 requires that a reasonable range of Alternatives to the proposed Project be discussed in the EIR. The proposed Project is the superior alternative. The conclusion contained in Chapter 5 is based on the criteria established for the site and the three reasonable Alternatives. The three Alternatives evaluated are:

Alternative 1 – No Build / No Project

Alternative 2 – Alternative Site

Alternative 3 – Reduced (25%) Project

The proposed Alternatives were analyzed based on six evaluation criteria which include each of the objectives of the Project and the assessment of the potential environmental impacts. Each Alternative considered did not meet all the evaluation criteria, as identified in **Table 5-1** (Alternatives Evaluation), contained in Chapter 5. The following is a summary of the advantages and disadvantages of each Alternative:

<b>Table ES-1 Alternatives Comparison</b>	
<b>Alternative No. 1 (No Project) Advantages and Disadvantages</b>	
<b>Advantages</b>	<b>Disadvantages</b>
No environmental impacts beyond baseline conditions.	Does not meet any project objectives.
<b>Alternative No. 2 (Alternate Site) Advantages and Disadvantages</b>	
<b>Advantages</b>	<b>Disadvantages</b>
Unknown Impacts – The applicant does not have control of an alternate site.	Unknown Impacts – The applicant does not have control of an alternate site.  Does not meet all of the project objectives.
<b>Alternative No. 3 (Reduced Project) Advantages and Disadvantages</b>	
<b>Advantages</b>	<b>Disadvantages</b>
Slightly less impacts to noise, traffic, water use, and utilities.	Does not meet all of the project objectives or project-specific elements.

As discussed in Alternatives 2 and 3 and summarized in **Table 5-2**, each of the Alternatives could result in less to more adverse environmental impacts than the proposed Project as specified on the CEQA resources checklist. Based upon the analyses, Alternative 3 is the environmentally superior alternative; however, it would not meet the economic feasibility or objectives of the proposed Project.

Environmental impacts associated with each of the alternatives presented compared to the Preferred Alternative are shown in Chapter 5 Alternatives in **Table 5-1** Impacts of Alternatives Compared to the Proposed Project. **Table 5-2** is a matrix comparing each Alternative's and the Preferred Alternative's abilities to achieve the Evaluation Criteria.

### ***Chapter 6 Economic, Social, & Growth Inducing Impacts***

This Chapter discusses the Economic, Social, and Growth Inducing effects of the Project. It contains **Table 6-1** which provides the CEQA requirements and a summary of the impact analysis as follows:

- Economic Effects - The proposed Project will not result in negative impacts to the region. It will result in increases in economic benefits as the Project is anticipated to provide up to 12 permanent jobs which are anticipated to be filled by the local labor force.
- Social Impacts - The proposed Project would not result in disproportionate environmental effects on minority populations, low income populations, or Native Americans. The proposed Project does not pose any adverse environmental justice issues that would require mitigation.
- Growth Inducing Effects - The proposed Project would not result in significant growth inducing impacts. The proposed Project will result in 12 permanent jobs which are



anticipated to be filled by the local labor force. The Project will not result in new housing. Growth inducing impacts will be less than significant.

The overall conclusion contained in Chapter 6 is implementation of the proposed Project will result in ***Less Than Significant*** environmental impacts, either individually or cumulatively, caused by either economic, social, or growth inducing effects.

### ***Chapter 7 Immitigable Impacts***

This discussion provides determinations consistent with CEQA Guidelines Sections 15126.2 (b) Environmental Effects That Cannot Be Avoided, 15126.2 (c) Irreversible Impacts, and Statement of Overriding Considerations.

This Project will not result in significant and unavoidable impacts. All impacts have been found to be less than significant, or have been mitigated to a level considered less than significant. Based on the analysis contained in the No Environmental Impacts That Cannot Be Avoided and the No Irreversible Impact sections contained in Chapter 7, a Statement of Overriding Considerations is not necessary. The Project's merits and objectives are discussed in the Project Description and are found to be consistent with the intent of the County of Tulare and its 2030 General Plan. As noted earlier, there are one hundred eighty-three (183) General Plan Policies that apply to this Project. Chapter 3 of this document provides a complete list of applicable policies for the specific Resource item discussed. Thus, the Project's benefits would outweigh any unavoidable and immitigable impacts to warrant a Statement of Overriding Considerations.

### ***Chapter 8 Mitigation Monitoring and Reporting Program***

A summary of the Mitigation Monitoring and Reporting Program is contained at the end of this Executive Summary (**Table ES-2**) and in its entirety in Chapter 8 (**Table 8-1**). CEQA Section 21081.6 requires adoption of a reporting or monitoring program for those measures placed on a project to mitigate or avoid adverse effects on the environment. The mitigation monitoring and reporting program is required to ensure compliance during a project's implementation. Consistent with CEQA requirements, the Mitigation Monitoring and Reporting Program contained in this EIR include the following elements:

- **Action and Procedure.** The mitigation measures are recorded with the action and procedure necessary to ensure compliance. In some instances, one action may be used to verify implementation of several mitigation measures.
- **Compliance and Verification.** A procedure for compliance and verification has been outlined for each action necessary. This procedure designates who will take action, what action will be taken and when, and to whom and when compliance will be reported.
- **Flexibility.** The program has been designed to be flexible. As monitoring progresses, changes to compliance procedures may be necessary based upon recommendations by those responsible for the Mitigation Monitoring and Reporting Program. As changes are

made, new monitoring compliance procedures and records will be developed and incorporated into the program.

### ***Chapter 9 EIR Preparation***

Key persons from the County of Tulare and the consulting firms that contributed to preparation of the Draft Environmental Impact Report (Draft EIR) are identified.

The sitting Tulare County Board of Supervisors, Tulare County Planning Commission, Tulare County Resource Management Agency RMA Director (Reed Schenke), Associate RMA Director (Michael Washam), Assistant RMA Director Economic Development and Planning (Aaron Bock), Chief Environmental Planner (Hector Guerra), Planner IV (Jessica Willis), and Planner II (Cheng Chi) are noted.

This EIR also relied on the expertise of the following:

ECORP Consulting, Inc. - *“Air Quality & Greenhouse Gas Assessment, Three Rivers Hampton Inn and Suites Project, Tulare County, California;”* included in Appendix “A”.

*“Biological Resources Assessment, Hampton Inn and Suites Three Rivers, Tulare County, California,”* included in Appendix “B”.

*“Hampton Inn and Suites, Three Rivers, Tulare County, California – Special-Status Plant Survey,”* included in Appendix “B”.

*“Cultural Resources Inventory Report, Hampton Inn and Suites Three Rivers, Tulare County, California,”* included in Appendix “C”.

*“Noise Impact Assessment, Three Rivers Hampton Inn and Suites Project, Tulare County, California,”* included in Appendix “D”.

VRPA Technologies, Inc. - *“Three Rivers Hampton Inn & Suites Traffic Impact Study Report,”* included in Appendix “E”.

ALD General Engineering, Inc.- *“Hampton Inn & Suites Report of Waste Discharge Technical Report,”* included in Appendix “F”.

## SUMMARY OF POTENTIAL IMPACTS & MITIGATION MEASURES

Table ES-2 Mitigation Monitoring and Reporting Program							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
<b>AIR QUALITY</b>							
<b>AQ-1.</b> In accordance with SJVAPCD Rule 9510, a detailed air impact assessment (AIA) shall be prepared detailing the specific construction requirement (i.e., equipment required, hours of use, etc.). In accordance with this rule, emissions of NOX from construction equipment greater than 50 horsepower used or associated with the development Project shall be reduced by 20 percent from baseline (unmitigated) emissions and PM10 shall be reduced by 45 percent. The Project shall demonstrate compliance with Rule 9510, including payment of all applicable fees, before issuance of the first building permit.  While the specific emission reduction measures will be developed to the satisfaction of the SJVAPCD, the following measures would reduce short-term air quality impacts attributable to the Proposed Project consistent with Rule 9510: <ul style="list-style-type: none"><li>• During all construction activities, all diesel-fueled construction equipment including, but not limited to, rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, and tractors shall be of a certified clean fleet.</li><li>• All construction equipment shall be maintained and properly tuned in accordance with manufacturers’ specifications. Equipment maintenance records shall be kept on-site and made available upon request by the SJVAPCD or the County.</li></ul>	Prior to Issuance of Building Permit.	Verified on submitted site plans.	Tulare County Building Inspector	Tulare County Building Inspector			

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<p style="text-align: center;"><b>Table ES-2</b> <b>Mitigation Monitoring and Reporting Program</b></p>							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
<ul style="list-style-type: none"> <li>The Project applicant shall comply with all applicable SJVAPCD rules and regulations. Copies of any applicable air quality permits and/or monitoring plans shall be provided to the County.</li> </ul>							
<p><b>AQ-2.</b> In accordance with SJVAPCD Rule 9510, a detailed air impact assessment shall be prepared detailing the operational characteristics associated with the Proposed Project. In accordance with this rule, operational emissions of NOx shall be reduced by a minimum of 33.3 percent and operational emissions of PM10 must be reduced by a minimum of 50 percent over a period of ten years. (Emissions reductions are in comparison to the Project's operational baseline emissions presented in Table 2-6.) The Project would demonstrate compliance with Rule 9510, including payment of all applicable fees, before issuance of the first building permit.</p> <p>Based on the findings of the air impact assessment, the applicant shall pay the SJVAPCD a monetary sum necessary to offset the required operational emissions that are not reduced by the emission reduction measures contained in the air impact assessment. The quantity of operational emissions that need to be offset will be calculated in accordance with the methodologies identified in Rule 9510, Indirect Source Review, and approved by the SJVAPCD. Operational emissions reduction methods will be selected under the direction of the SJVAPCD according to the air impact assessment process detailed in, and required by Rule 9510, Indirect Source Review (see Rule 9510, subsection 5).</p>	Prior to Issuance of Building Permit.	Verified on submitted site plans.	Tulare County Building Inspector	Tulare County Building Inspector			

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Table ES-2 Mitigation Monitoring and Reporting Program							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
<b>BIOLOGICAL RESOURCES</b>							
<i>Measures for Special Status Plant Species</i>							
<b>BIO-1.</b> Pre-construction Survey - Perform focused plant surveys according to USFWS, CDFW, and CNPS protocols. Surveys should be timed according to the blooming period for target species and known reference populations, if available, and/or local herbaria should be visited prior to surveys to confirm the appropriate phenological state of the target species.	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings to CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist.			
<b>BIO-2.</b> Plants Absence - If no special-status plants are found within the Project Area, no further measures pertaining to special-status plants are necessary.	Prior to start of construction.	Retention of professional biologist to determine absence.	County of Tulare Planning Department	Field survey by a qualified Biologist.			
<b>BIO-3.</b> Avoidance - If special-status plant species are found during surveys within the Project and avoidance of the species is not possible, seed collection, transplantation, and/or other mitigation measures may be developed in consultation with appropriate resource agencies to reduce impacts to special-status plant populations.	Prior to construction-related activities.	Retention of professional biologist. Submittal of Report of Findings to CDFW, if applicable	County of Tulare Planning Department	Qualified biologist. Collaboration with CDFW			
<i>Measures for Special Status Reptiles</i>							
<b>BIO-4.</b> Pre-construction Survey - A Northern California legless lizard and Blainville’s horned lizard pre-construction survey will be conducted by a qualified biologist within 14 days prior to the initiation of ground disturbance (e.g., tree/vegetation removal,	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of	County of Tulare Planning Department	Field survey by a qualified Biologist.			

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<p style="text-align: center;"><b>Table ES-2</b> <b>Mitigation Monitoring and Reporting Program</b></p>							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
mass grading). The survey will consist of the entire Project footprint, including accessible areas within 100 feet.		Findings, if applicable.					
<b>BIO-5.</b> Presence - If individuals of either of these two special-status reptiles are found during the pre-construction survey, a qualified biologist with a CDFW Scientific Collecting Permit shall relocate the individuals, with the concurrence of CDFW, to a site with suitable habitat. Relocation methods shall be approved by CDFW	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings to CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with CDFW.			
<b>Measures for Nesting Raptors and Migratory Birds</b>							
<b>BIO-6.</b> Pre-construction Survey - Conduct a pre-construction nesting raptor and bird survey of all suitable habitat on the Project site within 14 days of the commencement ground disturbance (e.g., tree/vegetation removal, mass grading) during the nesting season (February 1 – August 31). Where accessible, surveys should be conducted within 300 feet of the Project site for nesting raptors, and 100 feet of the Project site for other nesting birds.	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings to CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist.			
<b>BIO-7.</b> Buffers - If active nests are found, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist, in consultation with CDFW. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest tree, to be determined by a qualified biologist. Once the young are independent of the nest, no further measures are necessary.	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings to CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with CDFW.			

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Table ES-2 Mitigation Monitoring and Reporting Program							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
<i>Measures for Special Status Mammals (Bats)</i>							
<b>BIO-8.</b> Pre-construction Survey: Absence - If no suitable roosting habitat is found, or if no bats are not found during the emergence surveys, no further measures are necessary	Prior to start of construction.	Retention of professional biologist, submittal of Report of Findings to CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist.			
<b>BIO-9.</b> Pre-construction Survey: Presence - A qualified biologist will conduct a bat habitat assessment of all suitable roosting habitat (i.e., suitable trees) prior to the initiation of site disturbance (e.g., tree removal, mass grading). If the assessment identifies suitable roosting habitat, a qualified biologist will conduct an evening bat emergence survey that may include acoustic monitoring to determine whether or not bats are present. If special-status bats are found, consult with CDFW to develop avoidance and/or exclusion methods.	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings to CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with CDFW			
<i>Measures for Waters of the United States and State</i>							
<b>BIO-10.</b> Perform Delineation - Potentially jurisdictional features should be avoided and fenced. Runoff from entering any avoided aquatic features could be considered an indirect impact. Adherence to a Construction General Permit and stormwater pollution prevention plan/Best Management Practices could reduce potential indirect impacts from runoff into aquatic features.	Prior to start of construction.	Retention of professional biologist, submittal of Report of Findings to CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with CDFW			

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<p style="text-align: center;"><b>Table ES-2</b> <b>Mitigation Monitoring and Reporting Program</b></p>							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
<b>BIO-11.</b> Avoidance - Potentially jurisdictional features should be avoided and fenced. Runoff from entering any avoided aquatic features could be considered an indirect impact. Adherence to a Construction General Permit and stormwater pollution prevention plan/Best Management Practices could reduce potential indirect impacts from runoff into aquatic features.	Prior to start of construction.	Retention of professional biologist, submittal of Report of Findings to USACE and/or CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with USACE and/or CDFW.			
<b>BIO-12.</b> Section 404 Permit - If Waters of the U.S./State cannot be avoided, authorization to fill wetlands and other Waters of the U.S. under the Section 404 Permit must be obtained from USACE prior to discharging any dredged or fill materials into any Waters of the U.S. Mitigation measures will be developed as part of the Section 404 Permit to ensure no-net-loss of wetland function and values. To facilitate such authorization, an application for a Section 404 Permit for the Project will be prepared and submitted to USACE and will include direct, avoided, and preserved acreages to Waters of the U.S. Mitigation for impacts to Waters of the U.S. typically consists of a minimum of a 1:1 ratio for direct impacts; however final mitigation requirements will be developed in consultation with USACE.	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings to USACE and/or CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with USACE and/or CDFW.			
<b>BIO-13.</b> Section 401 Permit - A Water Quality Certification or waiver pursuant to Section 401 of the CWA must be obtained from the RWQCB for Section 404 permit actions.	Prior to start of construction.	Retention of professional biologist, submittal of Report of Findings to	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with USACE and/or CDFW.			



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<p style="text-align: center;"><b>Table ES-2</b> <b>Mitigation Monitoring and Reporting Program</b></p>							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
		USACE and/or CDFW, if applicable.					
<b>BIO-14.</b> RWQCB permit - Pursuant to the Porter-Cologne Water Quality Act, a permit authorization from the RWQCB is required prior to the discharge of material in an area that could affect Waters of the State. Mitigation requirements for discharge to Waters of the State within the Project site will be developed in consultation with the RWQCB.	Prior to start of construction.	Retention of professional biologist, submittal of Report of RWQCB and/or CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with RWQCB and/or CDFW.			
<b><i>Measures for Oak Woodlands</i></b>							
<b>BIO-15.</b> Avoidance/Conservation - If feasible, avoid/conserve oak woodlands	Prior to start of construction.	Retention of professional arborist, if applicable.	County of Tulare Planning Department	County of Tulare Planning Department.			
<b>BIO-16.</b> Replacement - If oak woodlands are proposed for impact, plant an appropriate number of trees, including maintain planting and replacing dead or diseased trees; this requirement to maintain trees pursuant to this paragraph terminates seven years after the trees are planted; mitigation pursuant to this paragraph shall not fulfill more than 1/2 of the mitigation requirements for the Project; the requirements imposed pursuant to this paragraph also may be used to restore former oak woodlands.	Prior to start of construction.	Retention of professional arborist, if applicable.	County of Tulare Planning Department	County of Tulare Planning Department.			
<b>BIO-17.</b> Contribution - Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of the Section 1363 of the California Fish and Game Code. A project applicant who contributes funds under this paragraph shall not receive	Prior to start of construction.	Retention of professional arborist, if applicable.	County of Tulare Planning Department	County of Tulare Planning Department.			

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<p style="text-align: center;"><b>Table ES-2</b> <b>Mitigation Monitoring and Reporting Program</b></p>							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
a grant from the Oak Woodland Woodlands Conservation Fund as part of the mitigation for the Project.							
<b>BIO-18.</b> Other – Implement other mitigation measures developed by the County.	Prior to start of construction.	Retention of professional arborist, if applicable.	County of Tulare Planning Department	County of Tulare Planning Department.			
<b>CULTURAL RESOURCES</b>							
<b>CUL-1</b> - Prior to the start of construction, all field personnel shall receive worker's environmental awareness training on cultural resources. The training, which may be conducted with other environmental or safety trainings, will provide a description of cultural resources that may be encountered during construction and outline the steps to follow in the event that a discovery is made. Documentation of this training should be reviewed and approved by the lead agency prior to the start of construction.	During Construction	Daily or as needed throughout the construction period if suspicious resources are discovered	County of Tulare Planning Department via field evaluation of the resource finds by a qualified archaeologist	A qualified archaeologist shall document the results of field evaluation and shall recommend further actions that shall be taken to mitigate for unique resource or human remains found, consistent with all applicable laws including CEQA.			
<b>CUL-2</b> - If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for pre-contact and historic	During Construction	Daily or as needed throughout the construction period if suspicious	County of Tulare Planning Department via field evaluation of the resource	A qualified archaeologist shall document the results of field evaluation and shall			

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<p style="text-align: center;"><b>Table ES-2</b> <b>Mitigation Monitoring and Reporting Program</b></p>							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
<p>archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:</p> <p><b>(a):</b> If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.</p> <p><b>(b):</b> If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead federal agency, the lead CEQA agency, and applicable landowner. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.</p> <p><b>(c):</b> If the find includes human remains, or remains that are potentially human, he or she shall ensure</p>		resources are discovered	finds by a qualified archaeologist	recommend further actions that shall be taken to mitigate for unique resource or human remains found, consistent with all applicable laws including CEQA.			

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<p style="text-align: center;"><b>Table ES-2</b> <b>Mitigation Monitoring and Reporting Program</b></p>							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Tulare County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinterment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.							

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Table ES-2 Mitigation Monitoring and Reporting Program							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
<b>GEOLOGY AND SOILS (PALEONTOLOGICAL RESOURCES)</b>							
See CUL-1 subsets (a) through (c), as specified in Item 5 Cultural Resources (as applicable).	During Construction	Daily or as needed throughout the construction period if suspicious resources are discovered	County of Tulare Planning Department via field evaluation of the resource finds by a qualified archaeologist	A qualified archaeologist shall document the results of field evaluation and shall recommend further actions that shall be taken to mitigate for unique resource or human remains found, consistent with all applicable laws including CEQA.			
<b>GREENHOUSE GASES</b>							
GHG-1. - The Project must provide an onsite renewable energy system(s). The Project shall include solar panels or other alternative energy source meeting the County Solar Ordinance or new Title 24 standards, whichever is more stringent. The onsite renewable energy system(s) must be installed as part of the construction process and be functional upon commencement of Project operation. The Project Proponent must include solar on building plans and provide Title 24 compliance reports with Building Permit applications to the County.	Prior to Issuance of Building Permit.	Verified on submitted site plans.	Tulare County Building Inspector	Tulare County Building Inspector			

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<p style="text-align: center;"><b>Table ES-2</b> <b>Mitigation Monitoring and Reporting Program</b></p>							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
<b>GHG-2</b> - The Project shall meet the charging installation/charging ready requirements of the CALGreen Code. The Project Proponent shall include EV charging accommodations as specified in the CALGreen Code in building plans for review and approval by the County, prior to commencement of Project construction.	Prior to Issuance of Building Permit.	Verified on submitted site plans.	Tulare County Building Inspector	Tulare County Building Inspector			
<b>TRIBAL CULTURAL RESOURCES</b>							
See <b>CUL-1 subsets (a) through (c)</b> , as specified in Item 5 Cultural Resources (as applicable).	During Construction	Daily or as needed throughout the construction period if suspicious resources are discovered	County of Tulare Planning Department via field evaluation of the resource finds by a qualified archaeologist	A qualified archaeologist shall document the results of field evaluation and shall recommend further actions that shall be taken to mitigate for unique resource or human remains found, consistent with all applicable laws including CEQA.			

# **Introduction**

## **Chapter 1**

### **PROJECT SUMMARY**

Ineffable Hospitality, Inc. (Applicant), is proposing development of 105 guest room hotel east of State Route (SR) 198/Sierra Drive in the unincorporated community of Three Rivers, Tulare County, California.

The proposed Project is a 3-story hotel and associated site improvements are being proposed on the existing parcel with one access/egress point from SR 198. A driveway road is proposed from SR 198/Sierra Drive through the vacant west of the subject property. This driveway will be situated within an existing 30-foot wide access easement. The hotel will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.) and outdoor swimming pool/cabana building. The proposed Project includes 108 standard parking stalls (6 of which will be handicap accessible stalls). Utilities include a septic tank with filter and dripline system, a new domestic well, and storm drainage will be retained on-site (with an option for biofiltration). Figures 2-1 through 2-5 show the Project Vicinity, Aerial View of the Site, Existing Zoning, Overall Site Plan and Floor Plan respectively.

When operational, the proposed Project would utilize approximately 12 employees, 70 customers, one (1) delivery, and one (1) shipment per day, for an average of 825 total daily vehicle trips. The Applicant is proposing to operate Monday-Sunday, 24-hours per day, 365-day per year.

### **LOCAL REGULATORY CONTEXT**

The Tulare County General Plan Update 2030 was adopted on August 28, 2012. As part of the General Plan an EIR was prepared as was a background report. The General Plan background report contained contextual environmental analysis for the General Plan. The Housing Element for 2009-2014 was adopted on May 8, 2012 and certified by State of California Department of Housing and Community Development on June 1, 2012. In addition to the General Plan Update, the Three Rivers Community Plan 2018 Update also applies to the proposed Project. The site is located within the Three Rivers Urban Development Boundary with a land use designation of Community Commercial and a zoning classification of C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone).

### **SCOPE AND METHODOLOGY**

The County of Tulare has determined that a project level environmental impact report (EIR) fulfills the requirements of CEQA and is the appropriate level evaluation to address the potential

environmental impacts of the proposed project. A project level EIR is described in Section 15161 of the State CEQA Guidelines as one that examines the environmental impacts of a specific development project. A project level EIR must examine all phases of the project, including planning, construction, and operation. Although this proposed Project is allowed “by-right” as it is consistent with the applicable Tulare County Zone classification and both the Tulare County General Plan and Three Rivers Community Plan land use designations, the Applicant has authorized preparation of an environmental impact report; as applicable.

This document addresses environmental impacts to the level that they can be assessed without undue speculation (CEQA Guidelines Section 15145). This Draft Environmental Impact Report (Draft EIR, DEIR, or EIR) acknowledges this uncertainty and incorporates these realities into the methodology to evaluate the environmental effects of the Plan, given its long term planning horizon. The degree of specificity in an EIR corresponds to the degree of specificity of the underlying activity being evaluated (CEQA Guidelines Section 15146). Also, the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project (CEQA Guidelines Sections 15151 and 15204(a)).

CEQA Guidelines Section 15002 (a) specifies that, “[t]he basic purposes of CEQA are to:

- (1) Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
- (2) Identify ways that environmental damage can be avoided or significantly reduced.
- (3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- (4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.”<sup>1</sup>

CEQA Guidelines Section 15002 (f) specifies that, “[a]n environmental impact report (EIR) is the public document used by the governmental agency to analyze the significant environmental effects of a proposed project, to identify alternatives, and to disclose possible ways to reduce or avoid the possible environmental damage...An EIR is prepared when the public agency finds substantial evidence that the project may have a significant effect on the environment...When the agency finds that there is no substantial evidence that a project may have a significant environmental effect, the agency will prepare a “Negative Declaration” instead of an EIR...”<sup>2</sup>

Pursuant to CEQA Guidelines Section 15021 Duty to Minimize Environmental Damage and Balance Competing Public Objectives:

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<sup>1</sup> CEQA Guidelines, Section 15002 (a).

<sup>2</sup> Ibid. Section 15002 (f).



- “(a) CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible.
- (1) In regulating public or private activities, agencies are required to give major consideration to preventing environmental damage.
  - (2) A public agency should not approve a project as proposed if there are feasible alternatives or mitigation measures available that would substantially lessen any significant effects that the project would have on the environment.
- (b) In deciding whether changes in a project are feasible, an agency may consider specific economic, environmental, legal, social, and technological factors.
- (c) The duty to prevent or minimize environmental damage is implemented through the findings required by Section 15091.
- (d) CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian. An agency shall prepare a statement of overriding considerations as described in Section 15093 to reflect the ultimate balancing of competing public objectives when the agency decides to approve a project that will cause one or more significant effects on the environment.”<sup>3</sup>

## IDENTIFICATION OF POTENTIALLY SIGNIFICANT IMPACTS

CEQA Guidelines Section 15002 (h) addresses potentially significant impacts, to wit, “CEQA requires more than merely preparing environmental documents. The EIR by itself does not control the way in which a project can be built or carried out. Rather, when an EIR shows that a project could cause substantial adverse changes in the environment, the governmental agency must respond to the information by one or more of the following methods:

- (1) Changing a proposed project;
- (2) Imposing conditions on the approval of the project;
- (3) Adopting plans or ordinances to control a broader class of projects to avoid the adverse changes;
- (4) Choosing an alternative way of meeting the same need;
- (5) Disapproving the project;
- (6) Finding that changes in, or alterations, the project are not feasible.
- (7) Finding that the unavoidable, significant environmental damage is acceptable as provided in Section 15093.”<sup>4</sup> (See Chapter 7)

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<sup>3</sup> Ibid. Section 15021.

<sup>4</sup> CEQA Guidelines, Section 15002 (h).

This Draft EIR identifies potentially significant impacts that would be anticipated to result from implementation of the proposed Project. Significant impacts are defined as a “substantial or potentially substantial, adverse change in the environment.”<sup>5</sup> Significant impacts must be determined by applying explicit significance criteria to compare the future plan conditions to the existing environmental setting.<sup>6</sup>

The existing setting is described in detail in each resource section of Chapter 3 of this document and represents the most recent, reliable, and representative data to describe current regional conditions. The criteria for determining significance are also included in each resource section in Chapter 3 of this document.

## **CONSIDERATION OF SIGNIFICANT IMPACTS**

Pursuant to CEQA Guidelines Section 15126.2, “[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>7</sup>

## **MITIGATION MEASURES**

CEQA Guidelines Section 15126.4 specifies that:

- “(1) An EIR shall describe feasible measures which could minimize significant adverse impacts, including where relevant, inefficient and unnecessary consumption of energy.

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<sup>5</sup> Public Resources Code Section 21068.

<sup>6</sup> CEQA Guidelines Section 15126.2(a).

<sup>7</sup> 2013 CEQA Guidelines, Section 15126.2

- (A) The discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other measures proposed by the lead, responsible or trustee agency or other persons which are not included but the lead agency determines could reasonably be expected to reduce adverse impacts if required as conditions of approving the project. This discussion shall identify mitigation measures for each significant environmental effect identified in the EIR.
  - (B) Where several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.
  - (C) Energy conservation measures, as well as other appropriate mitigation measures, shall be discussed when relevant. Examples of energy conservation measures are provided in Appendix F.
  - (D) If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed. (*Stevens v. City of Glendale* (1981) 125 Cal.App.3d 986.)
- (2) Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. In the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design.
  - (3) Mitigation measures are not required for effects which are not found to be significant.
  - (4) Mitigation measures must be consistent with all applicable constitutional requirements, including the following:
    - (A) There must be an essential nexus (i.e., connection) between the mitigation measure and a legitimate governmental interest. *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987); and
    - (B) The mitigation measure must be “roughly proportional” to the impacts of the project. *Dolan v. City of Tigard*, 512 U.S. 374 (1994). Where the mitigation measure is an ad hoc exaction, it must be “roughly proportional” to the impacts of the project. *Ehrlich v. City of Culver City* (1996) 12 Cal.4th 854.
  - (5) If the lead agency determines that a mitigation measure cannot be legally imposed, the measure need not be proposed or analyzed. Instead, the EIR may simply reference that fact and briefly explain the reasons underlying the lead agency's determination.”<sup>8</sup>

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<sup>8</sup> CEQA Guidelines, Section 15126.4.

## **ORGANIZATION OF THE EIR**

### Executive Summary

The Executive Summary Chapter summarizes the analysis in this Draft Environmental Impact Report.

### CHAPTER 1

Provides a brief introduction to the Environmental Analysis required by the California Environmental Quality Act (CEQA).

### CHAPTER 2

Describes the proposed Project. The chapter also includes the objectives of the proposed Project. The environmental setting is described and the regulatory context within which the proposed Project is evaluated is outlined.

### CHAPTER 3

Includes the Environmental Analysis in response to each Checklist item. Within each analysis the following is included:

#### ***Summary of Findings***

Each chapter notes a summary of findings.

#### ***Introduction***

Each chapter will begin with a summary of impacts, pertinent CEQA requirements, applicable definitions and/or acronyms, and thresholds of significance.

#### ***Environmental Setting***

Each environmental resource analysis in Chapter 3 will outline the environmental setting for each environmental resource. In addition, methodology is explained when complex analysis is required.

#### ***Regulatory Setting***

Each environmental resource analysis in Chapter 3 will outline the regulatory setting for that resource.

***Project Impact Analysis***

Each evaluation criteria will be reviewed for potential Project-specific impacts.

***Cumulative Impact Analysis***

Each evaluation criteria will be reviewed for potential cumulative impacts.

***Mitigation Measures***

Mitigation Measures will be proposed as deemed applicable.

***Conclusion***

Each conclusion will outline whether recommended mitigation measures will, based on the impact evaluation criteria, substantially reduce or eliminate potentially significant environmental impacts. If impacts cannot be mitigated, unavoidable significant impacts will be identified.

***Definitions/Acronyms***

Some sub-chapters of Chapter 3 will have definitions and/or acronyms.

***References***

Reference documents used in each chapter are listed at the end of each sub-chapter.

**CHAPTER 4**

Summarizes the cumulative impacts addressed in Chapter 3.

**CHAPTER 5**

Describes and evaluates alternatives to the proposed Project. The proposed Project is compared to each alternative, and the potential environmental impacts of each are analyzed.

**CHAPTER 6**

Evaluates or describes CEQA-required subject areas: Economic Effects, Social Effects, and Growth Inducement.

**CHAPTER 7**

Evaluates or describes CEQA-required subject areas: Environmental Effects That Cannot be Avoided, Irreversible Impacts, and Statement of Overriding Considerations.

## CHAPTER 8

Provides a Mitigation Monitoring and Reporting Program that summarizes the environmental issues, the significant mitigation measures, and the agency or agencies responsible for monitoring and reporting on the implementation of the mitigation measures.

## CHAPTER 9

Outlines persons preparing the EIR.

## APPENDICES

Following the text of this *Draft EIR*, several appendices and technical studies have been included as reference material.

## ***ENVIRONMENTAL REVIEW PROCESS***

Pursuant to CEQA Guidelines Section 15082, the Notice of Preparation (NOP) for the Proposed Project was circulated for review and comment on November 2, 2020 and circulated for a 30-day comment period ending December 2, 2020. Tulare County RMA received eleven (11) responses on the NOP. Comments were received from the following agencies, individuals, and/or organizations:

- Native American Heritage Commission, dated November 3, 2020;
- San Joaquin Valley Unified Air Pollution Control District, dated November 23, 2020;
- California Department of Fish and Wildlife, dated December 2, 2020;
- California Department of Transportation District 6, dated January 8, 2020; and
- Interested persons: Soapy Mulholland (November 2, 2020); Shvon Lavelly (November 30, 2020); Jenny Matsumoto (December 1, 2020); Greg and Laurie Schwaller (December 1, 2020); Cindy Howell, General Manager, Three Rivers Community Service District (December 2, 2020); Julianna Seligman, Director, The Kaweah Coalition (December 2, 2020); and Delores Lucero (November 2, 2020).

A copy of the NOP is included in Appendix “G”, along with copies of letters received in response to the NOP.

Consistent with CEQA Guidelines Section 15103, “Responsible and Trustee Agencies, and the Office of Planning and Research shall provide a response to a Notice of Preparation to the Lead Agency within 30 days after receipt of the notice. If they fail to reply within the 30 days with either

a response or a well justified request for additional time, the lead agency may assume that none of those entities have a response to make and may ignore a late response.”<sup>9</sup>

A scoping meeting was noticed in the Notice of Preparation and held on November 5, 2020. Due to the COVID-19 crisis, an opportunity was provided for interested parties to participate live, via video link to accommodate remote participation. No comments were received during this meeting.

Section 15093 of the State CEQA Guidelines requires decision-makers to balance the benefits of a proposed project against any unavoidable adverse environmental effects of the project. If the benefits of the project outweigh the unavoidable adverse environmental effects, then the decision-makers may adopt a statement of overriding considerations, finding that the environmental effects are acceptable in light of the project’s benefits to the public.

As noted in CEQA Guidelines Section 15105 (a), a Draft EIR that is submitted to the State Clearinghouse shall have a minimum review period of 45 days. This Draft EIR was circulated publicly for a 45-day comment period beginning on March 8, 2021 and ending on April 22, 2021. Following completion of the review period, staff will prepare responses to comments and a Final EIR will be prepared. The Final EIR will then be forwarded to the County of Tulare Planning Commission for consideration of certification. Notwithstanding an appeal to the County of Tulare Board of Supervisors, a Notice of Determination will then be filed with the County of Tulare Clerk’s Office and also forwarded to the State of California, Office of Planning and Research/State Clearinghouse.

## **ORGANIZATIONS AND PERSONS CONSULTED**

### **Public Entities**

- 1) California Environmental Protection Agency
- 2) California Department of Conservation – Division of Land Resources Protection
- 3) California Department of Fish and Wildlife, Region 4
- 4) California Department of Food and Agriculture
- 5) California Department of Forestry and Fire Protection
- 6) California Department of Toxic Substances Control
- 7) California Department of Transportation, District 6
- 8) California Department of Water Resources
- 9) California Natural Resources Agency
- 10) California Office of Emergency Services
- 11) California Office of Historic Preservation
- 12) California Public Utilities Commission
- 13) Native American Heritage Commission
- 14) State Water Resources Control Board, Region 5F
- 15) California Office of Planning and Research/State Clearinghouse
- 16) San Joaquin Valley Unified Air Pollution Control District

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<sup>9</sup> 2013 CEQA Guidelines, Section 15103.

- 17) Tulare County Agricultural Commissioner
- 18) Tulare County Association of Governments
- 19) Tulare County Farm Bureau
- 20) Tulare County Fire Warden
- 21) Tulare County Environmental Health and Human Services Agency, Environmental Health Division
- 22) Tulare County Local Agency Formation Commission
- 23) Tulare County Office of Emergency Services
- 24) Tulare County Resource Management Agency:
  - a. Planning Branch (Environmental Planning, Project Review, Building and Housing Divisions)
  - b. Public Works Branch
  - c. Tulare County Flood Control
  - d. Tulare County Fire Warden
- 25) Tulare County Resources Conservation District
- 26) Tulare County Sheriff's Office
- 27) Tulare County U.C. Cooperative Extension
- 28) U.S. Army Corps of Engineers
- 29) U.S. Department of Agriculture – Forest Service and Natural Resources Conservation Service
- 30) U.S. Department of the Interior – Fish & Wildlife Service and National Parks Service
- 31) U.S. Naval Facilities Engineering Command

Native American Tribes

- 32) Kern Valley Indian Council
- 33) Santa Rosa Rancheria Tachi Yokut Tribe
- 34) Tubatulabals of Kern County of Tulare
- 35) Tule River Indian Tribe
- 36) Wuksache Indian Tribe

Others

- 37) Chris Ott and Joel Hiser, HTL Hospitality Advisors
- 38) Ineffable Hospitality, Inc.
- 39) Kaweah Commonwealth
- 40) Lozeau Drury LLP
- 41) Neighboring Properties within 300' of proposed Project
- 42) Sukhjinder & Kulvinder Sanghera
- 43) Southern California Edison
- 44) Three Rivers Community Services District
- 45) Three Rivers Historical Society
- 46) Three Rivers Union School District
- 47) Three Rivers Village Foundation
- 48) Tulare County Citizens for Responsible Growth



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- 49) Sequoia Riverlands Trust
- 50) Woodlake Union School District
- 51) The following, by last name only, were also contacted: Balsom, Birch, Bodine, Bodner, Brewer, Campbell, Campe, Change, Cloutier, Coleman, Combs, Crain, Di Silvestro, Doyle, Elliott, Fletcher, French, Goldstein, Greenspan, Gregg, Huecker, Jeffries, Kamansky, Lavelly, Lucero, Marini, Matsumoto, McKee, McKown, McWilliam, Mills, Mulholland, Mutch, Newton, Norman, Peter, Reimer, Ricci, Rothhammer, Rourke, Schwaller, Seligman, Sherliock, Simonian, Smeck, Sparks, Stanton, Steel, Stryd, Temple, Tharp, Uhler, Vartanian, Warner.

# **Project Description & Objectives**

## **Chapter 2**

### **INTRODUCTION**

In accordance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, Section 21000 et seq.), the County of Tulare Resource Management Agency (RMA) is preparing this Draft Environmental Impact Report (Draft EIR, DEIR, or EIR) to evaluate the environmental effects associated with the Three Rivers Hampton Inn and Suites Project (Project).

The Applicant is seeking to construct and operate a proposed 105 guest room, 3-story hotel, and associated site improvements on an existing parcel with one access/egress point from State Route (SR) 198/Sierra Drive. A driveway road is proposed from SR 198/Sierra Drive through the vacant west of the subject property. This driveway will be situated within an existing 30-foot wide access easement. The hotel will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.), and outdoor swimming pool/cabana building. The proposed Project includes 108 standard parking stalls (6 of which will be handicap accessible stalls). Utilities include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration).

### **PROJECT LOCATION**

The Applicant of the proposed Project seeks to develop a 105-room hotel to be located east of State Route (SR) 198/Sierra Drive, approximately 1,100 feet north of Old Three Rivers Road in the unincorporated community of Three Rivers. The proposed Project will be located within the Urban Development Boundary (UBD) of the Three Rivers Community Plan area. Three Rivers is located in the Kaweah River canyon, just above Lake Kaweah, approximately 28 miles east of the City of Visalia. Three Rivers' name comes from its location near the junction of the North, Middle, and South Forks of the Kaweah River. The surrounding terrain is marked by oak woodland forest and foothills. Three Rivers is located in the northern portion of Tulare County at an elevation of 825 feet above sea level with a total area of 45.4 square miles. Three Rivers is the gateway town for the Ash Mountain Main Entrance to Sequoia-Kings Canyon National Park, home of the Giant Sequoia trees. Three Rivers is located approximately 30 miles east of the City of the City of Visalia, the County Seat, and approximately 52 miles southeast of Fresno, the largest metropolitan area in the region (see **Figure 2-2**). The approximately 2.80-acre site is located entirely on Tulare County APN 068-080-010 and is currently zoned C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone). The use is allowed by-right and is consistent with the current zoning classification. The site is located within the USGS 7.5 Minute Quadrangle in Section 26, Township 17S, Range 28E, M.D.B.& M.

The coordinates of the proposed Project site are:

Latitude: N 35° 25' 27.31"  
Longitude: W 118° 54' 55.84"

## **VICINITY OF PROJECT SITE**

The immediate area surrounding the Project site is generally level; there are two nearby hills northeast and east of the site and numerous hills north and west the site (north and west of the Kaweah River). The site is currently vacant, there is an existing hotel (Comfort Inn & Suites) to the north and a former (now unused) restaurant adjacent to and northwest, a vacant lot to the east, a rural residential/commercial development (two large propane aboveground storage tanks) to the south, and a vacant lot to the west. As noted earlier, the site is east of SR 198/Sierra Drive.

## **ZONING AND LAND USE**

The site is located within the Three Rivers Community planning area which designates the existing proposed Project area as C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone) (see **Figure 2-3**); as such, the proposed Project is an allowed use. The site is currently vacant.

## **PROJECT DESCRIPTION**

According to the Applicant, the proposed Project will consist of the following components:

- 3-story, 105 guest room hotel
- 108 parking stalls (with 6 dedicated as handicap accessible stalls)
- Hotel to include manager's office, meeting room, in-house food preparation, breakfast area and various hotel facilities (such as in-house and guest laundry, elevator, fitness center, storage closets, etc.)
- Swimming pool with cabana
- Septic tank with filter and dripline system
- New domestic well
- On-site storm drainage (with option for biofiltration)
- One access/egress point on the west side of the property
- Landscaping

## **CURRENT LAND USE AND SURROUNDING LAND USE**

As noted earlier, the proposed Project site is currently vacant. an existing hotel (Comfort Inn & Suites) to the north and a former (now unused) restaurant adjacent to and northwest, a vacant lot to the east, a rural residential/commercial development (two large propane aboveground storage tanks) to the south, and a vacant lot to the west. As noted earlier, the site is east of SR 198/Sierra Drive.

## **PROJECT OBJECTIVES**

### **Objective 1: Expands County's Economic Base**

Tulare County General Plan Policy ED-3.1 (Diverse Economic Base) encourages the development of a diversified economic base by continuing to promote agriculture, recreation services, and commerce, and by expanding its efforts to encourage industrial development including the development of energy resources; ED-5.7 (Foothills) encourages additional recreational and visitor-serving development in the Sierra and foothills in areas such as Three Rivers and Springville as gateway communities; and LU-4.4 (Travel-Oriented Tourist Commercial Uses) requires travel-oriented tourist commercial uses (for example, entertainment, commercial recreation, lodging, fuel) to be used in areas where traffic patterns are oriented to major arterials and highways. The proposed Project consists of commercial development that is allowed by-right and is not only consistent with the existing zoning classification, but also the existing land use designation as contained in the Tulare County General Plan 2030 Update.

### **Objective 2: Implements the Three Rivers Community Plan**

The proposed Project would implement many Three Rivers Community Plan goals, objectives, and policies. Following are some of the more significant: Objective 1.1 Development Compatibility: Ensure compliance with the Community Plan to ensure compatibility between and within new and existing development. Policy 1.1.2 Mixed Uses to ensure that development to accommodate growth includes a balanced mix of residential, commercial, and public uses that enhance the community's economic vitality while maintaining its rural character and quality of life. Policy: 1.2.1 New Development Compatibility to ensure that the size, type, and scale of new development in Three Rivers is compatible with the rural character of the community. Policy 1.2.13 SL-3.3 Highway Commercial wherein the County shall require highway commercial uses to be located and designed to reduce their visual impact on the travel experience along State scenic highways and County scenic routes. Goal 2: Economic Vitality: A strong, diversified economic environment within Three Rivers which is consistent with the rural and visual atmosphere of the community. Policy 2.1.4 Highway-Oriented Commercial Development to maintain existing commercial areas along SR 198 to the extent feasible for highway-oriented commercial development. Objective 2.2 Business Attraction, Expansion, and Retention: To promote business growth and industry diversification and maintain a favorable business climate and a supportive economic foundation. In summary, the proposed Project is consistent with and implements these and many other Three Rivers Community Plan goals, objectives, and policies.

### **Objective 3: Provide Visitor/Tourist Accommodations**

The Project would accommodate visitors/tourists to the Three Rivers area by implementing the following: Objective 1.1 Development Compatibility, Policy 1.1.4 Compatible Commercial Establishments, to encourage compatible commercial establishments necessary to serve residents and tourists that are commensurate with the scale and intensity of the community, preserve the environment, and which do not have to the extent feasible, significant traffic, light, noise or visual impacts to the community. Goal 2: Economic Vitality, Policy 2.1.5 ED-5.4 Recreational Accommodations, wherein the County shall support the development of visitor-serving attractions and accommodations in unincorporated areas near natural amenities and resources that would not be diminished by tourist activities. Policy 2.1.8 ED-5.7 Foothills wherein the County shall encourage additional recreational and visitor-serving development in the Sierra and foothills in areas such as Three Rivers. The proposed Project's proximity to SR 198 and Sequoia-Kings Canyon National Parks) is ideally suited to accommodate the proposed Three Rivers Hampton Inn & Suites project.

### **Objective 4: Efficient Business Operations**

The proposed Project is intended to implement Applicant's strategic business plan by planning, designing, constructing, and operating a facility which is economically, technologically and environmentally feasible.

## **PROJECT BENEFITS**

### **Project Benefit # 1): Facilitates Visitor/Tourism Industry**

The Project will facilitate the availability of overnight accommodations for visitors/tourists in the Three Rivers area by making available 105 rooms.

### **Project Benefit # 2): Job Creation**

The Project will directly create approximately 12 new, full-time jobs for Tulare County residents.

### **Project Benefit # 3): Reduce Air Quality Emissions, Greenhouse Gas Emissions, and Energy Usage**

With the availability of up to 105 rooms, visitors/tourists would not have to drive to Visalia or other communities thereby reducing vehicle miles travelled. As such, air quality emissions, greenhouse gas emissions, and energy (in the form of gasoline/diesel usage) would be reduced.

### **Project Benefit # 4): Implementation of Countywide Tulare County General Plan 2030 Update and Three Rivers Community Plan 2018 Update policies**

Tulare County's General Plan and Three Rivers Community Plan Policies that are consistent with the Project's purpose and objectives are included in each CEQA Checklist Resource chapter contained in Chapters 3-1 thru 3-21. One hundred eighty three (183) General Policies apply to this Project.

**Project Benefit # 5): Generate Sales Tax, Increase Property Valuation, and Transit Occupancy Tax**

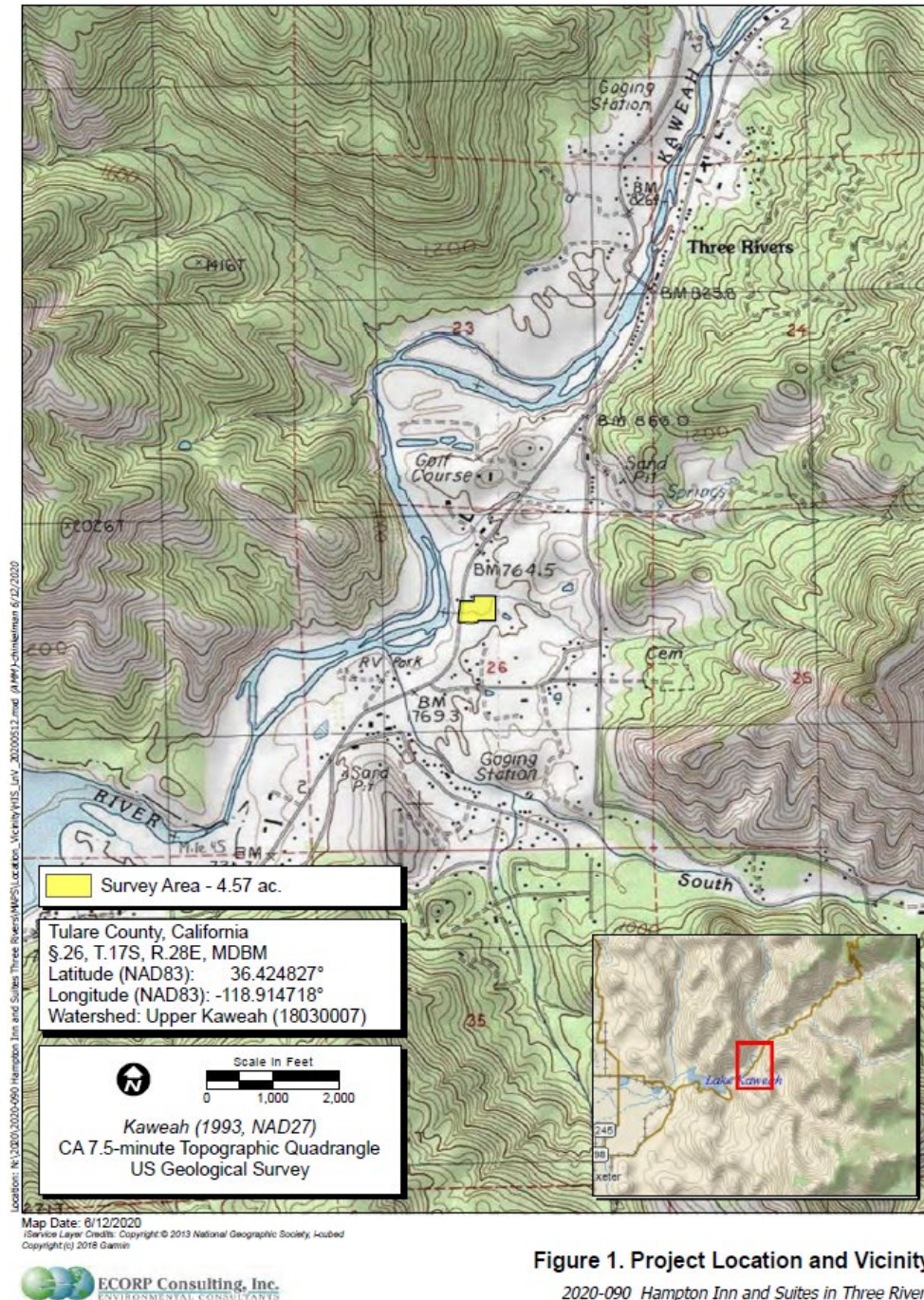
The proposed Project would generate sales taxes, transit occupancy taxes, and result in an overall increase in property valuation at the site.

**ACTIONS REQUIRED FOR IMPLEMENTATION**

To accommodate the proposed Project, the following actions will need to occur:

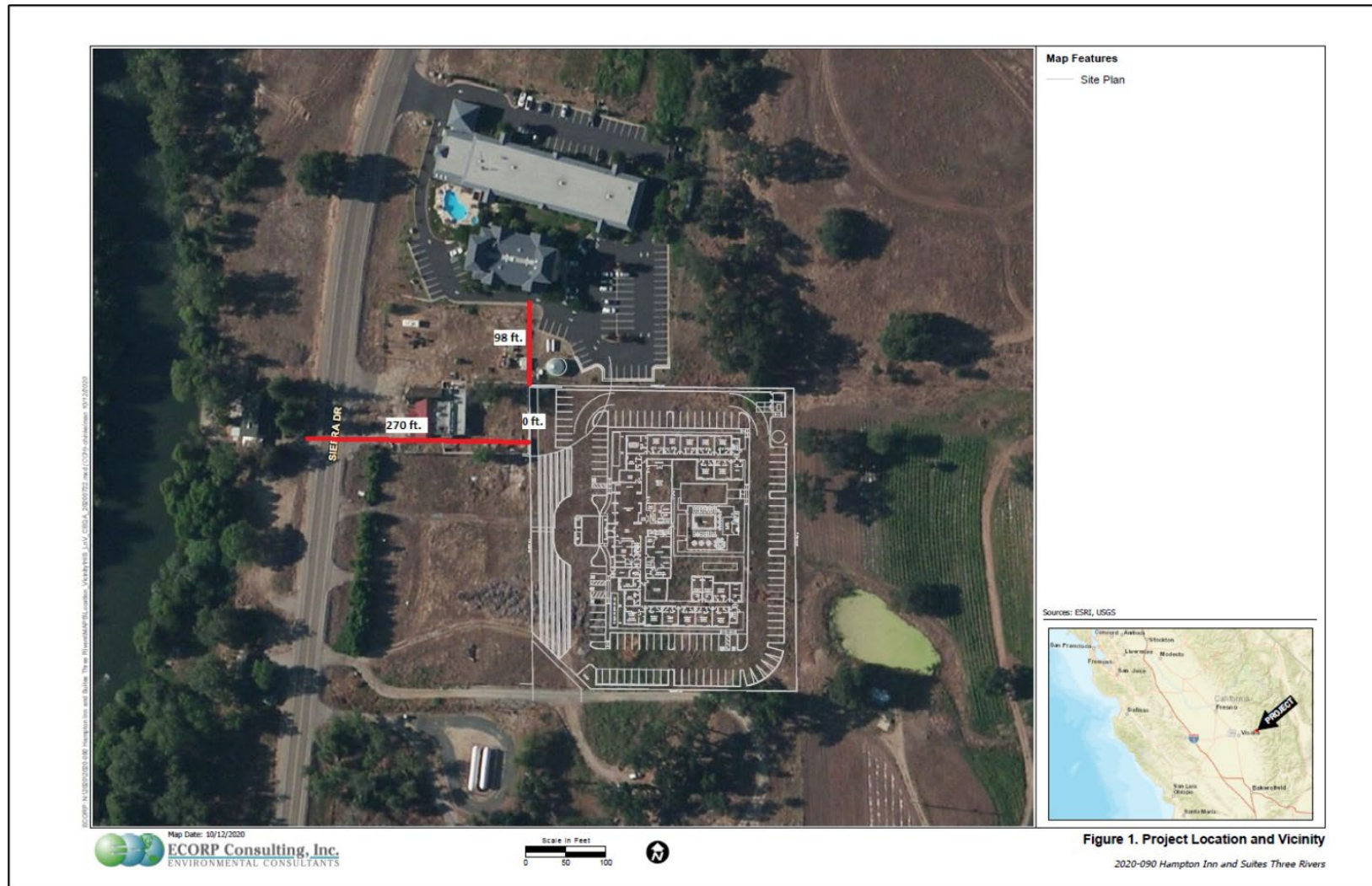
- Regional Water Quality Control Board permits as applicable
- Caltrans approvals/permits as applicable
- San Joaquin Valley Unified Air Pollution Control District (Air District) permits, and compliance with rules/regulations, as applicable

**Figure 2-1**  
**Project Location and Vicinity**



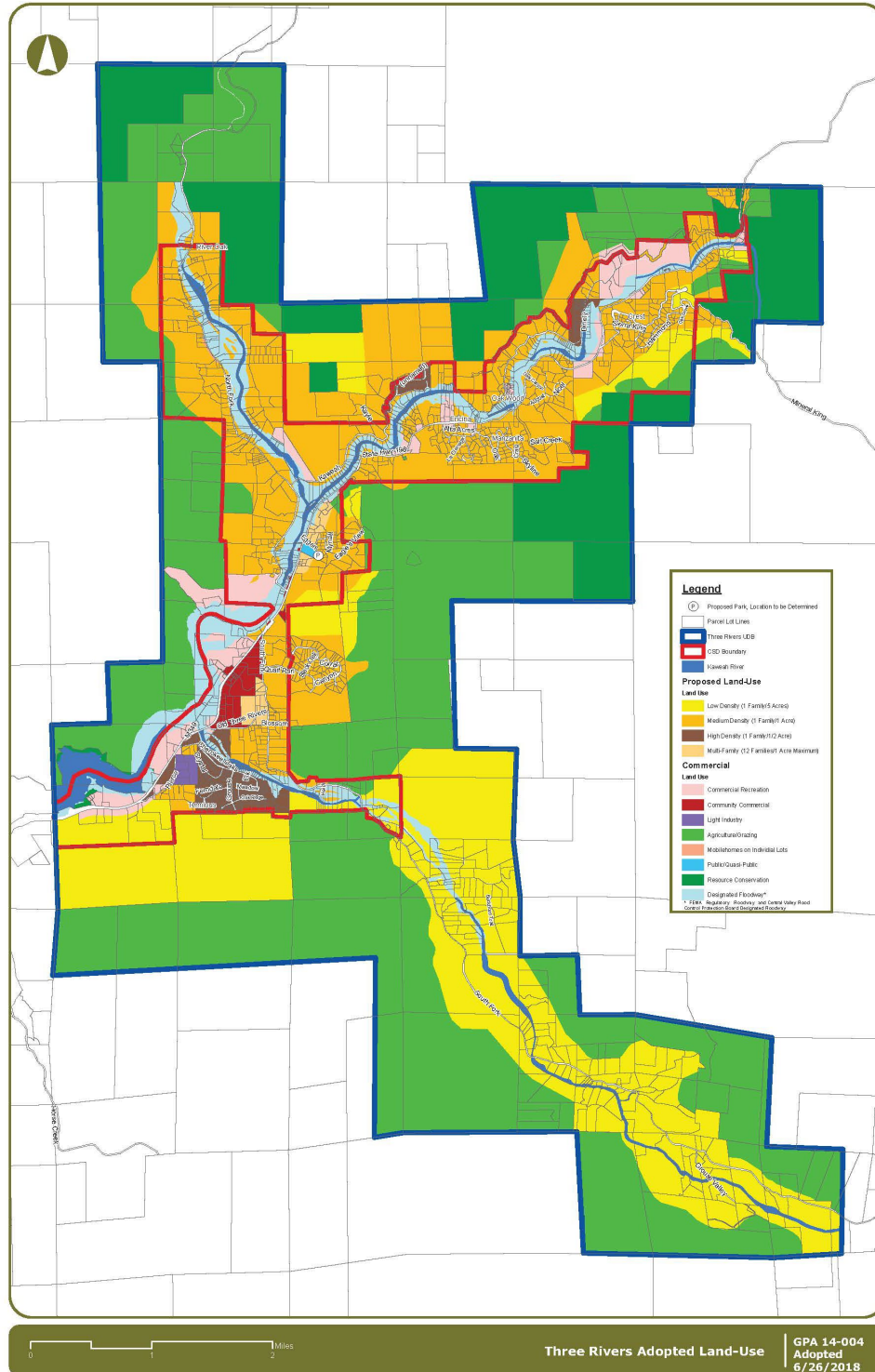


**Figure 2-2**  
**Aerial View of Site and Regional Vicinity**



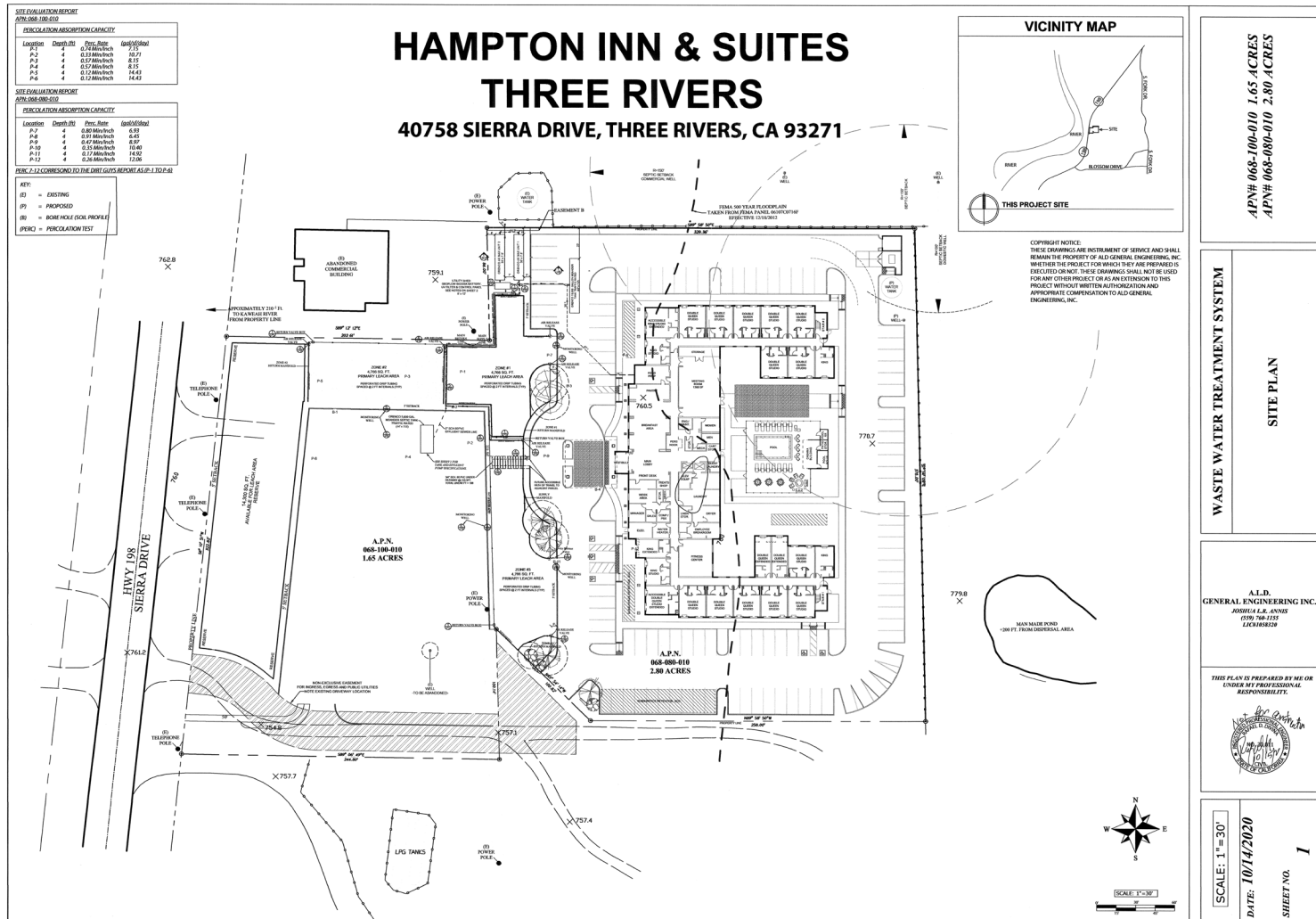


**Figure 2-3**  
**Existing Zoning with Three Rivers UDB**

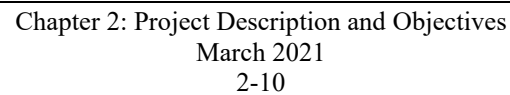


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Three Rivers Hampton Inn & Suites  
SCH# 2020110016

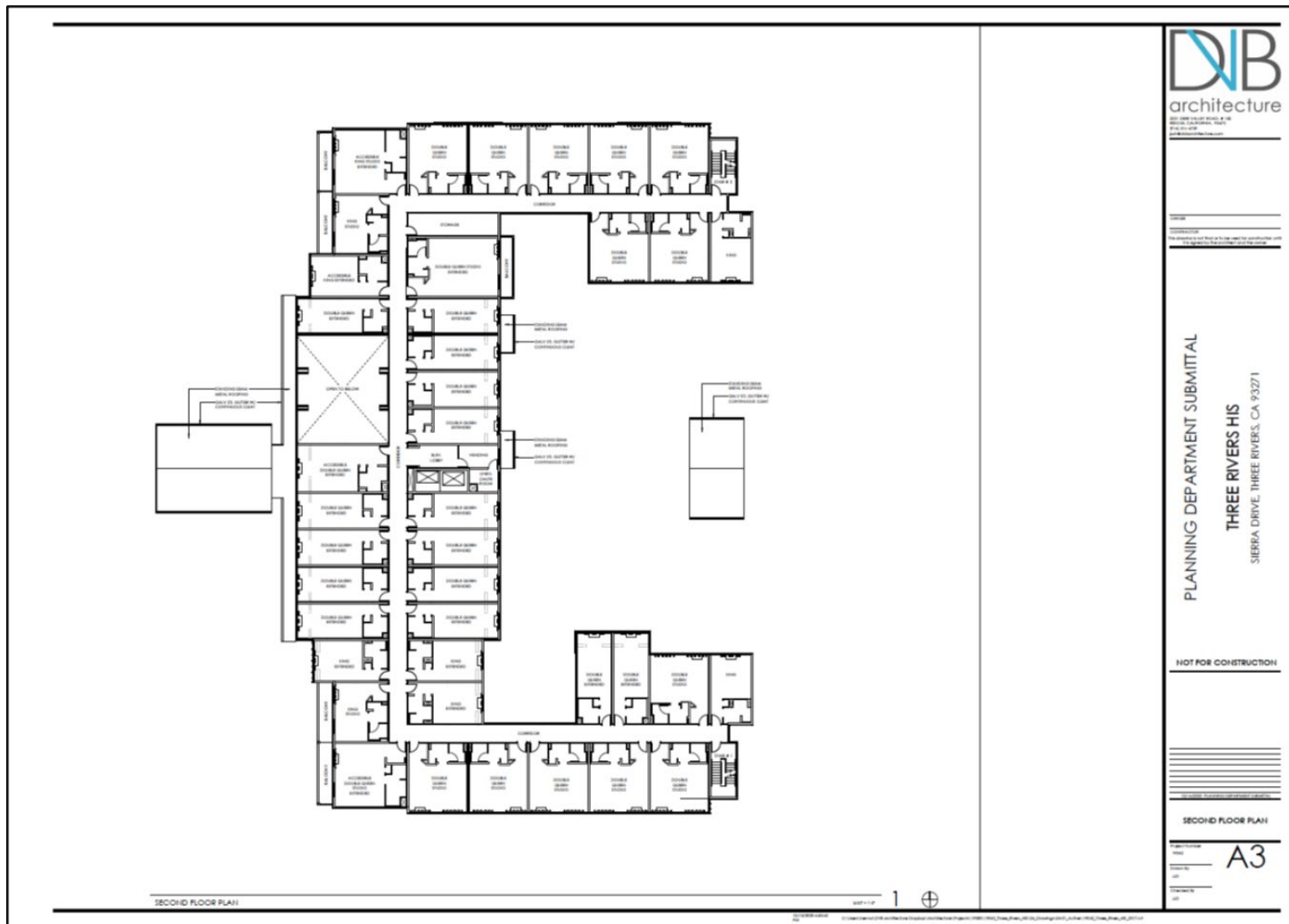
Figure 2-4  
Overall Site Plan



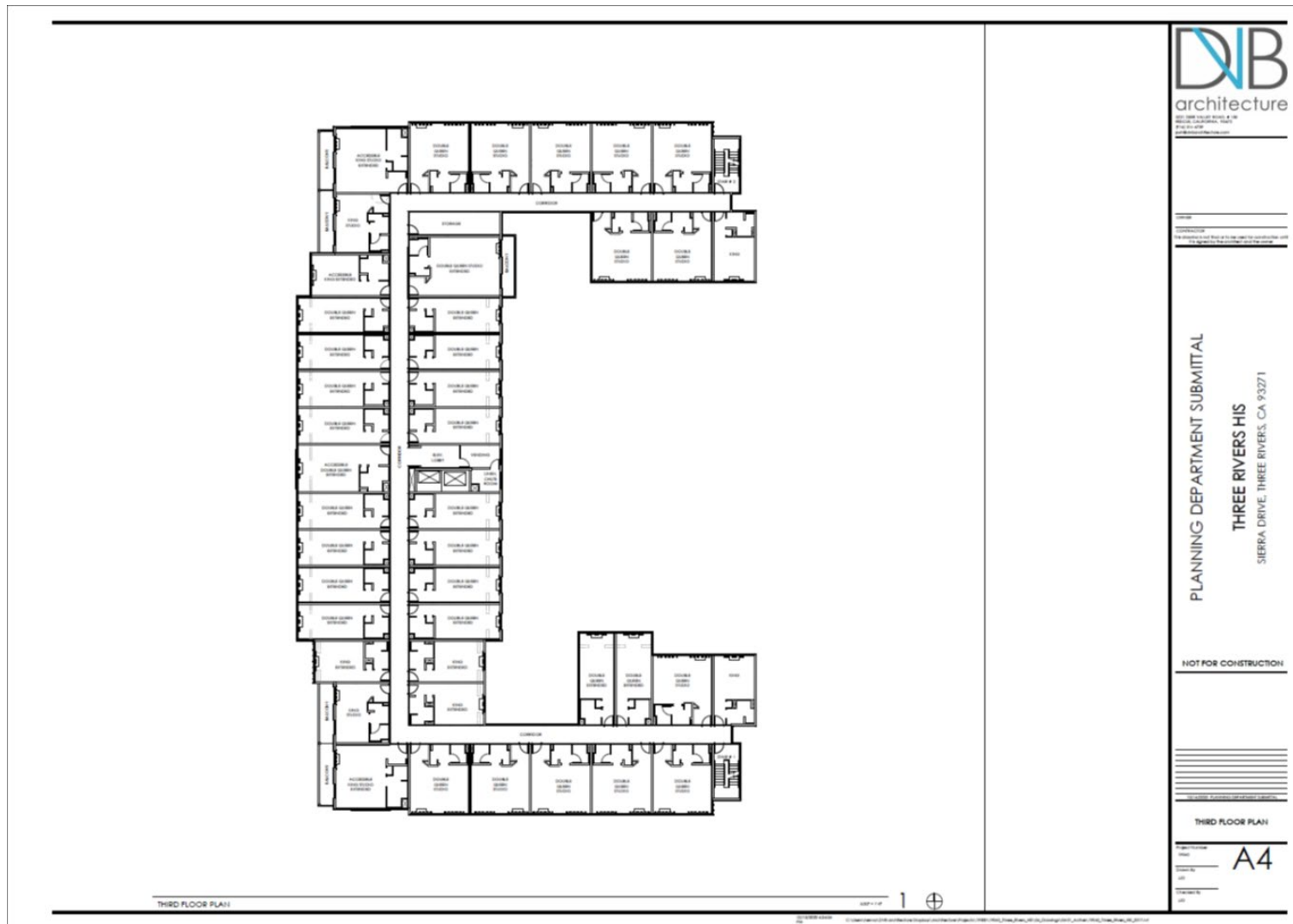
**Figure 2-5a**  
**Floor Plan (1 of 3)**



**Figure 2-5b**  
**Floor Plan (2 of 3)**



**Figure 2-5c**  
**Floor Plan (3 of 3)**



# Aesthetics

## Chapter 3.1

### SUMMARY OF FINDINGS

The proposed Three Rivers-Hampton Inn & Suites (Project) will result in *Less Than Significant Impacts* to Aesthetics. No mitigation measures will be required. A detailed review of potential impacts is provided in the analysis below.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

The California Environmental Quality Act requires that significant impacts on the environment be identified and, where possible, measures be added to minimize or eliminate impacts. ““Significant effect on the environment” means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project...”<sup>1</sup> With respect to aesthetics, potentially significant CEQA impacts include visual impacts to scenic highways, the visual character of the site, and impacts from lighting.

This section describes the existing visual environment in the vicinity of the Project area using accepted methodologies to evaluate aesthetic/visual landscape quality and light/glare. Aesthetic considerations tend to be subjective. The methodologies used to evaluate aesthetic impacts to visual character are qualitative in nature, and are based on the physical characteristics of the Project site and surrounding area.

The proposed Project site is located in the western foothills of the Sierra Nevada portion of Tulare County. The “Environmental Setting” section describes scenic and aesthetic resources in the region, with special emphasis on the proposed Project site and vicinity. The “Regulatory Setting” section provides a description of applicable State and local regulatory policies. A description of the potential impacts of the proposed Project is also provided and includes the identification of feasible mitigation to avoid or lessen the impacts.

The analyses of the existing visual setting and potential visual impacts resulting from the proposed Project are based primarily on information provided by the Resource Management Agency staff.

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<sup>1</sup> California Natural Resources Agency, 2019 California Environmental Quality Act (CEQA) Statute and Guidelines.  
[https://resources.ca.gov/CNRA/LegacyFiles/ceqa/docs/2019\\_CEQA\\_Statutes\\_and\\_Guidelines.pdf](https://resources.ca.gov/CNRA/LegacyFiles/ceqa/docs/2019_CEQA_Statutes_and_Guidelines.pdf). Accessed October 2020.



Thresholds of Significance:

The thresholds of significance for this section are established by the CEQA Checklist Item questions.<sup>2</sup> The following are potential thresholds for significance.

- Impact on a scenic vista
- Impact on a scenic highway
- Impact on visual quality
- Creation of glare or impacts on nighttime views

**ENVIRONMENTAL SETTING**

*Visual Character of the Region*

Community Overview

Three Rivers is located approximately 52 miles southeast of Fresno in the north central area of Tulare County, a predominately agricultural region of central California. The terrain in the County varies. The western portion of the County includes a portion of the San Joaquin Valley (Valley) and is generally flat, with large agricultural areas and generally compact, interspersed towns. The eastern portions of the County are typified by foothills that transition into the Sierra Nevada mountain range.

The Project area is located in the Sierran foothills on the western slope of the Sierra Nevada range at elevations between 700 and 3000 feet. Geophysical factors including elevation, slope, hydrogeology and climate allow the area a high degree of biodiversity that supports a wealth of flora and fauna. This area is typified by undulating terrain that varies from relatively flat riparian valleys immediately adjacent to the Kaweah River to very rugged, mountainous terrain particularly at the southern end of South Fork Drive and along the East Fork of the Kaweah River. Elevations along the South Fork Drive area range from approximately 1200 to 3600 feet above sea level. The North Fork area elevations range from approximately 980 to over 2400 feet in the vicinity of Comb Rocks. Elevations along the State Highway 198 corridor range from approximately 772 feet at Lake Kaweah to a high elevation of 2400 feet east of the entrance to the Sequoia National Park.<sup>3</sup>

“The mild climate in Three Rivers is generally characterized as Mediterranean. The area tends to be clear, sunny, warm, dry and free of fog. The mean temperatures range from a low of 35° F in January to a high of 95° F in July. The average yearly rainfall for the area is approximately 18 inches with 90 percent of the precipitation falling between the months of November and April.

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<sup>2</sup> Ibid.

<sup>3</sup> Tulare County. Three Rivers Community Plan 2018 Update. Page 73. Accessed October 2020 at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>.

The winds in the area are considered light, moving up the canyons in the mornings and down the canyons in the evening.”<sup>4</sup>

### Three Rivers Community Plan Update

Since 1998 the Tulare County Resource Management Agency (RMA) has endeavored to update and replace the 37-year-old Community Plan that still governs growth and development in Three Rivers. In 2012, the Tulare County 2030 General Plan was approved. Since 2013, the RMA has intensified its efforts to update the Plan and reached out to the Three Rivers Community, on a monthly and at times, weekly basis, to achieve this end. Through the various “town hall meetings,” RMA staff have met with and discussed County policies and procedures with Three Rivers’ residents, to further refine the Community Plan. An updated Community Plan has been prepared with a coinciding Environmental Impact Report, to address issues, concerns and viewpoints expressed by the residents of this community.

The vision for the community takes into account the aesthetic of the rural Sierra foothills, proximity to the Sequoia National Park, state highway access, the confluence of several rivers and the community’s proximity to Visalia, Fresno, and Bakersfield. Three Rivers is a standalone destination unique in its natural and social ambiance. A gateway to the Sequoia and Kings Canyon National Park, it is a destination that the residents are proud of. The County acknowledges the strong views its residents hold as to how its future is managed and history protected.

## **REGULATORY SETTING**

The following environmental regulatory settings were summarized, in part, from information contained in the Tulare County General Plan 2030 Update, the Tulare County General Plan 2030 Update Background Report, and the Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR).

### ***Federal Agencies & Regulations***

The National Scenic Byways Program is part of the U.S. Department of Transportation, Federal Highway Administration. The program is a grass-roots collaborative effort established to help recognize, preserve and enhance selected roads throughout the United States. There are currently 150 designated byways in 46 states. However, of the seven (7) designated byways in California, none are located in Tulare County.<sup>5</sup> As such, there are no federal regulations that apply in this case.

### ***State Agencies & Regulations***

#### Title 24 Outdoor Lighting Standards

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<sup>4</sup> Ibid.

<sup>5</sup> USDOT. Federal Highway Administration. 2017. National Scenic Byways Program. California (CA). Accessed October 2020 at: <https://www.fhwa.dot.gov/byways/states/CA>.



Title 24 Outdoor Lighting Standards were adopted by the State of California Energy Commission (CEC) (Title 24, Parts 6 and 11 Building Energy Efficiency Standards) on November 5, 2003, approved by the California Building Standards Commission (BSC) on July 21, 2004 and went into effect on October 1, 2005.<sup>6</sup> Recent updates to Title 24 requirements became effective on January 1, 2020.<sup>7</sup> The updates include definitions for outdoor lighting, which vary according to which “Lighting Zone” the equipment is in. The CEC defines rural areas in accordance with guidelines established by the United States Census Bureau. Rural areas are categorized as CEC Lighting Zone 2 (LZ2) and described as areas being exposed to “moderate” levels of ambient illumination.<sup>8</sup>

### Scenic Highway Program

The California Scenic Highway Program was established by the state Legislature in 1963 for the purpose of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been officially designated. The state laws governing the scenic highways program are found in the California Streets and Highways Code Sections 260-284.<sup>9</sup> There are two eligible State Scenic Highways in Tulare County, SRs 198 and 190; however, they are not Designated State Scenic Highways.<sup>10</sup>

### ***Local Policy & Regulations***

The Tulare County General Plan 2030 Update includes a number of goals and policies relating to scenic protection of County resources. The Framework Concepts (3) addresses Scenic Landscapes:

*“The scenic landscapes in Tulare County will continue to be one of the County’s most visible assets. The Tulare County General Plan emphasizes the enhancement and preservation of these resources as critical to the future of the County. The County will continue to assess the recreational, tourism, quality of life, and economic benefits that scenic landscapes provide and implement programs that preserve and use this resource to the fullest extent.”<sup>11</sup>*

### Scenic Roadways

Tulare County’s General Plan 2030 Update discusses State and County-designated and eligible scenic highways and encourages citizen and private sector initiatives to promote and protect such

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<sup>6</sup> California Energy Commission. 2017. Past Building Energy Efficiency Standards. Accessed October 2020 at: [http://www.energy.ca.gov/title24/standards\\_archive/](http://www.energy.ca.gov/title24/standards_archive/).

<sup>7</sup> California Energy Commission. 2017. Building Energy Efficiency Program. Accessed October 2020 at: <http://www.energy.ca.gov/title24/>.

<sup>8</sup> California Energy Commission. 2016. page 41. Accessed October 2020 at: <http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf>.

<sup>9</sup> California Legislative Information., 2017. Article 2.5. State Scenic Highways [260 – 284]. Accessed October 2020 at: [https://leginfo.ca.gov/faces/codes\\_displayText.xhtml?lawCode=SHC&division=1.&title=&part=&chapter=2.&article=2.5](https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=SHC&division=1.&title=&part=&chapter=2.&article=2.5), accessed October 2020.

<sup>10</sup> CADOT, 2017. Tulare County. Accessed October 2020 at: [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm).

<sup>11</sup> Tulare County, 2012. Tulare County General Plan 2030 Update. Page A-2. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>

areas.<sup>12</sup> State Route 198 from Visalia to Three Rivers has been designated as an eligible State Scenic Highway by the State of California.<sup>13</sup> State Route 198 parallels Lake Kaweah and the Kaweah River. This highway travels through the agricultural areas of the valley floor to the foothills and the Sierra Nevada range. Figure 7-1 of the General Plan 2030 Update identifies State-designated scenic highways as well as County-designated scenic roads within Tulare County.<sup>14</sup>

#### Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within the County of Tulare. General Plan policies that relate to the proposed Project are listed below.

**LU-5.3 Storage Screening** - The County shall require adequate landscaping and screening of industrial storage areas to minimize visual impacts and enhance the quality of the environment.

**LU-5.6 Industrial Use Buffer** - Unless mitigated, the County shall prohibit new heavy industrial uses to a minimum of 500 feet from schools, hospitals, or populated residential areas (more than 10 dwelling units within a quarter mile diameter area). The buffer area may be used for activities not creating impacts to adjoining sensitive land uses for uses accessory to the heavy industrial use. The establishment of a buffer may not be required when mitigated or may not apply to industrial uses that do not impact adjoining uses identified herein. The buffer area shall be landscaped and maintained.

**LU-7.6 Screening** - The County shall require landscaping to adequately screen new industrial uses to minimize visual impacts.

**LU-7.14 Contextual and Compatible Design** - The County shall ensure that new development respects Tulare County's heritage by requiring that development respond to its context, be compatible with the traditions and character of each community, and develop in an orderly fashion which is compatible with the scale of surrounding structures.

**LU-7.19 Minimize Lighting Impacts** - The County shall ensure that lighting in residential areas and along County roadways shall be designed to prevent artificial lighting from reflecting into adjacent natural or open space areas unless required for public safety.

**SL-1.1 Natural Landscapes** - During review of discretionary approvals, including parcel and subdivision maps, the County shall as appropriate, require new development to not significantly impact or block views of Tulare County's natural landscapes. To this end, the County may require new development to:

1. Be sited to minimize obstruction of views from public lands and right-of-ways,

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<sup>12</sup> Ibid. Page 7-4, 7.2 Scenic Corridors and Places.

<sup>13</sup> CADOT, 2017. Tulare County. Accessed October 2020 at: [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm).

<sup>14</sup> Tulare County, 2012. Tulare County General Plan 2030 Update. Page 7-5. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>.

2. Be designed to reduce visual prominence by keeping development below ridge lines, using regionally familiar architectural forms, materials, and colors that blend structures into the landscape,
3. Screen parking areas from view,
4. Include landscaping that screens the development,
5. Limit the impact of new roadways and grading on natural settings, and,
6. Include signage that is compatible and in character with the location and building design.

**SL-1.2 Working Landscapes** - The County shall require that new non-agricultural structures and infrastructure located in or adjacent to croplands, orchards, vineyards, and open rangelands be sited so as to not obstruct important viewsheds and to be designed to reflect unique relationships with the landscape by:

1. Referencing traditional agricultural building forms and materials,
2. Screening and breaking up parking and paving with landscaping, and
3. Minimizing light pollution and bright signage.

**SL-2.1 Designated Scenic Routes and Highways** - The County shall protect views of natural and working landscapes along the County's highways and roads by maintaining a designated system of County scenic routes and State scenic highways by:

1. Requiring development within existing eligible State scenic highway corridors to adhere to land use and design standards and guidelines required by the State Scenic Highway Program,
2. Supporting and encouraging citizen initiatives working for formal designation of eligible segments of State Highway 198 and State Highway 190 as State scenic highways,
3. Formalizing a system of County scenic routes throughout the County ..., and
4. Requiring development located within County scenic route corridors to adhere to local design guidelines and standards.

**ERM-1.4 Protect Riparian Areas** - The County shall protect riparian areas through habitat preservation, designation as open space or recreational land uses, bank stabilization, and development controls.

**ERM-1.5 Riparian Management Plans and Mining Reclamation Plans** - The County shall require mining reclamation plans and other management plans to include measures that protect, maintain, and restore riparian resources and habitats.

**ERM-1.6 Management of Wetlands** - The County shall support the preservation and management of wetland and riparian plant communities for passive recreation, groundwater recharge, and wildlife habitats.

**ERM-1.8 Open Space Buffers** - The County shall require buffer areas between development projects and significant watercourses, riparian vegetation, wetlands, and other sensitive habitats and natural communities. These buffers should be sufficient to assure the continued existence of the waterways and riparian habitat in their natural state.

**ERM-1.15 Minimize Lighting Impacts** - The County shall ensure that lighting associated with new development or facilities (including street lighting, recreational facilities, and parking) shall be designed to prevent artificial lighting from illuminating adjacent natural areas at a level greater than one foot candle above ambient conditions.

**ERM-5.19 Night Sky Protection** - Upon demonstrated interest by a community, mountain service center, or hamlet, the County will determine the best means by which to protect the visibility of the night sky.

## IMPACT EVALUATION

### Will the proposed Project:

#### a) Have a substantial adverse effect on a scenic vista?

Impact Analysis:

***Less Than Significant Impact***

For the purposes of this Project, a scenic vista is defined as an area that is designated, signed, and accessible to the public for the purpose of viewing and sightseeing. The Project site is located in the unincorporated community of Three Rivers and is adjacent to an existing hotel along and east of SR 198/Sierra Drive. The County requires development within existing eligible State Scenic Highway corridors to adhere to land use and design standards and guidelines required by the State Scenic Highway Program. The immediate area surrounding the Project site is generally level; there are two nearby hills northeast and east of the site and numerous hills west the site (west of the Kaweah River). The Comfort Inn and Suites is located to the north, the Kaweah River is west of site (west of SR 198) with scattered development (i.e., two rural residences), undeveloped land to the east and, a rural residence and two large compressed natural gas tanks to the south. The Project would be three stories in height and would not be allowed to exceed the 75 feet maximum as specified in the Zoning Ordinance. No parts of the Project would obstruct local scenic views. The primary structure (the hotel building) will be setback greater than 300 feet from the edge of SR 198/Sierra Drive thereby minimizing visual intrusion on scenic views as applicable to CEQA. To be clear, there are ***no designated scenic vistas*** (emphasis added) within or within visible distance of the Project site (County of Tulare, 2010). Therefore, as the Project would result in a less than significant effect on a scenic vista, the Project would result in a ***Less Than Significant Impact*** to this resource.

Cumulative Impact Analysis:      ***Less Than Significant Impact***

The geographic area of the plan falls within the Foothill Growth Management Plan (FGMP). This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), and the Three Rivers Community Plan 2018 Update and supporting EIR. As the proposed Project is screened by existing cottonwood trees along its frontage of SR 198, it would be setback greater than 300 feet, will be three-stories (34'-8" in height; the C-2-MU-SC zone allows a maximum height of 35 feet), will designed to minimize intrusion to surrounding uses, and as there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers that would impact aesthetics, the proposed Project will not significantly contribute to the overall aesthetics of the area.

As there are no anticipated impacts on scenic vistas on-site or in the Project vicinity, there will be ***Less Than Significant Impacts project*** related to this Checklist Item.

Mitigation Measure(s):      ***None Required***

Conclusion:      ***Less Than Significant Impact***

As noted previously, there will be ***No Project-specific or Cumulative Impacts*** related to this Checklist Item.

**b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

Project Impact Analysis:      ***No Impact and Less Than Significant Impact***

There are no rock outcroppings, historic buildings, or other designated scenic resources within or near the Project site. The California Scenic Highway Program allows counties to nominate an eligible scenic highway to be approved by the California Department of Transportation and placed under the scenic corridor protection program. In Tulare County, there is currently one officially designated scenic highway, and two highways that are eligible for designation. Approximately two miles of the officially designated Scenic Highway (State Route) 180 passes through Tulare County, but this segment of SR 180 is greater approximately 20 miles north of the Project site. In addition to SR 198 (a segment of it passes through Three Rivers), SR 190 (approximately 21 miles south), are Eligible State Scenic Highways. As such, the Project is located within the viewshed of an eligible highway segment of SR 198 but, it is ***not located*** within the viewshed of any ***designated scenic highway*** (emphasis added).

As noted in the Three Rivers Community Plan (Community Plan), the Three Rivers community is located within a segment of SR 198 appropriately labeled as the "Three Rivers Community segment". The Community Plan contains policies for visual resources such as design quality, minimize viewshed impacts, skyline preservation, etc., that will apply to the Project. As noted

earlier, the Project is located in a relatively flat area and does not contain scenic resources such as significant trees, rock outcroppings, or historic buildings. Based on these conditions and requirements, there will be no substantial damage to scenic resources or a state scenic highway, therefore, there will be **No Impact** and a **Less Than Significant Impact** as a result of the proposed Project to this Checklist Item.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is in the Foothill Region of Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), and the adopted Three Rivers Community Plan 2018 Update and the approved/certified Environmental Impact Report.

Project-specific impacts will be less than significant. The proposed Project is consistent with the County's 1.3 percent projected growth rate and permitted as part of the adopted Community Plan Update including policies contained within the Community Plan to prevent or minimize adverse impacts to scenic resources. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers that would impact aesthetics, the proposed Project will not result in substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway., ***Less Than Significant Impacts*** related to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact and Less Than Significant Impact***

As noted previously, there will be ***No Project-specific Impact and Less Than Significant Cumulative Impacts*** related to this Checklist Item.

**c) Substantially degrade the existing visual character or quality of the site and its surroundings?**

Project Impact Analysis: ***No Impact***

The Project site is located in a mixed-use, low density, non-intensive developed area. The proposed Project is screened by existing cottonwood trees along its frontage of SR 198, would be located greater than 300 feet from SR 198, will be three-stories (34'-8" in height; the C-2-MU-SC zone allows a maximum height of 35 feet), and will designed to be minimally intrusive to surrounding uses. As such, even though the Project location is in a generally urbanized area, it would not substantially degrade the existing visual character or quality of the site and its surroundings. As noted earlier, implementation of Tulare County General Plan and Three Rivers Community Plan policies and development standards would minimize or avoid substantial impacts to the visual character or quality of the site and its surroundings. Therefore,

the project would not conflict with applicable zoning and other regulations governing scenic quality resulting in no impact to this resource. Therefore, there will be ***No Impact*** related to this Checklist Item.

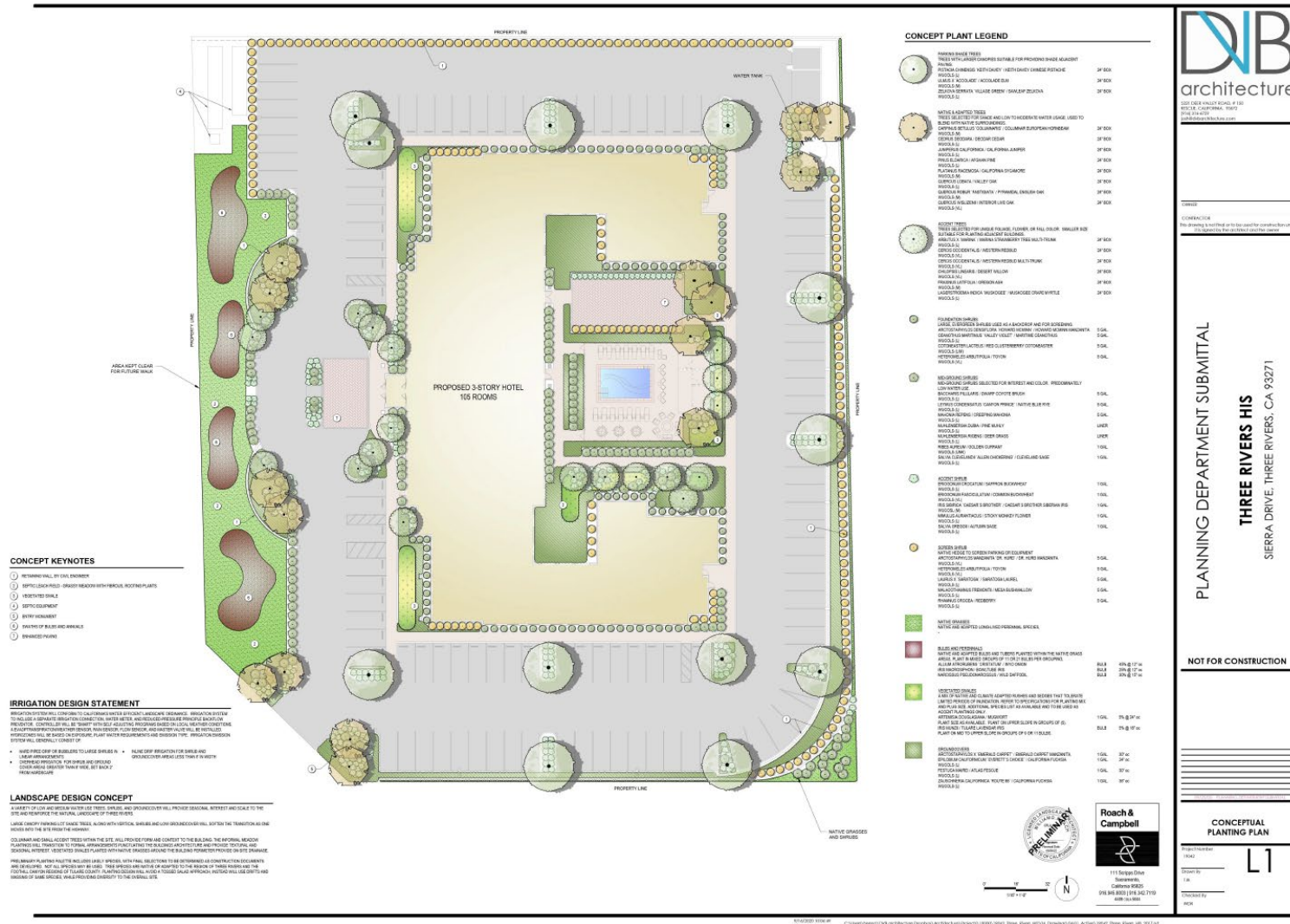
Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is in the foothill region of Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), and the adopted Three Rivers Community Plan 2018 Update and the approved/certified Environmental Impact Report. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers that would impact aesthetics, the proposed Project will not significantly contribute to the overall visual character or quality of the site and its surroundings. **Figure 3.1-1** shows the landscaping plan for the proposed Project site, note the extensive usage of native grasses, shrubs, and trees, etc. As indicated in this figure, a mixture of trees will provide shade canopies, low water usage, will blend in with native trees, would result in fall colors, would be used as backdrop with taller trees for screening, etc. Shrubs of various types and sizes will include native varieties (e.g., manzanita) for screening, backdrop, color, low water usage, etc.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

### Figure 3.1-1 Landscape Plan





**d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

Project Impact Analysis:

***Less Than Significant Impact***

The Project will likely including lighting at the entry/exit point, and include evening lighting in the parking areas, pedestrian walkways, and security lighting, it will be required to comply with Tulare County General Plan and Three Rivers Community Plan policies and development standards. The Community Plan contains specific standards for night sky conservation and protection at *Policy 1.1.12 LU-4.5 Commercial Building Design; 4.5.2. Proposals Subject to County Project Review Committee* and, *A-1 - Policy Matrix (6) Establishing Lighting Standards for Night Sky Conservation and Protection*. As such, the Project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area resulting in a less than significant impact to this resource.

Cumulative Impact Analysis:

***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), and the adopted Three Rivers Community Plan 2018 Update and the approved/certified Environmental Impact Report. As the proposed Project is screened by existing cottonwood trees along its frontage of SR 198, it would be setback greater than 300 feet from SR 198, will be three-stories (34'-8" in height; the C-2-MU-SC zone allows a maximum height of 35 feet), will designed to minimize intrusion to surrounding uses, and as there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers that would a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The proposed Program will not result in any significant off-site impacts. Therefore, ***No Cumulative Impact*** related to this Checklist Item will occur.

Mitigation Measure(s):

***None Required.***

Conclusion:

***No Impact***

## DEFINITIONS & ABBREVIATIONS

### Abbreviations

BSC	Building Standards Commission
CEC	California Energy Commission
DOT	Department of Transportation
ERM	Environmental Resource Management
FGMP	Foothill Growth Management Plan
RDEIR	Recirculated Draft Environmental Impact Report

### Definitions

**Scenic landscapes** - Landscapes that include agricultural lands, woodlands, forestlands, watercourses, mountains, meadows, structures, communities, and other types of scenery that contribute to the visual beauty of Tulare County.

**Natural Landscapes** - An expanse of naturally-formed scenery that contribute to the visual beauty of Tulare County.

**Working Landscapes** - These are landscapes shaped by human activities that produce economic commodities such as agricultural lands, ranch lands, and timber lands. They may also include picturesque commercial districts in communities, crops, orchards, agricultural structures, stands of timber, and canals.”

**Viewshed** - An area of land, water, or other environmental features that is visible from a fixed vantage point. Viewsheds tend to be areas of particular scenic or historic value that are deemed worthy of preservation against development or other change. The preservation of viewsheds is typically the goal in the designation of open space areas, green belts, and urban separators.

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# Agricultural Land and Forestry Resources

## Chapter 3.2

### SUMMARY OF FINDINGS

The proposed Three Rivers-Hampton Inn & Suites (Project) will result in ***Less Than Significant Impacts*** to Agricultural Land and Forestry Resources. No mitigation measures will be required. A detailed review of potential impacts is provided in the analysis below.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Agricultural Land and Forestry Resources. As required in CEQA Guidelines Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2(a), “[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

The “Environmental Setting” section provides a description of the Agricultural Lands and Forestry Resources in the County. The “Regulatory Setting” section provides a description of applicable

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<sup>1</sup> CEQA Guidelines, Section 15126.2 (a)

Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR) incorporated by reference. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

### Thresholds of Significance

The Department of Conservation identifies the location of prime Agricultural Land resource areas and Williamson Act Contract lands. Thresholds of potential significance will include the following:

- Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
- Conflict with Williamson Act Contracts
- Conflict with existing zoning, or cause rezoning of, forest land
- Result in the loss of forest land
- Conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use

## **ENVIRONMENTAL SETTING**

Tulare County exhibits a diverse ecosystems landscape created through the extensive amount of topographic relief (elevations range from approximately 200 to 14,000 feet above sea level). The County is essentially divided into three eco-regions. The majority of the western portion of the County comprises the Great Valley Section, the majority of the eastern portion of the County is in the Sierra Nevada Section, and a small section between these two sections comprises the Sierra Nevada Foothill Area.”<sup>2</sup>

Three Rivers lies in this foothill area generally at elevations between 700 and 3000 feet. Geophysical factors including elevation, slope, hydrogeology, and climate allow the area a high degree of biodiversity that supports a wealth of flora and fauna. The area is typified by undulating terrain that varies from relatively flat riparian valleys immediately adjacent to the North, South, and Middle forks of the Kaweah River to very rugged, mountainous terrain particularly at the southern end of South Fork Drive and along the East Fork of the Kaweah River.

### Agricultural Productivity

According to the General Soils Map of Tulare County, Three Rivers contains three soil classes: Class VI, Class VII and Class VIII, all of which are not suitable for cultivation however they lend

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<sup>2</sup> Tulare County, 2010. General Plan 2030 Update RDEIR. Page 3.11-5. Accessed October 2020 at:  
<http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf>.

themselves to pasture, rangelands, grazing and wildlife.<sup>3</sup> Three Rivers' soils are conducive to cattle and grazing operations and to this end extensive grazing occurs along north and south forks (Case Mountain) of the Kaweah River on private ranches and lands leased from the BLM.<sup>4</sup>

### Important Farmland Trends

"Agriculture is the largest private employer in the county with farm employment accounting for nearly a quarter of all jobs. Processing, manufacturing, and service to the agriculture industry provides many other related jobs." According to Tulare County Agricultural Facts.<sup>5</sup> Agricultural lands (crop and commodity production and grazing) also provide the County's most visible source of open space lands. As such, the protection of agricultural lands and continued growth and production of agriculture industries are essential to all County residents.

The 2018 Tulare County Annual Crop and Livestock Report reports that, "Tulare County's total gross production value for 2019 is \$7,505,352,100. This represents an increase of \$292,048,700 or 4.0% above 2018's value of \$7,213,303,400.

Milk continues to be the leading agricultural commodity in Tulare County; with a gross value of \$1,612,070,000, a decrease of \$71,677,000 or 4.3%. Milk represents 21.5% of the total crop and livestock value for 2019. Total milk production decreased by 11%. Livestock and Poultry's gross value of \$665,379,000 represents a decrease of 4.2% below 2018, mostly due to a lower per unit value for cattle.

The total value of all Field Crop production was \$496,171,000, a decrease of 5.0% from the previous year. This decrease is mostly attributed to lower acreage for several field crops. Fruit and Nut commodities were valued at \$4,555,465,000 an increase of 11.0%. This increase can be partially attributed to the increase in Almond, Pistachio, and Tangerine acreage. Nursery Products decreased by 25.1% compared to 2018 with an overall value of \$72,794,000. Vegetable crops were valued at \$19,929,000, representing a 15.2% increase. This can be attributed to an increase in yield in both Broccoli and Cucumbers compared to 2018.

Tulare County's agricultural strength is based on the diversity of the crops produced. The 2019 crop report covers more than 120 different commodities, 44 of which have a gross value in excess of \$1,000,000. Although individual commodities may experience difficulties from year to year, Tulare County continues to produce high-quality crops that provide food and fiber to more than 96 countries throughout the world.<sup>6</sup>

"According to the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), in 2012 agricultural lands in Tulare County included 860,120 acres of important

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<sup>3</sup> Tulare County. Three Rivers Community Plan 2018 Update Draft EIR. Page 3.2-2.

<sup>4</sup> Ibid. 3.2-2 and -3.

<sup>5</sup> Tulare County Agricultural Facts. Accessed October 2020 at <https://www.tulcofb.org/index.php?page=agfacts>.

<sup>6</sup> Tulare County. 2019 Tulare County Crop and Livestock Report. Tom Tucker III Agricultural Commissioner/Sealer. Accessed February 2020 at: <https://agcomm.co.tulare.ca.us/ag/index.cfm/standards-and-quarantine/crop-reports1/crop-reports-2011-2020/2019-crop-report/>

farmland (designated as FMMP Prime, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance) and 439,940 acres of grazing land.

This same data indicates that farmland acreage in the County has generally been decreasing for each two-year period between 1998 and 2006. In the 2010 FMMP analysis, Tulare County lost 17,502 acres of important farmland, and 17,748 acres of total farmland between 2008 and 2010. This trending will likely have a minimum impact on Three Rivers as the community's soils are of limited agronomic value and best utilized for forage and grazing purposes.

Approximately 10,300 acres within the planning area have been entered into agricultural preserve contracts (Williamson Act contract) or in Partial Non-Renewal (Removal from the Williamson Act). Agricultural preserve contracts are designed to keep productive farmland in agricultural use and prevent premature conversion to urban use. When a landowner enters into a contract, they receive a lower property tax rate. They must agree to keep their land in agricultural use for a ten year period. Contracts can be canceled before the ten year period ends, however, the county must make several findings and the owner must pay a penalty equal to 12.5 percent of the unrestricted value of the property before the contract can be canceled. Property owners may elect to file for a notice of non-renewal, which phases out the Williamson Act contract over a ten year period. Property taxes increase over the ten-year phase-out period. Figure 3.2-1 shows the location of agricultural preserves in the Three Rivers area.”<sup>7</sup>

“Within the Three Rivers Urban Development Boundary (UDB), approximately 9,010 acres are utilized for urban uses (commercial, industrial, and residential uses) and approximately 10,300 acres are used for agriculture. The Year 2015 baseline population and was determined by projecting the 2014 American Community Survey (Survey) data population by an annual growth rate of 1.3% annually. The Survey indicated that in Year 2014 the community had 1,093 dwelling units (including vacant dwellings) with a population of 2,278. At an annual growth rate of 1.3%, the projected housing units are 1,181 and 1,344 in Years 2020 and 2030, respectively, and projected population is 2,462 and 2,801 in Years 2020 and 2030, respectively.

By comparison the State of California is projected to see a population growth rate of approximately of 0.76 percent across this same time frame. Population density figures are approximate and do not reflect demographic disparities caused by the tendency of human populations to concentrate in urban centers. In the case of Three Rivers, long term development, based on historic and contemporary trends and conditions, indicates that the majority of growth within the Three Rivers UDB will be in and around the Middle Fork corridor and collocated about the commercial center of the community. Population density figures encompass street rights-of-way, residential, commercial/industrial uses, public space, and buildings.

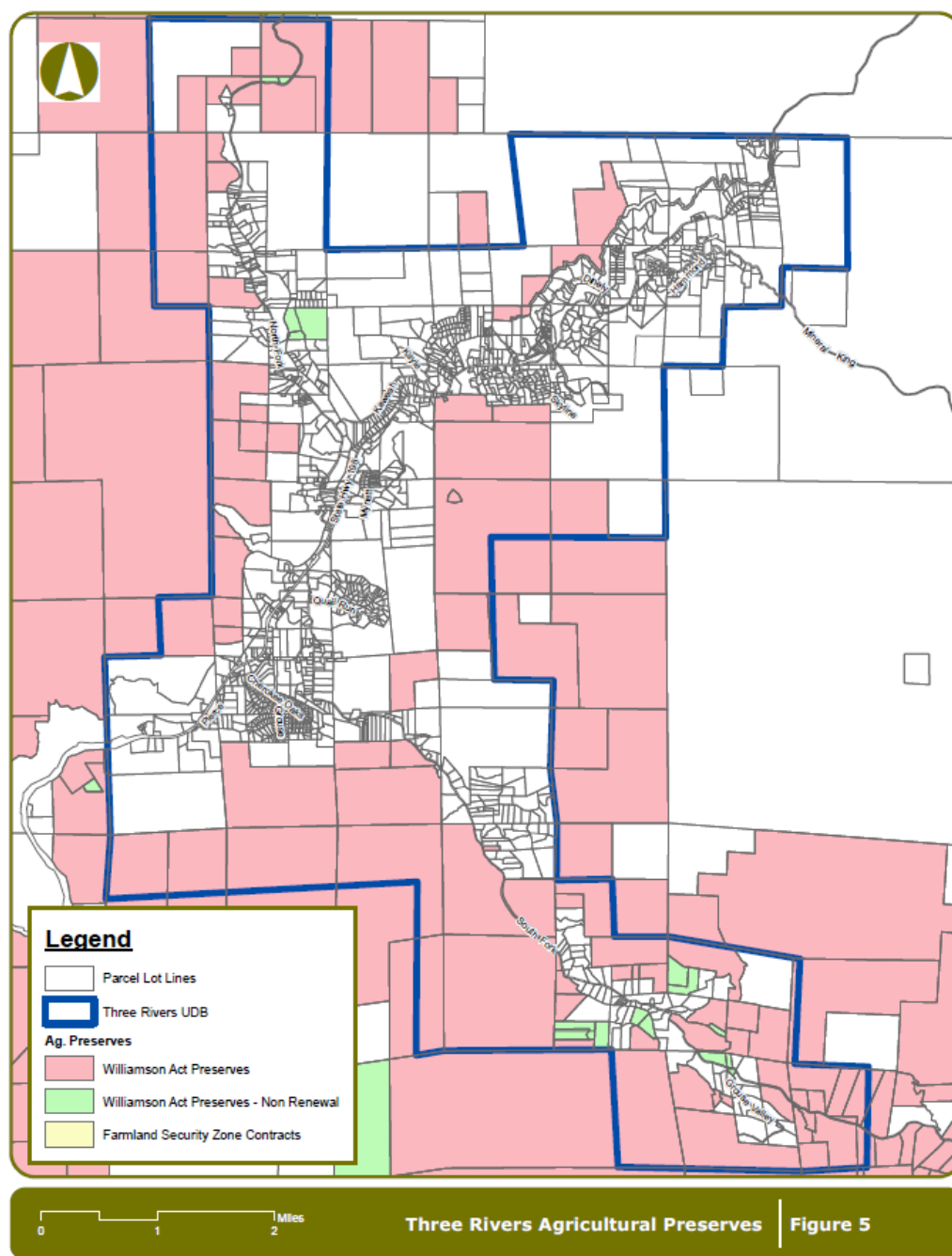
“There are 35 soil types present in the Three Rivers Planning Area. The majority of the soils in the Three Rivers area are Loam, Sandy Loam, and Rock Outcrops.” Land capability class (non-irrigated), serves as a gauge for assessing a soil's capability to produce common cultivated crops and pasture plants. Land capability in the Three Rivers area indicates soils of Class VI, VII, or

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<sup>7</sup> Tulare County. Three Rivers Community Plan 2018 Update Draft EIR. Page 3.2-3.

VIII, rankings indicative of low soil productivity. The Storie Index ranges from the low 20's to the mid-50's, indicative of "poor" and "fair" arability."<sup>8</sup>

**Figure 3.2-1  
Williamson Act Lands Map**



Source: Tulare County, 2017, page 43. Three Rivers Community Plan 2018 Update.

<sup>8</sup> Ibid. 3.2-5.



### Urbanization

“The County recognizes that concerns exist over historical trending both statewide, and locally within Tulare County, regarding the conversion of agriculturally-designated lands to urban uses. The draft Three Rivers Community Plan Update does not envision or mandate the urbanization of lands zoned for agricultural or conservation purposes. In most cases residential, commercial, and recreational use areas delineated by the Community Plan Update fall within corridors where higher population densities have historically been located i.e. in and around the Middle Fork and lower North, South, and East Forks of the Kaweah River. Agricultural lands within the Three Rivers UDB are generally located on the outer peripheries of the community and are utilized for pasture and grazing operations and are zoned in accordance with these uses. Due to elevation and soil chemistry, the Three Rivers UDB does not lend itself to large scale horticulture.

A secondary impact associated with the conversion of agricultural land to urban uses involves land use conflicts. As agricultural land in the Planning Area is converted to urban uses, land use conflicts will arise as existing farming (and ranching) operations interface with urban uses. This urban encroachment could prevent ranchers from carrying out many of their normal management practices (e.g.; application of pesticides, tilling, harvesting, open range use, grazing requirements, etc.). Agricultural practices can generate dust, noise, and odors. This can have an adverse impact on surrounding residents and it places an additional burden on the agricultural sector to minimize these impacts. In addition to farmers/ranchers potentially receiving complaints from surrounding neighbors, the farmers/ranchers can be adversely impacted by vandalism, theft and nuisance activities from neighboring residents. However, due to the physical and topographical features of the Three Rivers area, it is unlikely that farmers/ranchers will have to contend with secondary impacts as ranching operations are typically located away from populated areas and/or areas that may be developed in the future.

Urbanization of agricultural land can also have an economic impact on the local economy because land taken out of production reduces the amount of money that flows into the local economy from agriculture.”<sup>9</sup>

### Forest Lands

“Three Rivers supports two major plant communities - Foothill Woodland and Chaparral and one plant association - Riparian Woodland. The Foothill Woodland is the dominant plant community in the foothills. The community is characterized as having a park-like setting with the typical landscape being dotted with Blue Oaks and Buckeye and carpeted with grasses and annual wildflowers during the spring. At lower elevations, Valley Oak occupies the valley bottoms. In drier microclimates, the Chaparral plant community encroaches on the Foothill Woodland. Generally Chaparral areas, found on south and southwest facing slopes, contain plants which are similar to each other in that they are drought resistant and in many cases fire adapted. Chaparral

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<sup>9</sup> Op. Cit. 3.2-5 and -6.

is important as a winter feed area for deer. Typical plants in the Chaparral are manzanita, ceonothus, chamise, redbud, Scrub Oak and Interior Live Oak.”<sup>10</sup>

“The Riparian Woodland is associated with both of these communities wherever watercourses are prevalent. At the lower elevations this woodland contains Valley Oak, Sycamore, Cottonwood and Willow. As elevations increase, the vegetation along these watercourses becomes more diverse and lush. Alder and Oregon Ash join Sycamore and Willow to form a vegetational pattern that denotes the existence of water and supports a large wildlife population.”<sup>11</sup>

## REGULATORY SETTING

### *Federal Agencies & Regulations*

#### Federal Farmland Protection Policy Act (FPPA)

“The FPPA is intended to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that to the extent possible federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect farmland...Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.”<sup>12</sup>

#### U.S. Forest Service

The U.S. Department of Agriculture Forest Service is a federal agency that manages public lands in national forests and grasslands. The Forest Service is also the largest forestry research organization in the world, and provides technical and financial assistance to state and private forestry agencies.

#### Bureau of Land Management

“The Bureau of Land Management administers more surface land (245 million acres or one-tenth of America’s land base) and more subsurface mineral estate (700 million acres) than any other government agency in the United States. The BLM’s mission, which is principally defined by the Federal Land Policy and Management Act of 1976 (FLPMA for short), directs the agency to carry out a dual mandate: that of managing public land for multiple uses while conserving natural, historical, and cultural resources. In the language of FLPMA, the BLM is to administer public lands “on the basis of multiple use and sustained yield” of resources.

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<sup>10</sup> Tulare County. Three Rivers Community Plan 2018 Update. Page 110.

<sup>11</sup> Ibid.

<sup>12</sup> USDA Natural Resources Conservation Service. Accessed October 2020 at:  
[https://www.nrcs.usda.gov/wps/portal/nrcs/detail/?cid=nrcs143\\_008275](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/?cid=nrcs143_008275).

Multiple uses under BLM management include renewable energy development (solar, wind, other); conventional energy development (oil and gas, coal); livestock grazing; hardrock mining (gold, silver, other), timber harvesting; and outdoor recreation (such as camping, hunting, rafting, and off-highway vehicle driving).

The conservation side of the BLM's mission includes preserving specially designated landscapes, such as those comprising the 35 million-acre system of National Conservation Lands (including wilderness areas, wilderness study areas, national monuments, national conservation areas, historic trails, and wild and scenic rivers); protecting wild horse and burro rangeland; conserving wildlife, fish, and plant habitat; preserving Native American and "Old West" artifacts; and protecting paleontological resources, such as dinosaur bones."<sup>13</sup>

### National Park Service

"The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world."<sup>14</sup>

"The National Park System covers more than 84 million acres and is comprised of 417 sites with at least 19 different designations. These include 129 historical parks or sites, 87 national monuments, 59 national parks, 25 battlefields or military parks, 19 preserves, 18 recreation areas, 10 seashores, four parkways, four lakeshores, and two reserves."<sup>15</sup> "Annual visitor spending in communities within 60 miles of NPS sites supports more than 295,000 mostly local jobs and contributes about \$32 billion to the U.S. economy."<sup>16</sup>

### U.S. Army Corps of Engineers

The US Army Corps of Engineers (USACE) is a federal agency that performs military and civilian functions. The USACE is the nation's number one federal provider of outdoor recreation. Largely responsible for damming waterways the USACE is an environmental engineer, owner and operator of more than 600 dams. The USACE operates and maintains 12,000 miles of commercial inland navigation channels, dredges more than 200 million cubic yards of construction and maintenance dredge material annually, maintains 926 coastal, Great Lakes and inland harbors, restores, creates, enhances or preserves tens of thousands of acres of wetlands and provides for a water supply storage capacity of 329.2 million acre-feet in major Corps lakes. The USACE owns and operates 24 percent of the U.S. hydropower capacity and supports Army and Air Force installations along with developing technologies to protect the nation's environment and enhance quality of life.<sup>17</sup>

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<sup>13</sup> U.S. Department of the Interior. Bureau of Land Management. About. Accessed February 2021 at: <https://www.blm.gov/about>

<sup>14</sup> National Park Service. Our Mission. Accessed October 2020 at: <https://www.nps.gov/aboutus/index.htm>.

<sup>15</sup> National Park Service. National Park Service Overview. Accessed October 2020 at: <https://www.nps.gov/aboutus/upload/NPS-Overview-02-09-17.pdf>.

<sup>16</sup> Ibid.

<sup>17</sup> U.S. Army Corps of Engineers. Accessed October 2020 at: <http://www.usace.army.mil/Missions.aspx>.

## ***State Agencies & Regulations***

### California Department of Conservation: Farmland Mapping and Monitoring Program

“The Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California’s agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance.”<sup>18</sup>

### Williamson Act: California Land Conservation Act of 1965

“The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value.”<sup>19</sup>

“The Open Space Subvention Act (OSSA) was enacted on January 1, 1972, to provide for the partial replacement of local property tax revenue foregone as a result of participation in the Land Conservation (Williamson) Act and other enforceable open space restriction programs (Government Code §16140 et seq.). Participating local governments have received annual payment on the basis of the number of eligible acres, quality (soil type and agricultural productivity), and, for Farmland Security Zone contracts, location (proximity to a city) of land enrolled under eligible enforceable open space restrictions.”<sup>20</sup> “The Open Space Subvention payments totaled more than \$863 million between 1972 and 2010. Despite elimination of OSSA payments since the FY 09/10 budget, information provided by counties and cities is critical in order to document the level of participation in the program and the impact the loss of OSSA payments is having on local governments. It is the basis for the biennial Land Conservation Act Status Report, which provides information to the Legislature and general public on the status of the Program among counties and cities.”<sup>21</sup>

### California Department of Forestry and Fire Protection (CAL FIRE)

“The men and women of the California Department of Forestry and Fire Protection (CAL FIRE) are dedicated to the fire protection and stewardship of over 31 million acres of California's privately-owned wildlands. Preventing wildfires in the State Responsibility Area (SRA) is a vital part of CAL FIRE's mission. While these efforts have occurred since the early days of the Department, CAL FIRE has adapted to the evolving destructive wildfires and succeeded in

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<sup>18</sup> California Department of Conservation, Farmland Mapping and Monitoring Program. Accessed October 2020 at: <http://www.conservation.ca.gov/dlrp/fmmp>.

<sup>19</sup> California Department of Conservation, Williamson Act Program. Accessed October 2020 at: <https://www.conservation.ca.gov/dlrp/lca>.

<sup>20</sup> California Department of Conservation, Open Space Subvention Act. Accessed November 2020 at: <https://www.conservation.ca.gov/dlrp/wa/Pages/Open-Space-Subvention.aspx>

<sup>21</sup> Ibid.

significantly increasing its efforts in fire prevention. The Department's Fire Prevention Program consists of multiple activities including wildland pre-fire engineering, vegetation management, fire planning, education and law enforcement.”<sup>22</sup>

#### California Department of Fish and Wildlife

“The Mission of the Department of Fish and Wildlife (CDFW) is to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public.”<sup>23</sup>

#### ***Local Policy & Regulations***

##### Tulare County General Plan Policies

The General Plan has policies that apply to projects within Tulare County. General Plan policies that are applicable to the proposed Project are listed as follows:

**AG-1.1 Primary Land Use** - The County shall maintain agriculture as the primary land use in the valley region of the County, not only in recognition of the economic importance of agriculture, but also in terms of agriculture’s real contribution to the conservation of open space and natural resources.

**AG-1.3 Williamson Act** - The County should promote the use of the California Land Conservation Act (Williamson Act) on all agricultural lands throughout the County located outside established UDBs. However, this policy carries with it a caveat that support for the Williamson Act as a tax reduction component is premised on continued funding of the State subvention program that offsets the loss of property taxes.

**AG-1.4 Williamson Act in UDBs and HDBs** - The County shall support non-renewal or cancellation processes that meet State law for lands within UDBs and HDBs.

**AG-1.6 Conservation Easements** - The County shall consider developing an Agricultural Conservation Easement Program (ACEP) to help protect and preserve agricultural lands (including “Important Farmlands”), as defined in this Element. This program may require payment of an in-lieu fee sufficient to purchase a farmland conservation easement, farmland deed restriction, or other farmland conservation mechanism as a condition of approval for conservation of important agricultural land to non-agricultural use. If available, the ACEP shall be used for replacement lands determined to be of statewide significance (Prime or other Important Farmlands), or sensitive and necessary for the preservation of agricultural land, including land that may be a part of a community separator as part of a comprehensive program to establish community separators. The in-lieu fee or other conservation mechanism shall recognize the importance of land value and shall require equivalent mitigation.

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<sup>22</sup> Cal Fire. [About Us](https://www.fire.ca.gov/about-us/). Accessed October 2020 at: <https://www.fire.ca.gov/about-us/>.

<sup>23</sup> California Department of Fish and Wildlife. Mission Statement. Accessed November 2020 at: <https://wildlife.ca.gov/>

**AG-1.7 Preservation of Agricultural Lands** - The County shall promote the preservation of its agricultural economic base and open space resources through the implementation of resource management programs such as the Williamson Act, Rural Valley Lands Plan, Foothill Growth Management Plan or similar types of strategies and the identification of growth boundaries for all urban areas located in the County.

**AG-1.8 Agriculture within Urban Boundaries** - The County shall not approve applications for preserves or regular Williamson Act contracts on lands located within a UDB and/or HDB unless it is demonstrated that the restriction of such land will not detrimentally affect the growth of the community involved for the succeeding 10 years, that the property in question has special public values for open space, conservation, other comparable uses, or that the contract is consistent with the publicly desirable future use and control of the land in question. If proposed within a UDB of an incorporated city, the County shall give written notice to the affected city pursuant to Government Code §51233.

**AG-1.9 Agricultural Preserves Outside Urban Boundaries** - The County shall grant approval of individual applications for agricultural preserves located outside a UDB provided that the property involved meets the requirements of the Williamson Act and the regulations of Tulare County.

**AG-1.10 Extension of Infrastructure into Agricultural Areas** - The County shall oppose extension of urban services, such as sewer lines, water lines, or other urban infrastructure, into areas designated for agriculture use unless necessary to resolve a public health situation. Where necessary to address a public health issue, services should be located in public rights-of-way in order to prevent interference with agricultural operations and to provide ease of access for operation and maintenance. Service capacity and length of lines should be designed to prevent the conversion of agricultural lands into urban/suburban uses.

**AG-1.11 Agricultural Buffers** - The County shall examine the feasibility of employing agricultural buffers between agricultural and non-agricultural uses, and along the edges of UDBs and HDBs. Considering factors include the type of operation and chemicals used for spraying, building orientation, planting of trees for screening, location of existing and future rights-of-way (roads, railroads, canals, power lines, etc.), and unique site conditions.

**AG-1.17 Agricultural Water Resources** - The County shall seek to protect and enhance surface water and groundwater resources critical to agriculture.

**LU-2.3 Open Space Character** - The County shall require that all new development requiring a County discretionary approval, including parcel and subdivision maps, be planned and designed to maintain the scenic open space character of open space resources including, but not limited to, agricultural areas, rangeland, riparian areas, etc., within the view corridors of highways. New development shall utilize natural landforms and vegetation in the least visually disruptive way

possible and use design, construction and maintenance techniques that minimize the visibility of structures on hilltops, hillsides, ridgelines, steep slopes, and canyons.

**LU-2.6 Industrial Development** - Other than provided in Policy LU-2.5: Agricultural Support Facilities, the County shall, and the cities should, through their industrial development policies, approve only those agriculturally-oriented or related industries and uses that can demonstrate, whether by location and/or controlled methods of operation, that they will not adversely affect agricultural production or the County's natural resources. These uses should be located inside UDBs, HDBs, PCAs and regional growth corridors unless necessary for the support of agricultural operations or as provided in Policy LU-2.5: Agricultural Support Facilities.

## IMPACT EVALUATION

**In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:**

- a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses?**

Project Impact Analysis:

*No Impact*

As was envisioned in the original 1980 Three Rivers Community Plan, the creation of a town center with a concentration of commercial, retail, and social uses in these areas, largely ensures that outlying and peripheral areas of the community, site of much of the farmland in this area, remains unimpeded by development or community expansion. Based on maps provided by the Farmland Mapping Monitoring Program and the Tulare County Resource Management Agency GIS office, any future urban, commercial or residential development within this community will be concentrated on lands outside of areas zoned under Williamson Act or Prime and Important Farmland designations.<sup>24</sup>

Tulare County exhibits a diverse ecosystems landscape created through the extensive amount of topographic relief (elevations range from approximately 200 to 14,000 feet above sea level). The County is essentially divided into three eco-regions. The majority of the western portion

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<sup>24</sup> Three Rivers Community Plan 2018 Update, Figure 15 Williamson Act Map Page 108.



of the County comprises the Great Valley Section, the majority of the eastern portion of the County is in the Sierra Nevada Section, and a small section between these two sections comprises the Sierra Nevada Foothill Area.”<sup>25</sup>

Three Rivers lies in this foothill area generally at elevations between 700 and 3,000 feet. Geophysical factors including elevation, slope, hydrogeology, and climate allow the area a high degree of biodiversity that supports a wealth of flora and fauna. The area is typified by undulating terrain that varies from relatively flat riparian valleys immediately adjacent to the North, South, and Middle forks of the Kaweah River to very rugged, mountainous terrain.

According to the General Soils Map of Tulare County, Three Rivers contains three soil classes: Class VI, Class VII and Class VIII. These soils are not suitable for cultivation however they lend themselves to pasture, rangelands, grazing and wildlife purposes. Three Rivers’ soils are conducive to cattle and grazing operations and to this end extensive grazing occurs along north and south forks (Case Mountain) of the Kaweah River on private ranches and lands leased from the BLM. The Project site itself consists of Blasingame sandy loam and Tujunda sand soils; both are not hydric and are not rated as prime farmland.<sup>26</sup>

Therefore, ***No Impact*** will result from the proposed Project.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is the entire State of California. This cumulative analysis is based on the information provided by the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), Three Rivers Community Plan 2018 Update, and the Statewide FMMP map provided by the California State Department of Conservation. Therefore, ***No Impacts*** related to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

**b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

Project Impact Analysis: ***No Impact***

As noted earlier, the Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose

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<sup>25</sup> Tulare County, 2010. General Plan 2030 Update RDEIR, page 3.11-5. Accessed at: <http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf>

<sup>26</sup> Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Accessed September 2020 at: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.



of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. The Department of Conservation assists all levels of government, and landowners in the interpretation of the Williamson Act related government code. The Department also researches, publishes and disseminates information regarding the policies, purposes, procedures, and administration of the Williamson Act according to government code. Participating counties and cities are required to establish their own rules and regulations regarding implementation of the Act within their jurisdiction. These rules include but are not limited to: enrollment guidelines, acreage minimums, enforcement procedures, allowable uses, and compatible uses.<sup>27</sup>

The Project will not result in the conversion of any prime agricultural land as defined in Section 51201(C) of the Govt. Code to non-agricultural use. It will not conflict with existing zoning for agriculture use, or a Williamson Act contract. The proposed Project is not expected to encourage the non-renewal or cancellation of other nearby Williamson Act contracted lands. Therefore, **No Impact** will result from the proposed Project.

Cumulative Impact Analysis: **No Impact**

Both the Tulare County General Plan 2030 Update and the 2018 Three Rivers Community Plan Update include proposals and guidelines that address and foster sustainable development within the Three Rivers Community area. Most notably, the Foothill Growth Management Plan (FGMP) in the former and the Visioning Statement in the latter.

The FGMP specifically outlines policies to de-conflict land use and zoning issues (FGMP-1.13) and safeguard agricultural lands (FGMP-5.1). A summarization of such policies indicates that whenever possible, the County shall maintain and preserve extensive and intensive agricultural uses in the foothills.<sup>28</sup> Planned development within the foothills requires development corridors on lands designated Foothill Mixed Use (FMU) and zoned Planned Development-Foothill Combining-Special Mobile Home Zone (PD-F-M). Such development must occur within corridors delineated on a Master Development Plan, established in compliance with the FGMP first and second level planning criteria and where an area has been designated as a Planned Community Area (PCA).<sup>29</sup>

The Project site is zoned C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone); as such, the proposed project is an allowed (by-right) use. The proposed Project site is not under a Williamson Act Contract. Therefore, the proposed Project would not conflict with existing zoning or a Williamson Act Contract and **No Impact** would occur.

Cumulative Impact Analysis: **No Impact**

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<sup>27</sup> California Department of Conservation, Williamson Act Program. Accessed October 2020 at: <https://www.conservation.ca.gov/dlrp/wa>.

<sup>28</sup> Tulare County General Plan 2030 Update, page 3-9 & 3-11. Foothill Growth Management Plan. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>.

<sup>29</sup> Ibid. Page 3-9. FGMP-1.13 Land Use and Zoning.

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided by the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), Three Rivers Community Plan 2018 Update, and the Statewide FMMP map provided by the California State Department of Conservation. Therefore, ***No Impact*** related to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

- c) **Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code § 12220(g), timberland (as defined by Public Resources Code § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?**

Project Impact Analysis: ***No Impact***

The California Public Resource Code §754 defines “forested landscapes” as “[t]ree dominated landscapes and their associated vegetation types on which there is growing a significant stand of tree species, or which are naturally capable of growing a significant stand of native trees in perpetuity, and is not otherwise devoted to non-forestry commercial, urban, or farming uses.”<sup>30</sup>

The California Department of Fish and Wildlife defines “Timberland” as forests that can produce commercial wood products and are not reserved as publicly owned, protected forests.<sup>31</sup>

The Project will not occur on land zoned as forest land or timberland, or result in a loss of forest land. As such, the Project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources code 12220(g), timberland (as defined in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).As such, ***No Project-specific Impacts*** related to this Checklist Item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided by the Tulare County General Plan 2030 Update, General

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<sup>30</sup> California Legislative Information. Accessed October 2020 at:  
[https://leginfo.ca.gov/faces/codes\\_displaySection.xhtml?sectionNum=754.&lawCode=PRC](https://leginfo.ca.gov/faces/codes_displaySection.xhtml?sectionNum=754.&lawCode=PRC).

<sup>31</sup> California Department of Fish and Wildlife. Timberland Conservation Program. Accessed October 2020 at:  
<https://www.wildlife.ca.gov/Conservation/Timber>.

Plan 2030 Update Background Report, Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), Three Rivers Community Plan 2018 Update, and the Statewide FMMP map provided by the California State Department of Conservation. Therefore, ***No Impact*** related to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

**d) Result in the loss of forest land or conversion of forest land to non-forest use?**

Project Impact Analysis: ***No Impact***

As noted in section (c), the proposed Project is not located within a forest land zone nor will the Project require the change of a forest land zone. As such, ***No Project-specific Impacts*** to this Checklist Item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, Tulare County 2030 Update General Plan RDEIR, and/or Three Rivers Community Plan 2018 Update.

As noted earlier, the proposed Project is not located within a forest land zone or will require the change of a forest land zone. As such, ***No Cumulative Impacts*** to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** to this Checklist Item will occur.

**e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

Project Impact Analysis: ***No Impact***

The Project site is not located near land zoned as forest land or timberland and therefore would not result in any changes in the environment that might convert forest land to non-forest land.

Also, the proposed Project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use. Therefore, the proposed Project would not result in other changes to the environment that could result in the conversion of forest land to no-forest land nor farmland to non-farmland. Thus, the proposed Project will have ***No Impact*** on this item.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, the Tulare County General Plan 2030 Background Report, and/or the Tulare County 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), Three Rivers Community Plan 2018 Update.

As the proposed Project will not replace agricultural or timberland, it would not contribute to any cumulative impact to this resource. Therefore, ***No Impact*** to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

## DEFINITIONS/ACRONYMS

### Definitions

**Farmland of Local Importance** - Farmland of Local Importance is land important to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.<sup>32</sup>

**Farmland of Statewide Importance** - Farmland of Statewide Importance is similar to Prime Farmland but has minor shortcomings, such as greater slopes or a lesser ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.<sup>33</sup>

**Grazing Land** - Grazing Land is land on which the vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, the University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.<sup>34</sup>

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<sup>32</sup> Tulare County General Plan Recirculated Draft Environmental Impact Report. Page 3.10-4. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf>.

<sup>33</sup> Ibid.

<sup>34</sup> Op. Cit.

**Land Capability Class** - A system of grouping soils primarily on the basis of their capability to produce common cultivated crops and pasture plants without deteriorating over a long period of time. Land capability classes I through VIII with capability subclasses e, w, s, or c has been assigned to each soil mapping unit in the soil survey area. Class I soils have little or no limitation for cultivated agriculture. Class VIII soils are not suitable for crops and have major limitations.<sup>35</sup>

**Other Land** - Other Land is land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.<sup>36</sup>

**Prime Farmland** - Prime Farmland is farmland with the best combination of physical and chemical features to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.<sup>37</sup>

**Storie Index** - A widely known and accepted method of rating soils for agricultural potential in California. Ratings are generated from a wide range of soil profile and landscape characteristics. Ratings are scored as an index ranging from 0 to 100 from lowest to highest in potential for agricultural production.<sup>38</sup>

**Timberland** - Forests that can produce commercial wood products and are not reserved as publicly owned, protected forests.<sup>39</sup>

**Unique Farmland** - Unique Farmland has lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.<sup>40</sup>

**Urban and Built-Up Land** - Urban and Built-Up Land is land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public

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<sup>35</sup> NRCS. 2008. Page 1. NRCS Technical Guide Section II May 2008. Accessed October 2020 at: <https://efotg.sc.egov.usda.gov/references/public/CA/4a-SectionIIcropinterp.pdf>.

<sup>36</sup> Tulare County General Plan Recirculated Draft Environmental Impact Report. Page 3.10-5. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf>.

<sup>37</sup> Ibid. 3.10-4.

<sup>38</sup> NRCS. 2008. Page 1. NRCS Technical Guide Section II May 2008 Accessed October 2020 at: <https://efotg.sc.egov.usda.gov/references/public/CA/4a-SectionIIcropinterp.pdf>.

<sup>39</sup> California Department of Fish and Wildlife. California's Forests. Accessed October 2020 at: <https://www.wildlife.ca.gov/Conservation/Timber>.

<sup>40</sup> Tulare County, 2010, page 3.10-4. Tulare County General Plan Recirculated Draft Environmental Impact Report. Page 3.10-4. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf>.

administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.”<sup>41</sup>

**Urban Development Boundary** - For cities, the County Adopted City UDB is an officially adopted and mapped County line delineating the area expected for urban growth over a 20-year period. This line may be coterminous to the Local Agency Formation Commissions Sphere of Influence. Land within a County Adopted City UDB may be appropriate for development.<sup>42</sup>

**Water** - Water is defined as perennial water bodies with an extent of at least 40 acres.<sup>43</sup>

#### Acronyms

BLM	Bureau of Land Management
CLCA	California Land Conservation Act (Williamson Act)
FGMP	Foothill Growth Management Plan
FFPA	Federal Farmland Protection Act
FMMP	Farmland Mapping and Monitoring Program
NPS	National Park Service
UDB	Urban Development Boundary
USFS	United States Forest Service

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<sup>41</sup> Op. Cit., pages 3.10-4 and 3.10-5.

<sup>42</sup> Tulare County, 2012, page 2-3. Tulare County General Plan 2030 Update.  
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<sup>43</sup> Tulare County, 2010, page 3.10-5. Tulare County General Plan Recirculated Draft Environmental Impact Report. Page 3.10-5. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf>.

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# Air Quality

## Chapter 3.3

### SUMMARY OF FINDINGS

The proposed Three Rivers-Hampton Inn & Suites (Project) will result in ***Less Than Significant Impacts*** related to Air Quality. A detailed review of potential impacts is provided in the “*Air Quality & Greenhouse Gas Assessment, Three Rivers Hampton Inn and Suites Project*” report (AQA Report) prepared by consultant ECORP Consulting, Inc. (ECORP), which is included as Appendix “A” of this document, and is used as the basis for determining this Project will result in a ***Less Than Significant Impact***.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Air Quality. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2(a), “[a]n EIR shall identify and focus on the significant effects of the proposed project on the environment. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected. For example, the EIR should evaluate any potentially significant direct, indirect, or cumulative environmental impacts of locating development in areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas), including both short-term and long-term conditions, as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

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<sup>1</sup> CEQA Guidelines, Section 15126.2(a)

The “Environmental Setting” section provides a description of the climate, topography, and air quality in the San Joaquin Valley Air Basin and in Tulare County. The “Regulatory Setting” section provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

### Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist Item questions and by the San Joaquin Valley Unified Air Pollution Control District (Air District or SJVAPCD) significance thresholds identified in their guidance document *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI).<sup>2</sup> The following are potential thresholds for significance.

- Result in conflict with or obstruction of implementation of the applicable air quality plan.
- Result in an exceedance of criteria pollutants as established in the 1990 Clean Air Act amendments.
- Result in an exceedance of Air District criteria pollutant thresholds. (See GAMAQI Thresholds of Significance for Criteria pollutants below, Table 3.3-5)
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard.
- Result in exposure of sensitive receptors to emissions of toxic air contaminants (TAC).
- Result in other emissions (such as those leading nuisance odors) adversely affecting a substantial number of people.

## **ENVIRONMENTAL SETTING**

### Air Quality in the San Joaquin Valley Air Basin

“Tulare County falls within the southern portion of the San Joaquin Valley Air Basin (SJVAB), which is bordered on the east by the Sierra Nevada range, on the west by the Coast Ranges, and on the south by the Tehachapi Mountains. These features restrict air movement through and out of the SJVAB.

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<sup>2</sup> San Joaquin Valley Unified Air Pollution Control District. Guidance for Assessing and Mitigating Air Quality Impacts. Accessed February 2021 at: [http://www.valleyair.org/transportation/GAMAQI\\_3-19-15.pdf](http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf).

The topography of Tulare County significantly varies in elevation from its eastern to western borders, which results in large climatic variations that ultimately affect air quality. The western portion of the County is within the low-lying areas of the SJVAB. This portion of the County is much dryer in comparison to the eastern portion that is located on the slopes of the Sierra Nevada Mountains. The higher elevation contributes to both increased precipitation and a cooler climate.

Wind direction and velocity in the eastern section varies significantly from the western portion of the County. The western side receives northwesterly winds. The eastern side of the County exhibits more variable wind patterns, but the wind direction is typically up-slope during the day and down-slope in the evening. Generally, the wind direction in the eastern portion of the County is westerly; however terrain differences can create moderate directional changes.”<sup>3</sup>

Generally, the temperature of air decreases with height, creating a gradient from warmer air near the ground to cooler air at elevation. This gradient of cooler air over warm air is known as the environmental lapse rate. Inversions occur when warm air sits over cooler air, trapping the cooler air near the ground. These inversions trap pollutants from dispersing vertically and the mountains surrounding the San Joaquin Valley trap the pollutants from dispersing horizontally. Strong temperature inversions occur throughout the San Joaquin Valley Air Basin in the summer, fall, and winter. Daytime temperature inversions occur at elevations of 2,000 to 2,500 feet above the San Joaquin Valley floor during the summer and at 500 to 1,500 feet during the winter. The result is a relatively high concentration of air pollution in the valley during inversion episodes. These inversions cause haziness, which in addition to moisture may include suspended dust, a variety of chemical aerosols emitted from vehicles, particulates from wood stoves, and other pollutants. In the winter, these conditions can lead to carbon monoxide “hotspots” along heavily traveled roads and at busy intersections. During summer’s longer daylight hours, stagnant air, high temperatures, and plentiful sunshine provide the conditions and energy for the photochemical reaction between reactive organic gases (ROG) and oxides of nitrogen (NOx), which results in the formation of ozone.<sup>4</sup>

“The SJVAB is highly susceptible to pollutant accumulation over time due to the transport of pollutants into the SJVAB from upwind sources. Stationary emission sources in the County include the use of cleaning and surface coatings and industrial processes, road dust, local burning, construction/demolition activities, and fuel combustion. Mobile emissions are primarily generated from the operation of vehicles. According to air quality monitoring data, the SJVAB has been in violation for exceeding ozone and PM10 emission standards for many years.”<sup>5</sup> As of November 2019 the SJVAB is in nonattainment for federal and state ozone and PM<sub>2.5</sub> standards, attainment for federal PM<sub>10</sub> standards, and nonattainment for state PM<sub>10</sub> standards.<sup>6</sup>

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<sup>3</sup> Tulare County General Plan 2030 Update RDEIR. Page 3.3-9.

<sup>4</sup> San Joaquin Valley Unified Air Pollution Control District. Guidance for Assessing and Mitigating Air Quality Impacts. Chapter 2. and Air Quality Guidelines for General Plan. Chapter 2. Accessed February 2021 at: <http://www.valleyair.org/transportation/Entire-AQGGP.pdf>.

<sup>5</sup> Tulare County General Plan 2030 Update RDEIR. Page 3.3-9.

<sup>6</sup> San Joaquin Valley Unified Air Pollution Control District. Accessed February 2021 at: <http://www.valleyair.org/aqinfo/attainment.htm>.

### Existing Conditions Overview

“Unlike other air basins in California, the pollution in the San Joaquin Valley Air Basin (SJVAB) is not produced by large urban areas. Instead, emissions are generated by many moderate sized communities and rural uses. Emission levels in the Central Valley have been decreasing overall since 1990. This can be primarily attributed to motor vehicle emission controls that reduce the amount of vehicle emissions and controls on industrial/stationary sources. In spite of these improvements, the San Joaquin Valley is still identified as having some of the worst air quality in the nation.

The main source of CO and NO<sub>x</sub> emissions is motor vehicles. The major contributors to ROG emissions are mobile sources and agriculture. ROG emissions from motor vehicles have been decreasing since 1985 due to stricter standards, even though the vehicle miles have been increasing. Stationary source regulations implemented by the SJVAPCD have also substantially reduced ROG emissions. ROG from natural sources (mainly from trees and plants) is the largest source of this pollutant in Tulare County. Atmospheric modeling accomplished for recent ozone planning efforts has found that controlling NO<sub>x</sub> is more effective at reducing ozone concentrations than controlling ROG. However, controls meeting RACT and BACT are still required for SJVAPCD plans.

The SJVAB has been ranked the 2nd worst in the United States for O<sub>3</sub> levels, even though data shows that overall O<sub>3</sub> has decreased between 1982 and 2001.

Direct PM<sub>10</sub> emissions have decreased between the years 1975 and 1995 and have remained relatively constant since 2000. The main sources of PM<sub>10</sub> in the SJVAB are from vehicles traveling on unpaved roads and agricultural activities. Regional Transportation Planning Agencies must implement BACM for sources of fine particulate matter (PM<sub>10</sub>) to comply with federal attainment planning requirements for PM<sub>10</sub>.<sup>7</sup>

### SJVAB Attainment Status

The United States Environmental Protection Agency (EPA) and the California Air Resources Board (ARB or CARB) designate air basins where ambient air quality standards are exceeded as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered “unclassified.” The federal non-attainment designation is subdivided into five categories (listed in order of increasing severity): marginal, moderate, serious, severe, and extreme. The degree of an area’s non-attainment status reflects the extent of the pollution and the expected time period required in order to achieve attainment.

Designated non-attainment areas are generally subject to more stringent review by ARB and EPA. In the endeavor to improve air quality to achieve the standards, projects are subject to more stringent pollution control strategies and requirements for mitigation measures (such as mobile

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<sup>7</sup> Tulare County 2030 General Plan 2030 Update, Part 1 Goals and Policies Report. Pages 9-4 to 9-5.

source reduction measures). If the National Ambient Air Quality Standards (NAAQS) are not achieved within the specified timeframe, federal highway funding penalties (and a federally administered implementation plan incorporating potentially harsh measures to achieve the NAAQS) will result.

Each standard has a different definition, or “form” of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual PM<sub>2.5</sub> standard is met if the three-year average of the annual average PM<sub>2.5</sub> concentration is less than or equal to the standard.

**Table 3.3-1** identifies the current federal and state attainment designations for the SJVAB while **Table 3.3-2** summarizes the ambient air quality standards from which the federal and state attainment status are derived. **Table 3.3-3** summarizes the common sources, health effects, and methods for prevention and control of criteria pollutant emissions.

<b>Table 3.3-1 SJVAB Attainment Status</b>		
	<b>Designation Classification</b>	
<b>Pollutant</b>	<b>Federal Standards</b>	<b>State Standards</b>
Ozone – one hour	No Federal Standard <sup>1</sup>	Nonattainment/Severe
Ozone – eight hour	Nonattainment/Extreme <sup>2</sup>	Nonattainment
PM <sub>10</sub>	Attainment <sup>3</sup>	Nonattainment
PM <sub>2.5</sub>	Nonattainment <sup>4</sup>	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Vinyl Chloride	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
<p>1 Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. However, EPA had previously classified the SJVAB as extreme nonattainment for this standard. Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.</p> <p>2 Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010)</p> <p>3 On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM<sub>10</sub> National Ambient Air Quality Standard (NAAQS) and approved the PM<sub>10</sub> Maintenance Plan.</p> <p>4 The Valley is designated nonattainment for the 1997 PM<sub>2.5</sub> NAAQS. EPA designated the Valley as nonattainment for the 2006 PM<sub>2.5</sub> NAAQS on November 13, 2009 (effective December 14, 2009).</p> <p>Source: San Joaquin Valley Unified Air Pollution Control District. Ambient Air Quality Standards &amp; Valley Attainment Status. <a href="http://www.valleyair.org/airinfo/attainment.htm">http://www.valleyair.org/airinfo/attainment.htm</a>.</p>		

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Table 3.3-2 State and Federal Ambient Air Quality Standards							
Pollutant	Averaging Time	California Standards <sup>1</sup>		National Standards <sup>2</sup>			
		Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>	
Ozone (O <sub>3</sub> ) <sup>8</sup>	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry	
	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )		0.075 ppm (147 µg/m <sup>3</sup> )			
Respirable Particulate Matter (PM <sub>10</sub> ) <sup>9</sup>	24 Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		-			
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>9</sup>	24 Hour	---	---	35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	12 µg/m <sup>3</sup>	15.0 µg/m <sup>3</sup>		
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m <sup>3</sup> )	---	Non-Dispersive Infrared Photometry (NDIR)	
	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )		9 µg/m <sup>3</sup> (10 mg/m <sup>3</sup> )	---		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )		---	---		
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>10</sup>	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	100 ppb (188 µg/m <sup>3</sup> )	Same as Primary Standard	Gas Phase Chemiluminescence	
	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )		0.053 ppm (100 µg/m <sup>3</sup> )			
Sulfur Dioxide (SO <sub>2</sub> ) <sup>11</sup>	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	75 ppb (196 µg/m <sup>3</sup> )	---	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)	
	3 Hour	---		---	0.5 ppm (1300 µg/m <sup>3</sup> )		
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (for certain areas)	---		
	Annual Arithmetic Mean	---		0.030 ppm (for certain areas)	---		
Lead <sup>12, 13</sup>	30 Day Average	1.5 µg/m <sup>3</sup>	Atomic Absorption	---	---	High Volume Sampler and Atomic Absorption	
	Calendar Quarter	---		1.5 µg/m <sup>3</sup> (for certain areas)	Same as Primary Standard		
	Rolling 3-Month Average	---		0.15 µg/m <sup>3</sup>			
Visibility Reducing Particles <sup>14</sup>	8 Hour	ARB converted visibility standards to instrumental equivalents in 1989	Beta Attenuation and Transmittance through Filter Tape	No National Standards			
Sulfates	24 Hour	25 µg/m3	Ion Chromatography				
Hydrogen Sulfide (H <sub>2</sub> S)	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence				
Vinyl Chloride <sup>12</sup>	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography				

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**Table 3.3-2  
State and Federal Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards <sup>1</sup>		National Standards <sup>2</sup>		
		Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>
<p>1 California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.</p> <p>2 National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.</p> <p>3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.</p> <p>4 Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.</p> <p>5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health</p> <p>6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.</p> <p>7 Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.</p> <p>8 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm</p> <p>9 On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3, as was the annual secondary standard of 15 µg/m3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.</p> <p>10 To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.</p> <p>11 On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.</p> <p>Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.</p> <p>12 The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.</p> <p>13 The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.</p> <p>14 In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.</p>						
Source: California Air Resources Board. Ambient Air Quality Standards. <a href="https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf">https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf</a> . Accessed October 2020. Also, <a href="https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards">https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards</a> and <a href="https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards">https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards</a> .						

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**Table 3.3-3**  
**Air Pollutant Sources, Effects and Control**

<b>Pollutant</b>	<b>Sources</b>	<b>Effects</b>	<b>Prevention and Control</b>
<b>Ozone (O<sub>3</sub>)</b>	Formed when reactive organic gases (ROG) and nitrogen oxides react in the presence of sunlight. ROG sources include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and storage and pesticides.	Breathing Difficulties, Lung Tissue Damage, Damage to Rubber and Some Plastics	Reduce motor vehicle reactive organic gas (ROG) and nitrogen oxide emissions through emissions standards, reformulated fuels, inspections programs, and reduced vehicle use. Limit ROG emissions from commercial operations and consumer products. Limit ROG and NOx emissions from industrial sources such as power plants and refineries. Conserve energy.
<b>Respirable Particulate Matter (PM<sub>10</sub>)</b>	Road Dust, Windblown Dust (Agriculture) and Construction (Fireplaces) Also formed from other pollutants (acid rain, NOx, SOx, organics). Incomplete combustion of any fuel.	Increased Respiratory Disease, Lung Damage, Cancer, Premature Death, Reduced Visibility, Surface Soiling	Control Dust Sources, Industrial Particulate Emissions, Wood Burning Stoves and Fireplaces Reduce secondary pollutants which react to form PM <sub>10</sub> . Conserve energy.
<b>Fine Particulate Matter (PM<sub>2.5</sub>)</b>	Fuel Combustion in Motor Vehicles, Equipment and Industrial Sources, Residential and Agricultural Burning. Also formed from reaction of other pollutants (acid rain, NOx, SOx, organics).	Increases Respiratory Disease, Lung Damage, Cancer, Premature Death, Reduced Visibility, Surface Soiling	Reduces Combustion Emissions from Motor Vehicles, Equipment, Industries and Agriculture and Residential Burning. Precursor controls, like those for ozone, reduce fine particle formation in the atmosphere.
<b>Carbon Monoxide (CO)</b>	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	Chest Pain in Heart Patients, Headaches, Reduced Mental Alertness	Control motor vehicle and industrial emissions. Use oxygenated gasoline during winter months. Conserve energy.
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>	See Carbon Monoxide	Lung Irritation and Damage. Reacts in the atmosphere to form ozone and acid rain	Controls motor vehicle and industrial combustion emissions. Conserve energy.
<b>Lead</b>	Metal Smelters, Resource Recovery, Leaded Gasoline, Deterioration of Lead Paint	Learning Disabilities, Brain and Kidney Damage	Control metal smelters, no lead in gasoline. Replace leaded paint with non-lead substitutes.
<b>Sulfur Dioxide (SO<sub>2</sub>)</b>	Coal or Oil Burning Power Plants and Industries, Refineries, Diesel Engines	Increases lung disease and breathing problems for asthmatics. Reacts in the atmosphere to form acid rain.	Reduces the use of high sulfur fuels (e.g., use low sulfur reformulated diesel or natural gas). Conserve energy.
<b>Visibility Reducing Particles</b>	See PM <sub>2.5</sub>	Reduces visibility (e.g., obscures mountains and other scenery), reduced airport safety, lower real estate value, discourages tourism.	See PM <sub>2.5</sub>
<b>Sulfates</b>	Produced by the reaction in the air of SO <sub>2</sub> (see SO <sub>2</sub> sources), a component of acid rain.	Breathing Difficulties, Aggravates Asthma, Reduced Visibility	See SO <sub>2</sub>
<b>Hydrogen Sulfide</b>	Geothermal Power Plants, Petroleum Production and Refining, Sewer Gas	Nuisance Odor (Rotten Egg Smell), Headache and Breathing Difficulties (Higher Concentrations)	Control emissions from geothermal power plants, petroleum production and refining, sewers, sewage treatment plants.

California Air Resources Board. ARB Fact Sheet: Air Pollution Sources, Effects and Control. <https://www.arb.ca.gov/research/health/fs/fs2/fs2.htm>. Accessed November 2019. Additional information can be found online at <https://ww2.arb.ca.gov/resources/common-air-pollutants>.



### Toxic Air Contaminants

“A Toxic Air Contaminant (TAC) is defined as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health.”<sup>8</sup> TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The *California Almanac of Emissions and Air Quality – 2009 Edition* presents the relevant concentration and cancer risk data for the ten (10) TACs that pose the most substantial health risk in California based on available data: acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).<sup>9</sup>

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increased risk of lung cancer, exposure to diesel exhaust can have other non-cancer health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause a cough, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.<sup>10,11,12,13</sup>

DPM differs from other TACs in that it is not a single substance, but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on: engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The ARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the ARB emissions inventory’s PM10 database, ambient PM10 monitoring data, and the results from several studies to estimate concentrations of DPM.

Health risks attributable to the top ten (10) TACs listed above are available from the ARB as part of its *California Almanac of Emissions and Air Quality—2009 Edition*. As shown therein for data

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<sup>8</sup> Health and Safety Code, Section 39655(a).

<sup>9</sup> California Air Resources Board. The California Almanac of Emissions and Air Quality – 2009 Edition. Chapter 5. Accessed February 2021 at: [http://www.trpa.org/documents/rseis/3.4%20Air%20Quality/3.4\\_ARB%202009\\_California%20Almanac%20of%20Emissions/ARB%202009%20title%20page.pdf](http://www.trpa.org/documents/rseis/3.4%20Air%20Quality/3.4_ARB%202009_California%20Almanac%20of%20Emissions/ARB%202009%20title%20page.pdf).

<sup>10</sup> California Air Resources Board. Fact Sheet – The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines. October 1998. Accessed February 2021 at: <https://ww3.arb.ca.gov/toxics/dieseltac/factsht1.pdf>.

<sup>11</sup> California Air Resources Board. Summary: Diesel Particulate Matter Health Impacts. Accessed February 2021 at: <https://ww2.arb.ca.gov/resources/summary-diesel-particulate-matter-health-impacts>.

<sup>12</sup> California Air Resources Board. Overview: Diesel Exhaust & Health. <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>. Accessed October 2020.

<sup>13</sup> California Air Resources Board. The Report on Diesel Exhaust. Accessed February 2021 at: <https://ww3.arb.ca.gov/toxics/dieseltac/de-fnds.htm>.

collected at the First Street air monitoring station in Fresno, cancer risks attributable to all of the listed TACs above with the exception of DPM have declined about 70 percent from the mid-1990s to 2007.<sup>14</sup> Risks associated with DPM emissions are provided only for the year 2000 and have not been updated in the Almanac. Although more recent editions of the Almanac do not provide estimated risk, they do provide emission inventories for DPM for later years. The 2013 edition of the Almanac provides emission inventory trends for DPM from 2000 through 2035.<sup>15</sup> The Almanac reports that DPM emissions were reduced in the SJVAB from 16 tons per day in 2000 to 11 tons per day in 2010, a 31 percent decrease. DPM emissions in the San Joaquin Valley are projected to decrease to six tons per day by 2015, a 62 percent reduction from year 2000 levels. ARB predicts a reduction to three tons per day by 2035, which would be an 81 percent reduction from year 2000 levels.<sup>16</sup> Continued implementation of the ARB's Diesel Risk Reduction Plan is expected to provide continued reductions in DPM through 2020 and beyond through regulations on this source.<sup>17</sup>

### Asbestos<sup>18,19,20,21,22,23</sup>

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The six types of asbestos are chrysotile, crocidolite, amosite, anthophyllite asbestos, tremolite asbestos, and actinolite asbestos. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings and makes up approximately 95 percent of commercial and home use in the United States. Exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed using asbestos-containing materials (such as insulation prior to 1950 and textured paints and patching compounds prior to 1977). Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present.

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<sup>14</sup> California Air Resources Board. The California Almanac of Emissions and Air Quality – 2009 Edition. Chapter 5. San Joaquin Valley Air Basin Annual Average Concentration and Health Risks. Pages 5-62 to 5-69. Accessed February 2021 at: <https://ww3.arb.ca.gov/aqd/almanac/almanac09/almanac09.htm>.

<sup>15</sup> California Air Resources Board. The California Almanac of Emissions and Air Quality – 2013 Edition. Accessed February 2021 at: <https://ww2.arb.ca.gov/our-work/programs/resource-center/technical-assistance/air-quality-and-emissions-data/almanac>.

<sup>16</sup> Ibid. Chapter 4. San Joaquin Valley Air Basin. 4-28.

<sup>17</sup> California Air Resources Board. Final Diesel Risk Reduction Plan with Appendices. Accessed February 2021 at: <https://ww3.arb.ca.gov/diesel/documents/rrpapp.htm>.

<sup>18</sup> 29 CFR 1910.1001. Accessed February 2021 at: <https://www.govinfo.gov/content/pkg/CFR-2007-title29-vol6/pdf/CFR-2007-title29-vol6-sec1910-1001.pdf>.

<sup>19</sup> California Air Resources Board. Naturally Occurring Asbestos. Accessed February 2021 at: <https://ww3.arb.ca.gov/toxics/asbestos/asbestos.htm>.

<sup>20</sup> California Air Resources Board. Naturally-Occurring Asbestos General Information. Accessed February 2021 at: <https://ww3.arb.ca.gov/toxics/asbestos/general.pdf>.

<sup>21</sup> United States Environmental Protection Agency. Learn About Asbestos – Health Effects From Exposure to Asbestos. Accessed February 2021 at: <https://www.epa.gov/asbestos/learn-about-asbestos>.

<sup>22</sup> United States Geological Survey. Fact Sheet FS-012-01. Some Facts About Asbestos. March 2001. Accessed February 2021 at: <http://www.capcoa.org/Docs/noa/%5B12%5D%20USGS%20Facts%20on%20Asbestos.pdf>.

<sup>23</sup> Environment, Health and Safety Online. Where Is Asbestos Commonly Found In The Home, When and How Should It be Removed? Accessed February 2021 at: <http://www.ehso.com/cssasbestos/asbestosfoundwhere.htm>.

### Air Quality Conditions in Tulare County

Tulare County lies within the southern portion of the SJVAB. Topography and climate are unusually favorable for the development of air pollution, especially in the southern portion of the air basin where pollutants build up against the Tehachapi Mountains. Due to the SJVAB's light wind patterns, long periods of warm and sunny days, and surrounding mountains, air quality problems can occur at any time of the year.

Existing local air quality conditions can be characterized by reviewing air pollution concentration data near the Project area for comparison with the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). Air samples are collected continuously for some pollutants and periodically for other pollutants depending on the type of monitoring equipment installed. Monitoring sites are usually chosen to be representative of the emissions in a community. There are currently 37 air monitoring stations in the SJVAB, which include 23 stations operated by the Air District, one (1) station operated jointly by the Air District and the ARB, nine (9) stations operated by the ARB, two (2) stations operated by the National Park Service, and two (2) stations operated on Native American tribal lands.<sup>24</sup> Of these, there are currently four (4) stations in Tulare County: Visalia-Church; Porterville; Sequoia National Park-Lower Kaweah; and Sequoia National Park-Ash Mountain. However, CO and SO<sub>2</sub> are not collected in these five stations, so the next closest monitor with those emissions must be identified.

[Table 3.3-4] identifies the approximate distance from the monitoring station to the community and the air pollutants monitored at each station in the County.

Table 3.3-4. Air Quality Monitoring Stations (as of 2019)		
Monitoring Station	Approximate Distance and Direction from Three Rivers	Pollutants Monitored
Porterville	30 miles southwest	O <sub>3</sub> , PM <sub>2.5</sub>
Ash Mountain	6 miles northeast	O <sub>3</sub> , PM <sub>2.5</sub>
Lower Kaweah	20 miles northeast	O <sub>3</sub>
Visalia-Church St.	24 miles southwest	NO <sub>2</sub> , O <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub>
Fresno-First St.	53 miles northwest	NO <sub>2</sub> , O <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , CO, Toxics
<i>* This station measures temperature, humidity, wind direction, wind speed, barometric pressure and solar radiation; no criteria pollutants are measured.</i>		
<i>Source: San Joaquin Valley Unified Air Pollution Control District. 2020 Air Monitoring Network Assessment., Figures 1-1, 2-2, 2-3, 2-4, 2-5, 2-6,, 2-7, 2-8, and 2-9.</i>		

As indicated in [Table 3.3-4], the Ash Mountain station is the closest station to the unincorporated community of Three Rivers. However, because State Route 198 runs through both the City of

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<sup>24</sup> San Joaquin Valley Unified Air Pollution Control District. 2020 Air Monitoring Network Plan. Figure 1-1. Accessed February 2021 at: <https://www.valleyair.org/aqinfo/Docs/2020-Air-Monitoring-Network-Assessment.pdf>.

Visalia and the community of Three Rivers, the data from the Visalia-Church station is also representative of the community of Three Rivers.

### Local Air Quality

Local air quality can be evaluated by reviewing relevant air pollution concentrations near the Project area. For the purposes of background data and this air quality assessment, this analysis relied on data collected in the last three years for the monitoring station that is located in the closest proximity to the Project site. **Table 3.3-5** provides the background concentrations for 2016 through 2018, which is the most recent three-year period available, for ozone, particulate matter of 10 microns (PM<sub>10</sub>), particulate matter of less than 2.5 microns (PM<sub>2.5</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and lead (Pb). The table displays monitoring data from the, Visalia – N Church Street monitoring station located approximately 8.5 miles northeast of the Project site. The data in the table reflects the concentration of the pollutants in the air, measured using air monitoring equipment. This differs from emissions, which are calculations of a pollutant being emitted over a certain period. No recent monitoring data for Tulare County or the SJVAB is available for CO or SO<sub>2</sub> as monitoring is generally not conducted for pollutants that are no longer likely to exceed ambient air quality standards. No monitoring data is available for hydrogen sulfide, vinyl chloride or other toxic air contaminants in Tulare County or any nearby counties.

Based on the air monitoring data the Project area has generally exceeded air quality standards for ozone (state and national), PM<sub>10</sub> (state), and PM<sub>2.5</sub> (national). The amount over the standards and the number of days each year that the standards were exceeded provide an indicator of the severity of the air quality problems in the local area.

The health impacts of the various air pollutants of concern can be presented in a number of ways. The clearest in comparison is to the state and federal ozone standards. If concentrations are below the standard, it is safe to say that no health impact would occur to anyone. When concentrations exceed the standard, impacts will vary based on the amount the standard is exceeded. The EPA developed the Air Quality Index (AQI) as an easy to understand measure of health impact compared to concentrations in the air. As the SJVAB is in nonattainment at the federal level for ozone and PM<sub>2.5</sub>, the discussion below includes only those emissions with respect to the AQI. **Table 3.3-6** and **Table 3.3-7** provide a description of the health impacts of ozone and PM<sub>2.5</sub>, respectively, at different concentrations.

Based on the AQI scale for the 8-hour ozone standard, the nearest monitoring station in Visalia experienced no days in the last three years that would be categorized as unhealthy (AQI 151-200), and as many as 65 days in one year (2017) that were categorized as unhealthy for sensitive groups (AQI 101-150). The highest reading for the 8-hour standard was 95 ppb in 2018 and the highest reading for the revoked 1-hour ozone standard was 112 ppb in 2018. These values are equal to or higher than the 95-ppb cut off point for unhealthy for sensitive groups (AQI 101-150), but lower than the 115-ppb cut off point for unhealthy (AQI 151-200). Active children and adults, and people with respiratory disease should avoid prolonged outdoor exertion when the AQI is at this level.

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**Table 3.3-5  
Air Quality Monitoring Summary<sup>25</sup>**

Air Pollutant	Averaging Time	Item	2016	2017	2018
Ozone (O <sub>3</sub> ) <sup>1</sup>	1-hour	Max 1-hour (ppm)	0.098	0.109	0.112
		Days > State Standard (0.09 ppm)	1	9	8
	8-hour	State Max 8-hour (ppm)	0.083	0.092	0.095
		Days > State Standard (0.07 ppm)	19	65	58
		National Max 8-hour (ppm)	0.083	0.091	0.094
		Days > National Standard (0.07 ppm)	18	61	53
Inhalable coarse particles (PM <sub>10</sub> ) <sup>1</sup>	Annual	Annual Average (µg/m <sup>3</sup> )	43.3	47.4	52.5
	24 hour	State 24-hour (µg/m <sup>3</sup> )	132.5	145.7	159.6
		Days > State Standard (50 µg/m <sup>3</sup> )	95*	135.9	164.4
		National 24-hour (µg/m <sup>3</sup> )	137.1	144.8	153.4
		Days > National Standard (150 µg/m <sup>3</sup> )	0	0	0
Fine particulate matter (PM <sub>2.5</sub> ) <sup>1</sup>	Annual	Annual Average (µg/m <sup>3</sup> )	14.6	16.2	17.3
	24-hour	24-hour (µg/m <sup>3</sup> )	48.0	86.1	86.8
		Days > National Standard (35 µg/m <sup>3</sup> )	21.3	26.7	42.3
Carbon monoxide (CO) <sup>2</sup>	8-hour	Max 8-hour (ppm)	ND	ND	ND
		Days > State and National Standards (9 ppm)	ND	ND	ND
Nitrogen dioxide (NO <sub>2</sub> ) <sup>1</sup>	Annual 1-hour	Annual Average (ppm)	ID	0.010	0.010
		Max 1-hour (ppm)	0.0575	0.0581	0.0692
		Days > State Standard (0.18 ppm)	0	0	0
		Days > National Standard (100 ppb)	0	0	0
Sulfur dioxide (SO <sub>2</sub> ) <sup>2</sup>	Annual	Annual Average (ppm)	ND	ND	ND
	24-hour	Max 24-hour (ppm)	ND	ND	ND
Abbreviations: ppm = parts per million; > = exceeded; µg/m <sup>3</sup> = micrograms per cubic meter; ID = insufficient data; ND = no data available; max = maximum State Standard = CAAQS; National Standard = NAAQS <sup>1</sup> data from Visalia-Church station <sup>2</sup> no recent data is available for Tulare County or the San Joaquin Valley as they are no longer likely to exceed AAQS * This value represents the number of measured days, the 2017 and 2018 values are estimated days that the AAQS was exceeded.					

<sup>25</sup> California Air Resources Board. Top 4 Summary. <http://www.arb.ca.gov/adam/topfour/topfour1.php>. Accessed November 2019.

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**Table 3.3-6**  
**Air Quality Index and Health Effects of Ozone<sup>26</sup>**

<b>Air Quality Index/ Ozone Concentration</b>	<b>Health Effects Description</b>
<b>AQI 0-50 – Good</b> Concentration 0-59 ppb	Sensitive Groups: Children and people with asthma are the groups most at risk.
	Health Effects Statements: None
	Cautionary Statements: None
<b>AQI 51-100 – Moderate</b> Concentration 60-75 ppb	Sensitive Groups: Children and people with asthma are the groups most at risk.
	Health Effects Statements: Unusually sensitive individuals may experience respiratory symptoms.
	Cautionary Statements: Unusually sensitive people should consider limiting prolonged outdoor exertion.
<b>AQI 101-150 – Unhealthy for Sensitive Groups</b> Concentration 76-95 ppb	Sensitive Groups: Children and people with asthma are the groups most at risk.
	Health Effects Statements: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults and people with respiratory disease, such as asthma.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
<b>AQI 151-200 – Unhealthy</b> Concentration 96-115 ppb	Sensitive Groups: Children and people with asthma are the groups most at risk.
	Health Effects Statements: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
<b>AQI 201-300 – Very Unhealthy</b> Concentration 116-374 ppb	Sensitive Groups: Children and people with asthma are the groups most at risk.
	Health Effects Statements: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.
<b>AQI 301-500 – Hazardous*</b> Concentration ≥405 ppb	Sensitive Groups: Children and people with asthma are the groups most at risk.
	Health Effects Statements: Severe respiratory effects and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasingly severe respiratory effects likely in general population.
	Cautionary Statements: Everyone should avoid all outdoor exertion.
* AQI 300-500 are calculated using 1-hr ozone data (under 1-hr ozone concentrations 375-404 ppb are identified as Very Unhealthy)	

<sup>26</sup> U.S. Environmental Protection Agency. AirNow. Air Quality Index Basics. Accessed February 2021 at: <https://www.airnow.gov/index.cfm?action=aqibasics.aqi>. AirNow. AQI Calculator accessed at: <https://airnow.gov/index.cfm?action=airnow.calculator>.

**Table 3.3-7**  
**Air Quality Index and Health Effects of PM<sub>2.5</sub>**<sup>27</sup>

<b>Air Quality Index/ PM<sub>2.5</sub> Concentration</b>	<b>Health Effects Description</b>
<b>AQI 0-50 – Good</b>  Concentration 0-12.0 µg/m <sup>3</sup>	Sensitive Groups: People with respiratory or heart disease, the elderly and children are the groups most at risk.
	Health Effects Statements: None
	Cautionary Statements: None
<b>AQI 51-100 – Moderate</b>  Concentration 12.1-35.4 µg/m <sup>3</sup>	Sensitive Groups: People with respiratory or heart disease, the elderly and children are the groups most at risk.
	Health Effects Statements: Unusually sensitive people should consider reducing prolonged or heavy exertion.
	Cautionary Statements: Unusually sensitive people should consider reducing prolonged or heavy exertion.
<b>AQI 101-150 – Unhealthy for Sensitive Groups</b>  Concentration 35.5-55.4 µg/m <sup>3</sup>	Sensitive Groups: People with respiratory or heart disease, the elderly and children are the groups most at risk.
	Health Effects Statements: Increasing likelihood of respiratory symptoms in sensitive individuals, aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly.
	Cautionary Statements: People with respiratory or heart disease, the elderly and children should limit prolonged exertion.
<b>AQI 151-200 – Unhealthy</b>  Concentration 55.5-150.4 µg/m <sup>3</sup>	Sensitive Groups: People with respiratory or heart disease, the elderly and children are the groups most at risk.
	Health Effects Statements: Increased aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; increased respiratory effects in general population.
	Cautionary Statements: People with respiratory or heart disease, the elderly and children should avoid prolonged exertion; everyone else should limit prolonged exertion.
<b>AQI 201-300 – Very Unhealthy</b>  Concentration 150.5-250.4 µg/m <sup>3</sup>	Sensitive Groups: People with respiratory or heart disease, the elderly and children are the groups most at risk.
	Health Effects Statements: Significant aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; significant increase in respiratory effects in general population.
	Cautionary Statements: People with respiratory or heart disease, the elderly and children should avoid any outdoor activity; everyone else should avoid prolonged exertion.
<b>AQI 301-500 – Hazardous*</b>  Concentration ≥250.5 µg/m <sup>3</sup>	Sensitive Groups: People with respiratory or heart disease, the elderly and children are the groups most at risk.
	Health Effects Statements: Serious aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; serious risk of respiratory effects in general population.
	Cautionary Statements: Everyone should avoid any outdoor exertion; people with respiratory or heart disease, the elderly and children should remain indoors.

<sup>27</sup> Ibid.

The health impacts of the various air pollutants of concern can be presented in a number of ways. The clearest in comparison is to the state and federal ozone standards. If concentrations are below the standard, it is safe to say that no health impact would occur to anyone. When concentrations exceed the standard, impacts will vary based on the amount the standard is exceeded. The EPA developed the Air Quality Index (AQI) as an easy to understand measure of health impact compared to concentrations in the air. As the SJVAB is in nonattainment at the federal level for ozone and PM<sub>2.5</sub>, the discussion below includes only those emissions with respect to the AQI. **Table 3.3-6** and **Table 3.3-7** provide a description of the health impacts of ozone and PM<sub>2.5</sub>, respectively, at different concentrations.

Based on the AQI scale for the 8-hour ozone standard, the nearest monitoring station in Visalia experienced no days in the last three years that would be categorized as unhealthy (AQI 151-200), and as many as 65 days in one year (2017) that were categorized as unhealthy for sensitive groups (AQI 101-150). The highest reading for the 8-hour standard was 95 ppb in 2018 and the highest reading for the revoked 1-hour ozone standard was 112 ppb in 2018. These values are equal to or higher than the 95-ppb cut off point for unhealthy for sensitive groups (AQI 101-150), but lower than the 115-ppb cut off point for unhealthy (AQI 151-200). Active children and adults, and people with respiratory disease should avoid prolonged outdoor exertion when the AQI is at this level.

An AQI of 51-100 for PM<sub>2.5</sub> is considered moderate and would be triggered by a 24-hour average concentration of 35.4 µg/m<sup>3</sup>, which is considered an exceedance of the federal PM<sub>2.5</sub> standard. The monitoring station in Visalia exceeded the standard as many as 42 days in one year (2018) over the last three years. People with respiratory or heart disease, the elderly and children are the groups most at risk. An unhealthy for sensitive groups AQI (101-150) was exceeded as many as 21 days in one year (2016) and an unhealthy AQI (AQI 151-200) was also exceeded on at least 42 days in one year (2018) over the last three years. The highest concentration recorded was 86.8 µg/m<sup>3</sup> in 2018. At this concentration, increased aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly and increased respiratory effects in general population would occur. People with respiratory or heart disease, the elderly, and children should avoid prolonged exertion; everyone else should limit prolonged exertion when the AQI exceeds this level.

## REGULATORY SETTING

Both the federal government (through the United State Environmental Protection Agency (EPA)) and the State of California (through the California Air Resources Board (CARB or ARB)) have established health-based ambient air quality standards (AAQS) for six air pollutants, commonly referred to as “criteria pollutants.” Criteria pollutants are air pollutants for which acceptable levels of exposure can be determined and for which AAQS has been set. The six criteria pollutants are: carbon monoxide (CO), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), respirable or coarse particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), and lead (Pb).

National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been established for each criteria pollutant to protect the public health and welfare. The federal and state standards were developed independently with differing purposes and



methods, although both processes are intended to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent.

### ***Federal Agencies & Regulations***

#### **Federal Clean Air Act**

“The Federal Clean Air Act (CAA), adopted in 1970 and amended twice thereafter (including the 1990 amendments), establishes the framework for modern air pollution control. The act directs the Environmental Protection Agency (EPA) to establish ambient air standards, the National Ambient Air Quality Standards (NAAQS)... for six pollutants: ozone, carbon monoxide, lead, nitrogen dioxide, particulate matter (less than 10 microns in diameter [PM10] and less than 2.5 microns in diameter [PM2.5]), and sulfur dioxide. The standards are divided into primary and secondary standards; the former are set to protect human health with an adequate margin of safety and the latter to protect environmental values, such as plant and animal life.

Areas that do not meet the ambient air quality standards are called "non-attainment areas". The Federal CAA requires each state to submit a State Implementation Plan (SIP) for non-attainment areas. The SIP, which is reviewed and approved by the EPA, must demonstrate how the federal standards will be achieved. Failing to submit a plan or secure approval could lead to the denial of federal funding and permits for such improvements as highway construction and sewage treatment plants. For cases in which the SIP is submitted by the State but fails to demonstrate achievement of the standards, the EPA is directed to prepare a federal implementation plan or EPA can "bump up" the air basin in question to a classification with a later attainment date that allows time for additional reductions needed to demonstrate attainment, as is the case for the San Joaquin Valley.

SIPs are not single documents. They are a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations and federal controls. The California SIP relies on the same core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations and limits on emissions from consumer products. California State law makes the California Air Resources Board (CARB) the lead agency for all purposes related to the SIP. Local Air Districts and other agencies, such as the Bureau of Automotive Repair and the Department of Pesticide Regulation, prepare SIP elements and submit them to CARB for review and approval. The CARB forwards SIP revisions to the EPA for approval and publication in the Federal Register.”<sup>28</sup>

The Federal Clean Air Act requires EPA to set NAAQS for the six criteria pollutants (See Table 3.3-5 Air Quality Monitoring Summary), that occur throughout the United States. Of the six pollutants, particle pollution and ground-level ozone are the most widespread health threats. EPA regulates the criteria pollutants by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human

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<sup>28</sup> Tulare County General Plan 2030 Update RDEIR. Pages 3.3-1 to 3.3-2.

health is called primary standards. Another set of limits intended to prevent environmental and property damage is called secondary standards.

EPA is required to designate areas as meeting (attainment) or not meeting (nonattainment) the air pollutant standards. The Federal Clean Air Act (CAA) further classifies nonattainment areas based on the severity of the nonattainment problem, with marginal, moderate, serious, severe, and extreme nonattainment classifications for ozone. Nonattainment classifications for PM range from marginal to serious. The Federal CAA requires areas with air quality violating the NAAQS to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The SIP contains the strategies and control measures that states will use to attain the NAAQS. The Federal CAA amendments of 1990 require states containing areas that violate the NAAQS to revise their SIP to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, rules, and regulations of Air Basins as reported by the agencies with jurisdiction over them. The EPA reviews SIPs to determine if they conform to the mandates of the Federal CAA amendments and will achieve air quality goals when implemented. If the EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and impose additional control measures.

The SJVAB is considered to be in attainment for federal and state air quality standards for carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>); attainment for federal and non-attainment for state air quality standards for respirable particulate matter (PM<sub>10</sub>); and non-attainment of state and federal air quality standards for ozone (O<sub>3</sub>) and fine particulate matter (PM<sub>2.5</sub>). To meet federal CAA requirements, the Air District has adopted the following attainment plans: the 2004 Extreme Ozone Attainment Demonstration Plan (for the 1979 1-hour standard); the 2007 Ozone Plan (for the 1997 8-hour standard); the 2009 RACT SIP; the 2013 Plan for the Revoked 1-Hour Ozone Standard; the 2014 RACT SIP; the 2016 Plan for the 2008 8-Hour Ozone Standard; 2020 RACT Demonstration (for the 2015 8-hour standard); the 2007 PM<sub>10</sub> Maintenance Plan; the 2008 PM<sub>2.5</sub> Plan (for the 1997 annual standard); the 2012 PM<sub>2.5</sub> Plan (for the 2006 24-hour standard); the 2015 Plan for the 1997 PM<sub>2.5</sub> Standard (for annual and 24-hour standards); the 2016 Moderate Area Plan for the 2012 PM 2.5 Standard (for the annual standard); the 2018 Plan for the 1997, 2006, and 2012 PM 2.5 Standards ( annual and 24-hour standards); and the 2004 Revision to the California State Implementation Plan for Carbon Monoxide. The State does not have an attainment deadline for the ozone standards; however, it does require implementation of all feasible measures to achieve attainment at the earliest date possible. State PM<sub>10</sub> and PM<sub>2.5</sub> standards have no attainment planning requirements but must demonstrate that all measures feasible for the area have been adopted.

### ***State Agencies & Regulations***

#### **California Clean Air Act**

The California Air Resources Board (ARB) divides the state into air basins that share similar meteorological and topographical features and is the state agency responsible for implementing the federal and state Clean Air Acts. ARB has established California Ambient Air Quality

Standards (CAAQS), which include all criteria pollutants established by the NAAQS, but with additional regulations for Visibility Reducing Particles, sulfates, hydrogen Sulfide (H<sub>2</sub>S), and vinyl chloride.

Air basins are designated as attainment or nonattainment. Attainment is achieved when monitored ambient air quality data is in compliance with the standards for a specified pollutant. Non-compliance with an established standard will result in a nonattainment designation and an unclassified designation indicates insufficient data is available to determine compliance for that pollutant. The proposed Project is located within the San Joaquin Valley Air Basin, which includes San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and parts of Kern counties and is managed by the San Joaquin Valley Unified Air Pollution Control District (Air District).

Standards and attainment status for listed pollutants in the Air District can be found in **Table 3.3-8**. Note that both state and federal standards are presented.

“The California CAA of 1988 establishes an air quality management process that generally parallels the federal process. The California CAA, however, focuses on attainment of the State ambient air quality standards, which, for certain pollutants and averaging periods are more stringent than the comparable federal standards. Responsibility for meeting California’s standards is addressed by the CARB and local air pollution control districts (such as the eight county San Joaquin Valley Air Pollution Control District (Air District), which administers air quality regulations for Tulare County). Compliance strategies are presented in district-level air quality attainment plans.

<b>Table 3.3-8 SJVAB Attainment Status</b>		
	<b>Designation/Classification</b>	
<b>Pollutant</b>	<b>Federal Standards<sup>a</sup></b>	<b>State Standards<sup>b</sup></b>
Ozone – one hour	No Federal Standard <sup>f</sup>	Nonattainment/Severe
Ozone – eight hour	Nonattainment/Extreme <sup>e</sup>	Nonattainment
PM <sub>10</sub>	Attainment <sup>c</sup>	Nonattainment
PM <sub>2.5</sub>	Nonattainment <sup>d</sup>	Nonattainment
CO	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment
<sup>a</sup> See 40 CFR Part 81 <sup>b</sup> See CCR Title 17 Sections 60200-60210 <sup>c</sup> On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM <sub>10</sub> National Ambient Air Quality Standard (NAAQS) and approved the PM <sub>10</sub> Maintenance Plan.		

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**Table 3.3-8  
SJVAB Attainment Status**

d The Valley is designated nonattainment for the 1997 PM<sub>2.5</sub> NAAQS. EPA designated the Valley as nonattainment for the 2006 PM<sub>2.5</sub> NAAQS on November 13, 2009 (effective December 14, 2009).  
e Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010)  
f Effective June 15, 2005, the U.S. EPA revoked the federal 1-hour ozone standard, including associated designations and classifications. However, EPA had previously classified the SJVAB as extreme nonattainment for this standard. Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

*Source: San Joaquin Valley Unified Air Pollution Control District, Ambient Air Quality Standards & Valley Attainment Status. <http://www.valleyair.org/aqinfo/attainment.htm>. Accessed October 2020.*

The California CAA requires that Air Districts prepare an air quality attainment plan if the district violates State air quality standards for criteria pollutants including carbon monoxide, sulfur dioxide, nitrogen dioxide, PM<sub>2.5</sub>, or ozone. Locally prepared attainment plans are not required for areas that violate the State PM<sub>10</sub> standards. The California CAA requires that the State air quality standards be met as expeditiously as practicable but does not set precise attainment deadlines. Instead, the act established increasingly stringent requirements for areas that will require more time to achieve the standards.

The air quality attainment plan requirements established by the California CAA are based on the severity of air pollution caused by locally generated emissions. Upwind air pollution control districts are required to establish and implement emission control programs commensurate with the extent of pollutant transport to downwind districts.”<sup>29</sup>

#### California Air Resources Board

“The CARB is responsible for establishing and reviewing the State ambient air quality standards, compiling the California State Implementation Plan (SIP) and securing approval of that plan from the U.S. EPA. As noted previously, federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop SIPs. SIPs are comprehensive plans that describe how an area will attain NAAQS. The 1990 amendments to the Federal CAA set deadlines for attainment based on the severity of an area’s air pollution problem. State law makes CARB the lead agency for all purposes related to the SIP. The California SIP is periodically modified by the CARB to reflect the latest emission inventories, planning documents, and rules and regulations of various air basins. The CARB produces a major part of the SIP for pollution sources that are statewide in scope; however, it relies on the local Air Districts to provide emissions inventory data and additional strategies for sources under their jurisdiction. The SIP consists of the emission standards for vehicular sources and consumer products set by the CARB, and attainment plans adopted by the local air agencies as approved by CARB. The EPA reviews the air quality SIPs to verify conformity with CAA mandates and to ensure that they will achieve air quality goals when implemented. If EPA determines that a SIP is inadequate, it may prepare a Federal Implementation Plan for the nonattainment area, and may impose additional control measures.

<sup>29</sup> Ibid. 3.3-1.

In addition to preparation of the SIP, the CARB also regulates mobile emission sources in California, such as construction equipment, trucks, automobiles, and oversees the activities of air quality management districts and air pollution control districts, which are organized at the county or regional level. The local or regional Air Districts are primarily responsible for regulating stationary emission sources at industrial and commercial facilities within their jurisdiction and for preparing the air quality plans that are required under the Federal CAA and California CAA.”<sup>30</sup>

#### California Air Resources Board Airborne Toxic Control Measures

The ARB is responsible for the statewide comprehensive air toxics program. This program was created to reduce exposure to air toxics and established a formal procedure for ARB to designate substances as toxic air contaminants (TACs). Once a TAC is identified, ARB adopts an airborne toxics control measure (ATCM) for sources that emit the designated TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology (BACT) to minimize emissions.

The ARB also administers the state’s mobile source emissions control program and oversees air quality programs established by state statute. Assembly Bill (AB) 2588 (Air Toxics “Hot Spots” Information and Assessment Act of 1987) requires quantification and prioritization of TAC emissions from individual facilities by the responsible air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA) and, if specific thresholds are exceeded, required to communicate the results to the public. The “Hot Spots” Act was amended by Senate Bill (SB) 1731, which requires facilities posing a significant health risk to the community to reduce their risk through a risk management plan.

**On-Road Heavy-Duty Vehicles Program.** “On-road heavy-duty vehicles are major contributors to poor air quality in California. In particular, emissions from these vehicles are highly disproportionate to the total population of these vehicles. The problem is complicated by the large number of heavy-duty vehicles registered in other states that travel on California's highways and roads, while bringing goods and commerce into and out of our state. The ARB works closely with the EPA, engine and vehicle manufacturers, and other interested parties to address this issue by establishing and enforcing emissions standards. Other programs that work in concert with this program include the Heavy-Duty Vehicle Inspection Program which requires heavy-duty trucks and buses to be inspected for excessive smoke and tampering, and engine certification label compliance; the Periodic Smoke Inspection Program which requires diesel and bus fleet owners conduct annual smoke opacity inspections of their vehicles and repair those with excessive smoke emissions; and the Emission Control Label Inspection Program which requires each vehicle operating in California, including those in transit from Mexico, Canada, or any other state, to be equipped with engines that meet California and/or EPA or equivalent emission standards and be labeled as such.”<sup>31</sup>

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<sup>30</sup> Op. Cit. 3.3-6 to 3.3-7.

<sup>31</sup> Three Rivers Community Plan 2018 Update. Air Quality and Greenhouse Gas Analysis Report. Pages 30 to 31.

**Low-Emission Vehicle Program.** “The ARB first adopted Low-Emission Vehicle (LEV) program standards in 1990. The first LEV standards ran from 1994 through 2003. LEV II regulations, which ran from 2004 through 2010, represent continuing progress in emission reductions. However, as the State’s passenger vehicle fleet continued to grow and more sport utility vehicles and pickup trucks are used as passenger cars, the more stringent LEV II standards were needed to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 State Implementation Plan (SIP). In 2012, ARB adopted the LEV III amendments to California’s LEV regulations to provide reductions needed to achieve the latest ozone and PM<sub>2.5</sub> standards. These amendments include more stringent emission standards for both criteria pollutants and greenhouse gases for new passenger vehicles.”<sup>32</sup>

**In-Use Off-Road Diesel-Fueled Fleets.** “On July 26, 2007, the ARB adopted a regulation to reduce diesel particulate matter (DPM) and NOx emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. These vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than five consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. Performance requirements of the rule are based on a fleet’s average NOx emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements making the first compliance deadline January 1, 2014 for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).”<sup>33</sup>

**In-Use On-Road Heavy-Duty Diesel Vehicles (Bus and Truck).** “On December 12, 2008, the ARB adopted the Truck and Bus Regulation that requires diesel trucks and buses that operate in California to be upgraded to reduce emissions and applies to nearly all privately and federally-owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. In light of the economic recession amendments that restructured the Truck and Bus Regulation were adopted by the ARB on December 17, 2010 and again on April 25, 2014. Beginning January 1, 2012, heavier trucks must be retrofitted with PM filters and older trucks engines must be replaced with 2010 model year or newer beginning January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. To allow for flexibility of compliance with the regulations, the regulation provides a variety of options tailored to fleets operating low use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.”<sup>34</sup>

**California Air Toxics Program.** “In the 1980’s, serious industrial accidents, in conjunction with researchers warning that exposure to very small amounts of toxic chemicals could cause long-term health problems, heightened public concern over the dangers of air toxics. As a result, the public demanded protection and control over the release of air toxics. The Air Toxics Program was created to protect the public’s health; identify, prevent and control toxic emissions; identify health

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<sup>32</sup> Ibid. 31.

<sup>33</sup> Op. Cit.

<sup>34</sup> Op. Cit. 31- to 32.

risks to the public; reduce emissions from high risk sources; increase community awareness of air toxics; improve interagency cooperation; and continue to reduce air toxics emissions in the future.

Key features of the program include compliance with the Toxic Air Contaminant Identification and Control Act (AB 1807-1983), the Air Toxics "Hot Spots" Information and Assessment Act (AB2588-1987), and the 1992 amendment to the law (SB1731). The 1990 Amendments of the federal CAA set up a nationwide air toxics control program. In 1993, the ARB expanded the TAC list to almost 200 substances to include the hazardous air pollutants (HAPs) identified in the 1990 federal CAA Amendments.

The federal program focuses on larger industrial sources that are of the highest national priority, such as chemical manufacturers. California's program focuses on protecting the public from all significant sources, regardless of size. The ARB works with both federal and local agencies to implement federal requirements in California while maintaining current public health safeguards and avoiding regulatory duplication."<sup>35</sup>

**Diesel Risk Reduction Plan.** "In August 1998, the ARB identified DPM as TACs and was required to determine the need for further control of DPM emissions. On September 28, 2000, the ARB approved the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines. The ARB's Diesel Risk Reduction Plan has led to the adoption of new state regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90% overall from year 2000 levels. The plan requires all new diesel-fueled vehicles and engines to use diesel particulate filters and very low-sulfur diesel fuel. The projected emission benefits associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75% by 2010 and 85% by 2020."<sup>36</sup>

**ATCM for School Bus Idling:** "On December 12, 2002, the ARB adopted the Airborne Toxic Control Measure (ATCM) to Limit School Bus Idling and Idling at Schools. The ATCM, which became effective July 16, 2003, limits school bus idling and idling at or near schools to only when necessary for safety or operational concerns and targets school buses, school pupil activity buses, youth buses, paratransit vehicles, transit buses, and heavy-duty commercial motor vehicles that operate at or near schools. In 2009, SB 124 (Oropeza), codified the ATCM limiting school bus idling and clarified authority of peace officers and Air District to enforce the program."<sup>37</sup>

**ATCM for Diesel-Fueled Commercial Motor Vehicle Idling:** "On July 22, 2004, the ARB adopted the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling and subsequently amended it on October 20, 2005, October 19, 2009, and December 12, 2013. The ATCM requires, among other things, that drivers of diesel-fueled commercial motor vehicles with gross vehicle weight ratings greater than 10,000 pounds, including buses and sleeper berth equipped trucks, not idle the vehicle's primary diesel engine longer than five minutes at any location. Vehicles with

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<sup>35</sup> Op. Cit. 32.

<sup>36</sup> Op. Cit.

<sup>37</sup> Op. Cit. 33.

2008 and newer model year diesel engines must either be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling or meet a stringent NOx idling emission standard. Emissions producing alternative technologies such as diesel-fueled auxiliary power systems and fuel-fired heaters are also required to meet emission performance requirements and requirements specified in the Low Emission Vehicle regulations. However, the regulation also contains exemptions allowing engine operation for power take-off, maintenance, extreme weather or emergency conditions, emergency vehicles, military and tactical vehicles, armored vehicles, workover rigs, etc.”<sup>38</sup>

**ATCM for Asbestos.** “Asbestos is found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentine) and often contains chrysotile asbestos. Another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

In July 1990, the ARB adopted an ATCM for surfacing application. The ATCM was amended in July 2000 and the amendments became effective in November 2011. The regulation prohibits the sale or use of restricted materials for unpaved surfacing unless it has been tested and found to have an asbestos content less than 0.25%. Restricted material includes aggregate material extracted from an ultramafic (or ultrabasic) rock unit as shown on the geologic maps referenced in the amended ATCM; ultramafic rock including serpentine; or aggregate material shown to have an asbestos content of 0.25% or more; or any mixture containing 10% of these materials. The regulation also establishes specific testing and notification of the restricted materials.

In July 2001, the ARB approved an ATCM for construction, grading, quarrying and surface mining operations to minimize emissions of naturally occurring asbestos, which requires the implementation of mitigation measures to minimize emissions of asbestos-laden dust. The regulation requires application of best management practices to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification and engineering controls prior to grading, quarrying or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than one acre in size. These projects require the submittal of a "Dust Mitigation Plan" and approval by the Air District prior to the start of a project.

The ATCM applies to road construction and maintenance, construction and grading operations, and quarries and surface mines when the activity occurs in an area where naturally occurring asbestos is likely to be found. Areas are subject to the regulation if they are identified on maps published by the California Department of Conservation, California Geological Survey (CGS) as

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<sup>38</sup> Op. Cit.



ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity. Review of the United States Geological Survey (USGS) and CGS maps shows no ultramafic rock has been found near the community Three Rivers.”<sup>39</sup>

### ***Regional Policy & Regulations***

#### **San Joaquin Valley Unified Air Pollution Control District**

The Air District is made up of eight counties in California’s Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, and Tulare Counties, and the San Joaquin Valley portion of Kern County. The Air District is “a public health agency whose mission is to improve the health and quality of life for all Valley residents through efficient, effective and entrepreneurial air quality-management strategies.”<sup>40</sup> The Air District’s 11 core values include: protection of public health; active and effective air pollution control efforts while seeking to improve the Valley’s economic prosperity and grow opportunities for all Valley Residents; outstanding customer service; ingenuity and innovation; accountability to the public; open and transparent public process; recognition of the uniqueness of the San Joaquin Valley; continuous improvement; effective and efficient use of public funds; respect for the opinions and interests of all Valley residents; and robust public outreach and education on Valley air quality progress and continuing air quality efforts.”<sup>41</sup> To achieve these core values the Air District has adopted air quality plans pursuant to the California CAA and a comprehensive list of rules to limit air quality impacts. The air plans currently in effect in the SJVAB and specific rules that apply to the proposed Project are listed and described further below.

#### ***Ozone Attainment Plans***

The SJVAB has severe ozone problems. The EPA has required the Air District to demonstrate in a plan, substantiated with modeling, that the ozone NAAQS could be met by the November 15, 2005, deadline. However, the Air District could not provide this demonstration for several reasons, including that its achievement would require regulation of certain source categories not currently under the jurisdiction of the Air District. According to the Air District, in order to meet the standard the SJVAB must reduce the total emissions inventory by an additional 30 percent (300 tons per day). Because attainment by the deadline could not be demonstrated by the mandated deadlines, the federal sanction clock was started. The clock was to be stopped if the Air District SIP could demonstrate compliance with specified federal requirements by November 15, 2005. However, the Air District recognized that it could not achieve demonstration in time. Therefore, the Air District, through petition by the State on behalf of AIR DISTRICT, sought a change in the federal nonattainment classification from “severe” to “extreme” nonattainment with the ozone standard. An extreme nonattainment designation would effectively move the compliance deadline to year 2010 before federal sanctions would begin.

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<sup>39</sup> Op. Cit. 33-34

<sup>40</sup> Air District. The Air District’s Mission. Accessed February 2021 at: [http://www.valleyair.org/General\\_info/aboutdist.htm#Mission](http://www.valleyair.org/General_info/aboutdist.htm#Mission).

<sup>41</sup> Air District. Core Values. Accessed February 2021 at: [http://www.valleyair.org/General\\_info/aboutdist.htm#Mission](http://www.valleyair.org/General_info/aboutdist.htm#Mission). Values.

On February 23, 2004, EPA publicly announced its intention to grant the request by the State of California to voluntarily reclassify the SJVAB from a “severe” to an “extreme” 1-hour ozone nonattainment area. The EPA stated that, except for a demonstration of attainment of the ozone standard by 2005, the Air District has submitted all of the required severe area plan requirements and they were deemed complete. The ARB submitted the 2004 Extreme Ozone Attainment Demonstration Plan to EPA on November 15, 2004. On August 21, 2008, the District adopted Clarifications for the 2004 Extreme Ozone Attainment Demonstration Plan for 1-hour Ozone, and on October 16, 2008, EPA proposed to approve the Air District's 2004 Extreme Ozone Attainment Demonstration Plan for 1-hour Ozone.

The planning requirements for the 1-hour plan remain in effect until replaced by a federal 8-hour ozone attainment plan. The EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan, including revisions to the plan, on March 8, 2010, effective April 7, 2010. However, the Air Basin failed to attain the standard in 2010 and was subject to a \$29-million Clean Air Act penalty. The penalty is being collected through an additional \$12 motor vehicle registration surcharge for each passenger vehicle registered in the Air Basin that will be applied to pollution reduction programs in the region. The Air District also instituted a more robust ozone episodic program to reduce emissions on days with the potential to exceed the ozone standards.

Following litigation over approval of the 2004 Extreme Ozone Attainment Demonstration Plan, EPA withdrew its approval in November 2012, and the Air District and ARB withdrew the plan from consideration. The Air District adopted the 2013 Plan for the Revoked 1-Hour Ozone Standard on September 19, 2013. This plan demonstrated that the SJVAB will attain the revoked 1-hour ozone standard by 2017. On May 6, 2014, the Air District submitted a formal request that the EPA determine that the Valley has attained the federal 1-hour ozone standard and to eliminate the \$29 million Clean Air Act penalty. Per federal requirements, the Air District's submittal includes a clean data finding (2011-2013) and a finding that attainment is due to permanent and enforceable emissions reductions.

As part of the clean data finding, the Air District requested EPA concurrence that an exceedance at Fresno-Drummond on August 10, 2012 was due to an exceptional event. Alternatively, the Air District also provided compelling evidence that the Valley would attain the 1-hour ozone standard but for the influence of international air pollutant transport, allowing nonattainment penalties to be lifted under CAA 179B. On July 18, 2016, EPA determined that, effective August 17, 2016, the SJVAB has attained the revoked 1-hour standard.

EPA originally classified the Air Basin as serious nonattainment for the 1997 federal 8-hour ozone standard with an attainment date of 2013. On April 30, 2007, the District's Governing Board adopted the 2007 Ozone Plan, which contained analysis showing a 2013 attainment target to be infeasible. The 2007 Ozone Plan details the plan for achieving attainment on schedule with an “extreme nonattainment” deadline of 2024. At its adoption of the 2007 Ozone Plan, the District also requested a reclassification to extreme nonattainment. ARB approved the plan in June 2007, and EPA approved the request for reclassification to extreme nonattainment on April 15, 2010.

The 2007 Ozone Plan contains measures to reduce ozone and particulate matter precursor emissions to bring the Basin into attainment with the federal 8-hour ozone standard. The 2007 Ozone Plan calls for a 75-percent reduction of NO<sub>x</sub> and a 25-percent reduction of ROG. The plan, with innovative measures and a “dual path” strategy, assures expeditious attainment of the federal 8-hour ozone standard for all Basin residents. The Air District Governing Board adopted the 2007 Ozone Plan on April 30, 2007. The ARB approved the plan on June 14, 2007. The 2007 Ozone Plan requires yet to be determined “Advanced Technology” to achieve additional reductions after 2021 to attain the standard at all monitoring stations in the Basin by 2024 as allowed for areas designated extreme nonattainment by the federal CAA.

The EPA revised the federal 8-hour ozone standard in 2008. To address this standard on June 16, 2016, the Air District adopted the 2016 Ozone Plan for 2008 8-hour Ozone Standard, which the SJVAB must attain by 2031. This plan demonstrates that the Air District’s attainment strategy satisfies all federal CAA requirements and includes a “black box” provision to satisfy the contingency requirements under the federal CAA. The “black box” represents reductions that would be needed to attain the standard for which specific measures or technologies are not currently available. The strategy in this plan will reduce NO<sub>x</sub> emissions by over 60% between 2012 and 2031.

In October 2015, the EPA again revised and lowered the federal 8-hour ozone standard. Upon EPA’s publication of the implementation rule, the Air District will be required to prepare a new plan to address the 2015 standard.

#### *Particulate Matter Attainment Plans*

The SJVAB was designated nonattainment of state and federal health-based air quality standards for PM<sub>10</sub>. However, as discussed below, the SJVAB has demonstrated attainment of the federal PM<sub>10</sub> standards and currently remains in nonattainment only for the state standards. The SJVAB is also designated nonattainment of state and federal standards for PM<sub>2.5</sub>.

To meet CAA requirements for the PM<sub>10</sub> standard, the Air District adopted a PM<sub>10</sub> Attainment Demonstration Plan (Amended 2003 PM<sub>10</sub> Plan and 2006 PM<sub>10</sub> Plan), which had an attainment date of 2010. The Air District adopted the 2007 PM<sub>10</sub> Maintenance Plan in September 2007 to assure the San Joaquin Valley’s continued attainment of the EPA’s PM<sub>10</sub> standard. The EPA designated the San Joaquin Valley as an attainment/maintenance area for PM<sub>10</sub> on September 25, 2008. Although the San Joaquin Valley has exceeded the standard since then, those days were considered exceptional events that are not considered a violation of the standard for attainment purposes.

On April 30, 2008, the Air District adopted the 2008 PM<sub>2.5</sub> Plan satisfying federal implementation requirements for the 1997 federal PM<sub>2.5</sub> standard. However, on the verge of the demonstration of attainment with the standard the SJVAB was plagued with extreme drought, stagnation, strong inversions, and historically dry conditions and could not achieve attainment by the 2015 deadlines. The 2015 Plan for the 1997 PM<sub>2.5</sub> Standard (2015 PM<sub>2.5</sub> Plan) was adopted by the Air District on April 16, 2015 and is a continuation of the Air District’s strategy to improve the air quality in the

SJVAB. The 2015 PM<sub>2.5</sub> Plan contains most stringent measures, best available control measures, additional enforceable commitments for further reductions in emissions, and ensures attainment of the 1997 federal 24-hour standard by 2018 and the annual standard by 2020.

In December 2012, the Air District adopted the 2012 PM<sub>2.5</sub> Plan to bring the San Joaquin Valley into attainment of the EPA's 2006 24-hour PM<sub>2.5</sub> standard. The ARB approved the Air District's 2012 PM<sub>2.5</sub> Plan for the 2006 standard at a public hearing on January 24, 2013. This plan seeks to bring the San Joaquin Valley into attainment with the standard by 2019, with the expectation that most areas will achieve attainment before that time.

EPA lowered the annual PM<sub>2.5</sub> standard in 2012 and in response the Air District adopted the 2016 Moderate Area Plan for the PM<sub>2.5</sub> Standard. This plan demonstrates that the SJVAB attainment of the revised annual standard by 2021 is not practical and seeks to bring the SJVAB into attainment by 2025. The plan also includes a request for reclassification of the SJVAB from "moderate nonattainment" to "serious nonattainment".

The Air District is currently in the process of developing an attainment strategy to address multiple PM<sub>2.5</sub> standards (including the 1997 24-hour standard of 65 µg/m<sup>3</sup> and annual standard of 15 µg/m<sup>3</sup>; the 2006 24-hour standard of 35 µg/m<sup>3</sup>; and the 2012 annual standard of 12 µg/m<sup>3</sup>) as well as a plan to demonstrate maintenance of the 1987 PM<sub>10</sub> standard as required under the federal Clean Air Act. The proposed attainment strategy will include the preparation of the 2017 PM<sub>2.5</sub> Plan; 2017 PM<sub>10</sub> Maintenance Plan; and 5 Percent Plan for the 1997 PM<sub>2.5</sub> Standard. The Air District continues to work with EPA on issues surrounding these plans, including EPA implementation updates.

### *Criteria Pollutants*

Although all criteria pollutants are to be evaluated, the primary pollutants of concern during project construction and operation are ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Ozone is a secondary pollutant that is formed in the atmosphere sometimes miles away from the source of emissions through reactions of ROG and NO<sub>x</sub> emissions in the presence of sunlight. Therefore, ROG and NO<sub>x</sub> are termed ozone precursors. As demonstrated in **Table 3.3-5**, the SJVAB often exceeds the state and national ozone standards. Therefore, if the project emits a substantial quantity of ozone precursors, the project may contribute to an exceedance of the ozone standard. The SJVAB also exceeds air quality standards for PM<sub>10</sub>, and PM<sub>2.5</sub>; therefore, substantial project emissions may contribute to an exceedance for these pollutants.

To assess air quality impacts, the Air District has established significance thresholds to assist Lead Agencies in determining whether a project may have a significant air quality impact.<sup>42</sup> The Air District's thresholds of significance for criteria pollutants, which are based on Air District Rule 2201 (New and Modified Stationary Source Review) offset thresholds, are provided below in **Table 3.3-9**.

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<sup>42</sup> Air District. GAMAQI. March 2015. Page 74. Accessed February 2021 at: [http://www.valleyair.org/transportation/GAMAQI\\_12-26-19.pdf](http://www.valleyair.org/transportation/GAMAQI_12-26-19.pdf)

As shown in **Table 3.3-9**, the Air District has three sets of significance thresholds for each pollutant based on the source of the emissions. According to the GAMAQI, “The District identifies thresholds that separate a project’s short-term emissions from its long-term emissions. The short-term emissions are mainly related to the construction phase of a project and are recognized to be short in duration. The long-term emissions are mainly related to the activities that will occur indefinitely as a result of project operations.”<sup>43</sup>

<b>Table 3.3-9</b>			
<b>Criteria Pollutant Emission Significance Thresholds</b>			
<b>Pollutant / Precursor</b>	<b>Construction Emissions</b>	<b>Operational Emissions</b>	
		<b>Permitted Equipment and Activities</b>	<b>Non- Permitted Equipment and Activities</b>
	<b>Emissions (tpy)</b>	<b>Emissions (tpy)</b>	<b>Emissions (tpy)</b>
<b>CO</b>	100	100	100
<b>NOx</b>	10	10	10
<b>ROG</b>	10	10	10
<b>SOx</b>	27	27	27
<b>PM<sub>10</sub></b>	15	15	15
<b>PM<sub>2.5</sub></b>	15	15	15

*Source: Air District, GAMAQI. Table 2. Page 80.*

Operational emissions are further separated into permitted and non-permitted equipment and activities. Stationary (permitted) sources that comply or will comply with Air District rules and regulations are generally not considered to have a significant air quality impact. Specifically, the GAMAQI states, “District Regulation II ensures that stationary source emissions will be reduced or mitigated to below the District’s significance thresholds. However, the Lead Agency can, and should, make an exception to this determination if special circumstances suggest that the emissions from any permitted or exempt source may cause a significant air quality impact. For example, if a source may emit objectionable odors, then odor impacts on nearby receptors should be considered a potentially significant air quality impact. District implementation of New Source Review (NSR) ensures that there is no net increase in emissions above specified thresholds from New and Modified Stationary Sources for all nonattainment pollutants and their precursors. Furthermore, in general, permitted sources emitting more than the NSR Offset Thresholds for any criteria pollutant must offset all emission increases in excess of the thresholds. However, under certain circumstances, the District may be precluded by state law or other District rule requirements from requiring a stationary source to offset emissions increases.”<sup>44</sup>

<sup>43</sup> Ibid. 75.

<sup>44</sup> Op. Cit. 76.

Air District Rules and Regulations<sup>45</sup>

The Air District is primarily responsible for regulating stationary source emissions within the SJVAB and preparing the air quality plans (or portions thereof) for its jurisdiction. The Air District's primary approach of implementing local air quality plans occurs through the adoption of specific rules and regulations. Stationary sources within the jurisdiction are regulated by the Air District's permit authority over such sources and through its review and planning activities. The following Air District rules and regulations that may apply to this Project include, but are not limited to, the following:

**Rule 3135 (Dust Control Plan Fees)** – This rule requires the project applicant to submit a fee in addition to a Dust Control Plan. The purpose of this rule is to recover the Air District's cost for reviewing these plans and conducting compliance inspections.

**Rule 3180 (Administrative Fees for Indirect Source Review (ISR))** – This rule requires the project applicant to submit a fee when submitting an Air Impact Assessment application in accordance with ISR regulations.

**Rule 4101 (Visible Emissions)** - The purpose of this rule is to prohibit the emissions of visible air contaminants to the atmosphere. The provisions of this rule shall apply to any source operation which emits or may emit air contaminants.

**Rule 4102 (Nuisance)** - The purpose of this rule is to protect the health and safety of the public, and applies to any source operation that emits or may emit air contaminants or other materials.

**Regulation VIII (Fugitive PM<sub>10</sub> Prohibitions)** - The Air District adopted its Regulation VIII on October 21, 1993 and amended on August 8, 2004 to implement Best Available Control Measures (BACM). This Regulation consists of a series of emission reduction rules consistent with the PM<sub>10</sub> Maintenance Plan. These rules are designed to reduce PM<sub>10</sub> emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track-out, etc. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules. Regulation VIII specifically addresses the following activities:

- Construction, Demolition, Excavation, Extraction and Other Earthmoving Activities (Rule 8021);
- Bulk Materials (including Handling and Storage) (Rule 8031);
- Carryout and Track-Out (Rule 8041);
- Open Areas (Rule 8051);
- Paved and Unpaved Roads (Rule 8061); and

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<sup>45</sup> For a full list of Air District rules and regulations, see their website at: <http://www.valleyair.org/rules/1ruleslist.htm>.

- Unpaved Vehicle/Equipment Parking (including Shipping and Receiving, Transfer, Fueling, and Service Areas) (Rule 8071).

**Rule 4601 (Architectural Coatings)** – This rule limits volatile organic compound (VOC) emissions from architectural coatings and specifies practices for proper storage, cleanup, and labeling requirements. The rule contains VOC content limits for colorants and coatings with different VOC limits for prior to and after January 1st, 2022.

**Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).** This purpose of this rule is to limit VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations. To comply with this rule the asphalt oil manufacturers produce materials that are in compliance with the rule.

The Air District has limited authority to regulate transportation sources and indirect sources that attract motor vehicle trips.

**Rule 9510 (Indirect Source Review)** - Requires developers to mitigate project emissions through 1) on-site design features that reduce trips and vehicle miles traveled, 2) controls on other emission sources, and 3) with reductions obtained through the payment of a mitigation fee used to fund off-site air quality mitigation projects. Rule 9510 requires construction related NO<sub>x</sub> emission reductions of 20 percent and PM<sub>10</sub> reductions of 45 percent. Rule 9510 requires a 33 percent reduction in operational NO<sub>x</sub> emissions and a 50 percent reduction in PM<sub>10</sub>. The reductions are calculated by comparing the unmitigated baseline emissions and mitigated emissions from the first year of project operation. The Air District recommends using the [California Emissions Estimator Model, CalEEMOD] model to quantify project emissions and emission reductions. Rule 9510 was adopted to reduce the impacts of development on Air District's attainment plans.<sup>46</sup>

#### Air District's CEQA Role

CEQA Guidelines define a significant effect on the environment as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project. To determine if a project would have a significant impact on air quality, the type, level, and impact of criteria pollutant emissions generated by the project must be evaluated. The Air District has prepared its guidance document, "Guidance for Assessing and Mitigating Air Quality Impacts" (GAMAQI), to assist Lead Agencies in assessing project specific impact on air quality.<sup>47</sup>

"As a public agency, the District takes an active part in the intergovernmental review process under CEQA. The District is available to assist governmental agencies and project proponents in understanding how to characterize project-related impacts on air quality and how to reduce or mitigate those impacts. As part of this ongoing effort, the District develops and publishes technical guidance relevant to assessing project specific emissions of criteria pollutants and assessing potential health risks to sensitive receptors."<sup>48</sup> In carrying out its duties under CEQA, the District

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<sup>46</sup> Ibid. Section 4.4.3.

<sup>47</sup> Air District. GAMAQI. March 2015. Accessed February 2021 at: [http://www.valleyair.org/transportation/GAMAQI\\_12-26-19.pdf](http://www.valleyair.org/transportation/GAMAQI_12-26-19.pdf).

<sup>48</sup> Ibid. 48

may act as a Lead Agency, a Responsible Agency, or a Trustee/Commenting Agency depending on the approvals required by the District and other land use agencies.<sup>49</sup>

“The District is always the Lead Agency for projects such as the development of District rules and regulations. The District may be Lead Agency for projects subject to District permit requirements. As discussed above, for projects triggering BACT, the District has discretionary approval in deciding how to permit the project. For projects subject to BACT, the District serves as Lead Agency when no other agency has principal responsibility for approving the project.”<sup>50</sup>

“As a Responsible Agency, the District assists Lead Agencies by providing technical expertise in characterizing project-related impacts on air quality and is available to provide technical assistance in addressing air quality issues in environmental documents. When commenting on a Lead Agency’s environmental analysis, the District reviews the air quality section of the analysis and other sections relevant to assessing potential impacts on air quality, i.e. sections assessing public health impacts. At the conclusion of its review the District may submit to the Lead Agency comments regarding the project air quality analysis. Where appropriate, the District will recommend feasible mitigation measures.”<sup>51</sup>

“As a Trustee Agency, the District assists Lead Agencies by providing technical expertise or tools in characterizing project-related impacts on air quality and identifying potential mitigation measures, and is available to provide technical assistance in addressing air quality issues in environmental documents. At the conclusion of its review the District may submit to the Lead Agency comments regarding the project air quality analysis. Where appropriate, the District will recommend feasible mitigation measures. The process is subject to change due to the District’s continuous improvements efforts.”<sup>52</sup> The Air District’s significance thresholds and guidance for evaluation are provided below.

### *Air Quality Plans*

The Air District has established thresholds of significance for criteria pollutant emissions. These thresholds are based on District New Source Review (NSR) offset requirements for stationary sources. “Stationary sources in the District are subject to some of the toughest regulatory requirements in the nation. Emission reductions achieved through implementation of District offset requirements are a major component of the District’s air quality plans. Thus, projects with emissions below the thresholds of significance for criteria pollutants would be determined to “Not conflict or obstruct implementation of the District’s air quality plan”. ”<sup>53</sup>

The Air District has three sets of significance thresholds based on the source of the emissions. According to the GAMAQI, “The District identifies thresholds that separate a project’s short-term emissions from its long-term emissions. The short-term emissions are mainly related to the

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<sup>49</sup> Op. Cit.

<sup>50</sup> Op. Cit. 50.

<sup>51</sup> Ibid. 51.

<sup>52</sup> Op. Cit. 52.

<sup>53</sup> Ibid. Section 7.12. 65.



construction phase of a project and are recognized to be short in duration. The long-term emissions are mainly related to the activities that will occur indefinitely as a result of project operations.”<sup>54</sup>

Long-term (operational) emissions are further separated into permitted and non-permitted equipment and activities. Stationary (permitted) sources that comply or will comply with Air District rules and regulations are generally not considered to have a significant air quality impact. Specifically, the GAMAQI states, “District Regulation II ensures that stationary source emissions will be reduced or mitigated to below the District’s significance thresholds”<sup>55</sup>. “District implementation of New Source Review (NSR) ensures that there is no net increase in emissions above specified thresholds from New and Modified Stationary Sources for all nonattainment pollutants and their precursors. Furthermore, in general, permitted sources emitting more than the NSR Offset Thresholds for any criteria pollutant must offset all emission increases in excess of the thresholds”<sup>56</sup>

### *Toxic Air Contaminants*

“The operation of any project with the potential to expose sensitive receptors to substantial levels of toxic air contaminants (TAC’s) would be deemed to have a potentially significant impact. More specifically, proposed development projects that have the potential to expose the public to TAC’s in excess of the following thresholds would be considered to have a significant air quality impact:

1. Probability of contracting cancer for the Maximally Exposed Individual<sup>57</sup> exceeds 10 in one million.
2. Ground-level concentrations of non-carcinogenic TAC’s would result in a Hazard Index greater than 1 for the Maximally Exposed Individual.

Application of these standards would typically apply to the preparation of more detailed project-specific health risk assessments (based on a detailed air dispersion modeling effort) that would occur as individual projects are considered under the proposed project. For this programmatic assessment of the proposed project, the assessment of TAC’s is conducted at a qualitative level with specific policies and implementation measures provided to address the potential impacts associated with this issue.”<sup>58</sup>

### *Cumulative Impacts*

“By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development. Future attainment of State and Federal ambient air quality standards is a function of successful implementation of the District’s attainment plans. Consequently, the District’s application of thresholds of significance for criteria

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<sup>54</sup> Op. Cit. Section 8.1 75.

<sup>55</sup> Op. Cit. 76.

<sup>56</sup> Op. Cit.

<sup>57</sup> Maximally Exposed Individual represents the worst-case risk estimate based on a theoretical person continuously exposed for 70 years at the point of highest compound concentration in air.

<sup>58</sup> Tulare County General Plan 2030 Update RDEIR. Pages 3.3-15 to 3.3-16.

pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

A Lead Agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program, including, but not limited to an air quality attainment or maintenance plan that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located [CCR §15064(h)(3)].

Thus, if project specific emissions exceed the thresholds of significance for criteria pollutants the project would be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the District is in non-attainment under applicable Federal or State ambient air quality standards. This does not imply that if the project is below all such significance thresholds, it cannot be cumulatively significant.”<sup>59</sup>

#### *Exposure to Sensitive Receptors*

“Determination of whether project emissions would expose sensitive receptors to substantial pollutant concentrations is a function of assessing potential health risks.

Sensitive receptors are facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors. When evaluating whether a development proposal has the potential to result in localized impacts, Lead Agency staff need to consider the nature of the air pollutant emissions, the proximity between the emitting facility and sensitive receptors, the direction of prevailing winds, and local topography.

Lead Agencies are encouraged to use the screening tools for Toxic Air Contaminant presented in section 6.5 (Potential Land Use Conflicts and Exposure of Sensitive Receptors) [pages 44-45 of the GAMAQI] to identify potential conflicts between land use and sensitive receptors and include the result of their analysis in the referral document.”<sup>60</sup>

“Another useful tool is the CAPCOA Guidance Document: Health Risk Assessments for Proposed Land Use Projects. CAPCOA prepared the guidance to assist Lead Agencies in complying with CEQA requirements. The guidance document describes when and how a health risk assessment should be prepared and what to do with the results.”<sup>61, 62</sup>

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<sup>59</sup> Op. Cit. Section 7.14. 65-66.

<sup>60</sup> Op. Cit. Section 7.15. 66.

<sup>61</sup> Op. Cit. Section 6.5. 45.

<sup>62</sup> The CAPCOA Guidance document can be found at [http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA\\_HRA\\_LU\\_Guidelines\\_8-6-09.pdf](http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf).

### *Nuisance Odors*

“Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or formulaic methodologies to determine the presence of a significant odor impact. Rather, the District recommends that odor analyses strive to fully disclose all pertinent information.

The intensity of an odor source’s operations and its proximity to sensitive receptors influences the potential significance of odor emissions. The District has identified some common types of facilities that have been known to produce odors in the San Joaquin Valley. These are presented in Chapter 8 [of the GAMAQI] along with a reasonable distance from the source within which, the degree of odors could possibly be significant.”<sup>63</sup>

“The intensity of an odor source’s operations and its proximity to sensitive receptors influences the potential significance of odor emissions. The District has identified some common types of facilities that have been known to produce odors in the San Joaquin Valley Air Basin. These are presented in Table 6 (Screening Levels For Potential Odor Sources) [of the GAMAQI] along with a reasonable distance from the source within which, the degree of odors could possibly be significant. Table 6 (Screening Levels for Potential Odor Sources) [of the GAMAQI], can be used as a screening tool to qualitatively assess a project’s potential to adversely affect area receptors. This list of facilities is not all-inclusive. The Lead Agency should evaluate facilities not included in the table or projects separated by greater distances if warranted by local conditions or special circumstances. If the proposed project would result in sensitive receptors being located closer than the screening level distances, a more detailed analysis should be provided.”<sup>64</sup>

### *Local Policy & Regulations*

#### Tulare County Board of Supervisors

“The County continues to evaluate and consider a variety of Federal, State, and Air District programs in order to respond to the non-attainment designation for Ozone that the SJVAB has received, and will continue to adopt resolutions to implement these programs. The Tulare County Board of Supervisor resolutions are described below. These resolutions were adopted in 2002 and 2004, respectively.”<sup>65</sup>

**“Resolution 2002-0157.** Resolution 2002-0157, as adopted on March 5, 2002, requires the County to commit to implementing the Reasonably Available Control Measures included in the Resolution. The following Reasonably Available Control Measures were included in the resolution:

1. Increasing transit service to the unincorporated communities of Woodville, Poplar and Cotton Center;

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<sup>63</sup> Air District. GAMAQI. March 2015 Section 7.15. 66-67.

<sup>64</sup> Ibid. Section 8.6. 102-103.

<sup>65</sup> Ibid. 3.3-12 to 3.3-13.

2. Purchase of three new buses and installation of additional bicycle racks on buses;
3. Public outreach to encourage the use of alternative modes of transportation;
4. Providing preferential parking for carpools and vanpools;
5. Removing on-street parking and providing bus pullouts in curbs to improve traffic flow;
6. Supporting the purchase of hybrid vehicles for the County fleet;
7. Mandating that the General Plan 2030 Update implement land use policies supporting public transit and vehicle trip reduction; and
8. Programming \$13,264,000 of highway widening projects.”<sup>66</sup>

**“Resolution 2004-0067.** As part of a follow up effort to Resolution 2002-0157 and to address the federal reclassification to Extreme non-attainment for ozone, the County Board of Supervisors adopted Resolution 2004-067. The resolution contains additional Reasonably Available Control Measures as summarized below:

1. Encouraging land use patterns which support public transit and alternative modes of transportation;
2. Exploring concepts of Livable Communities as they address housing incentives and transportation;
3. Consideration of incentives to encourage developments in unincorporated communities that are sensitive to air quality concerns; and
4. Exploring ways to enhance van/carpool incentives, alternative work schedules, and other Transportation Demand Management strategies.”<sup>67</sup>

The County continues to evaluate and consider Federal, State, and Air District programs in order to respond to the non-attainment designation for state PM<sub>10</sub> standards that the SJVAB has received. “On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM<sub>10</sub> NAAQS and approved the PM<sub>10</sub> Maintenance Plan. However, prior to this redesignation, Tulare County Board of Supervisors adopted the following resolution (Resolution 2002-0812) on October 29, 2002. Although now designated in attainment of the federal PM<sub>10</sub> standard, all requirements included in the AIR DISTRICT PM<sub>10</sub> Plan are still in effect. The resolution contains the following Best Available Control Measures (BACMs) to be implemented in order to reduce PM<sub>10</sub> emissions in the County:

1. Paving or stabilizing of unpaved roads and alleys;
2. Paving, vegetating, chemically stabilizing unpaved access points onto paved roads;
3. Curbing, paving, or stabilizing shoulders on paved roads;
4. Frequent routine sweeping or cleaning of paved roads;

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<sup>66</sup> Op. Cit.

<sup>67</sup> Op. Cit. 3.3-14

5. Intensive street cleaning requirements for industrial paved roads and streets providing access to industrial/ construction sites; and
6. Debris removal after wind and rain runoff when blocking roadways.”<sup>68</sup>

#### Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within the County of Tulare.<sup>69</sup> The following General Plan policies apply to the proposed Project:

**AQ-1.1 Cooperation with Other Agencies** - The County shall cooperate with other local, regional, Federal, and State agencies in developing and implementing air quality plans to achieve State and federal Ambient Air Quality Standards. The County shall partner with the SJVAPCD, Tulare County Association of Governments (TCAG), and the California Air Resource Board to achieve better air quality conditions locally and regionally.

**AQ-1.2 Cooperation with Local Jurisdictions** - The County shall participate with cities, surrounding counties, and regional agencies to address cross-jurisdictional transportation and air quality issues.

**AQ-1.3 Cumulative Air Quality Impacts** - The County shall require development to be located, designed, and constructed in a manner that would minimize cumulative air quality impacts. Applicants shall be required to propose alternatives as part of the State CEQA process that reduce air emissions and enhance, rather than harm, the environment.

**AQ-1.4 Air Quality Land Use Compatibility** - The County shall evaluate the compatibility of industrial or other developments which are likely to cause undesirable air pollution with regard to proximity to sensitive land uses, and wind direction and circulation in an effort to alleviate effects upon sensitive receptors.

**AQ-1.5 California Environmental Quality Act (CEQA) Compliance** - The County shall ensure that air quality impacts identified during the CEQA review process are consistently and reasonably mitigated when feasible.

**AQ-2.2 Indirect Source Review** - The County shall require major development projects, as defined by the SJVAPCD, to reasonably mitigate air quality impacts associated with the project. The County shall notify developers of SJVAPCD Rule 9510 – Indirect Source Review requirements and work with SJVAPCD to determine mitigations, as feasible, that may include, but are not limited to the following:

1. Providing bicycle access and parking facilities,
2. Increasing density,
3. Encouraging mixed use developments,

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<sup>68</sup> Op. Cit.

<sup>69</sup> Tulare County General Plan 2030 Update, Part 1 – Goals and Policies Report

4. Providing walkable and pedestrian-oriented neighborhoods,
5. Providing increased access to public transportation,
6. Providing preferential parking for high-occupancy vehicles, car pools, or alternative fuels vehicles, and
7. Establishing telecommuting programs or satellite work centers.

**AQ-3.2 Infill near Employment** - The County shall identify opportunities for infill development projects near employment areas within all unincorporated communities and hamlets to reduce vehicle trips.

**AQ-3.4 Landscape** - The County shall encourage the use of ecologically based landscape design principles that can improve local air quality by absorbing CO<sub>2</sub>, producing oxygen, providing shade that reduces energy required for cooling, and filtering particulates. These principles include, but are not limited to, the incorporation of parks, landscaped medians, and landscaping within development.

**AQ-3.6 Mixed Land Uses** - The County shall encourage the clustering of land uses that generate high trip volumes, especially when such uses can be mixed with support services and where they can be served by public transportation.

**AQ-4.1 Air Pollution Control Technology** - The County shall utilize the BACM and RACM as adopted by the County to support SJVAPCD air quality attainment plans to achieve and maintain healthful air quality and high visibility standards. These measures shall be applied to new development approvals and permit modifications as appropriate.

**AQ-4.2 Dust Suppression Measures** - The County shall require developers to implement dust suppression measures during excavation, grading, and site preparation activities consistent with SJVAPCD Regulation VIII – Fugitive Dust Prohibitions. Techniques may include, but are not limited to, the following:

1. Site watering or application of dust suppressants,
2. Phasing or extension of grading operations,
3. Covering of stockpiles,
4. Suspension of grading activities during high wind periods (typically winds greater than 25 miles per hour), and
5. Re-vegetation of graded areas.

## Impact Evaluation

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

**a) Conflict with or obstruct implementation of the applicable air quality plan?**

Project Impact Analysis:

*No Impact*

The CEQA Guidelines indicate that a significant impact would occur if the proposed project would conflict with or obstruct implementation of the applicable Air Quality Plan (AQP). AQPs are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the SJVAB can reach attainment for the ambient air quality standards. In order to show attainment of the standards, the Air District analyzes the growth projections in the San Joaquin Valley, contributing factors in air pollutant emissions and formations, and existing and future emissions controls. The Air District then formulates a control strategy to reach attainment.

As discussed in Item b) below, the Air District has determined that projects with emissions below the thresholds of significance for criteria pollutants would not conflict or obstruct implementation of the Air District's air quality plan. As presented in Tables AQ-3 and AQ-4, emissions during construction- and operation-related activities would not exceed the Air District significance thresholds. The proposed Project would be required to comply with applicable Air District rules and regulations, such as Regulation VIII (Fugitive PM10 Prohibitions) and Rule 9510 (Indirect Source Review), further reducing proposed Project-related emissions.

“As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the NAAQS and CAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The SJVAPCD prepared the 2004 Extreme Ozone Attainment Demonstration Plan, 2013 Plan for the Revoked 1-Hour Ozone Standard, 2007 Ozone Plan, 2009 Reasonably Available Control Technology Demonstration for Ozone State Implementation Plan, 2016 Plan for the 2008 8-Hour Ozone Standard, 2016 Moderate Area Plan for the 2012 PM2.5 Standard, 2013 Plan for the Revoked 1-Hour Ozone Standard, 2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards, 2020 RACT Demonstration, and 2007 PM10 Maintenance Plan and Request for Re-designation. These plans collectively address the air basin's nonattainment status with the national and state O3 standards as well as particulate matter by establishing a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California)

and national air quality standards. Pollutant control strategies are based on the latest scientific and technical information and planning assumptions, updated emission inventory methodologies for various source categories, and the latest population growth projections and associated vehicle miles traveled projections for the region. SJVAPCD's latest population growth forecasts were defined in consultation with local governments and with reference to local general plans.

The Project site is designated Urban Development by the General Plan. The General Plan identifies the Urban Development designation as meant for development generally characterized by low to high density residential development, commercial development, industrial development, and typically supported by public services such as central water and sewer systems. The Project is consistent with this General Plan designation and would not exceed the population or job growth projections used by the SJVAPCD to develop its air quality attainment plans. Additionally, as shown in Table 2-4 and Table 2-6 above [in the Assessment, **Tables 3.3-11** and **3.3-12** in the DEIR], both Project construction and Project operations would not generate emissions that would exceed SJVAPCD significance thresholds. Furthermore, the implementation of [Mitigation Measure] AQ-1 would reduce construction-generated emissions below what is required in Rule 9510 and [Mitigation Measure] AQ-2 would reduce operational-generated emissions or offset the emissions with payment of a fee, which is then used to fund clean-air projects within the air basin. Note that reductions in construction-generated emissions due to [Mitigation Measure] AQ-1 will vary per the fleet used. Regardless, [Mitigation Measure] AQ-1 would reduce construction-generated emissions below what is required in Rule 9510. The Project would be consistent with the emission-reduction goals of the SJVAPCD Attainment Plans.”<sup>70</sup>

#### Consistency with Assumptions in AQPs

The primary way of determining consistency with the AQP's assumptions is determining consistency with the applicable General Plan to ensure that the Project's population density and land uses are consistent with the growth assumptions used in the AQPs for the SJVAB. Projects requiring a General Plan Amendment might not be accounted for in the AQP growth forecast; however, amending land use designations and zoning for consistency with the General Plan would not result in an increase in the actual amount of land developed by the AQP's attainment year. Furthermore, no expansion to the UDB has been proposed because the existing UDB has adequate developable land area to accommodate projected future growth through horizon Year 2030. As such, the Project is intended only to direct the density, intensity, and types of growth needed to meet the needs of the community.

The growth forecasts for Tulare County included in the applicable Air District AQPs are provided in **Table 3.3-10** [Table 1 of the Three Rivers Community Plan 2018 Update Draft EIR]. As presented in **Table 3.3-10**, the Air District has used an average annual growth rate for Tulare County ranging from 1.44% to 1.94% (with the exception for the rate provided in the 2008 PM2.5 Plan). As such, the 1.3% annual growth rate applied in the Community Plan

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<sup>70</sup> “Air Quality & Greenhouse Gas Assessment Three Rivers Hampton Inn and Suites Project.” July 2020. Pages 23-24. Prepared by ECORP Consulting Inc. and included in Appendix “A” of this Draft EIR.



Update is lower than the growth rates applied in the applicable AQPs; therefore, the emissions presented in **Table 3.3-10** would be included in the AQPs emissions inventories.

As previously noted, there are no other hotels (motels) or other development projects proposed within or in the vicinity the Three Rivers Urban Development Boundary area. Therefore, the Project would not result in an increase in the total amount (i.e., acreage) of land actually developed by the AQP's attainment year. As such, the project would not conflict with the assumptions made in the AQPs and Less Than Significant Project-specific Impacts With Mitigation related to this Checklist Item will occur.

<b>Table 3.3-10 Tulare County Growth Projections as Included in Air Quality Plans<sup>71</sup></b>						
<b>Applicable Air Quality Plan</b>	<b>Base Year</b>	<b>Base Year Population</b>	<b>End Year</b>	<b>End Year Population</b>	<b>Period (Years)</b>	<b>Annual Growth Rate</b>
2004 Extreme Ozone Attainment Demonstration Plan	1990	311,921	2020	543,749	30	1.87%
2007 Ozone Plan	2002	384,650	2020	543,749	18	1.94%
2008 PM2.5 Plan	2005	384,650	2014	585,889	8	3.3% <sup>a</sup>
2015 Plan for the 1997 PM2.5 Standard	2010	443,567	2020	536,429	10	1.92%
2016 Plan for the 2008 8-Hour Ozone Standard	2015	467,170	2030	578,858	15	1.44%
2016 Moderate Area Plan for the 2012 PM2.5 Standard	2015	467,170	2030	578,858	15	1.44%
a The 2002 base year population is the same as that in the 2002 base year. Using 2002 as a base year and a 12 year period results in a 1.97% growth rate. <i>Sources: Appendix A of this DEIR</i>						

As the proposed Project is consistent with the General Plan, including the Three Rivers Community Plan 2018 Update, and proposed Project-related emissions do not exceed Air District significance thresholds, the proposed Project will not conflict with or obstruct implementation of the air quality plan. The Tulare County RMA agrees that the analysis and conclusions contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would not conflict or obstruct implementation of applicable San Joaquin Valley Air District's Air Quality Attainment Plans (AQAPs). Therefore, the proposed Project will have **No Impact** to this resource.

<sup>71</sup> Three Rivers Community Plan 2018 Draft EIR. Table 1. Page 3.3-31. Accessed February 2021 at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan/three-rivers-community-plan-update/three-rivers-community-plan-deir/>

**b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

Project Impact Analysis:

*Less Than Significant Impact With Mitigation*

Criteria air pollutant emissions have both regional and localized effects. This analysis evaluates the regional effects of the Community Plan Update's criteria pollutant emissions in comparison to the Air District's thresholds of significance for short-term construction-related activities and long-term operation of the developments over time. Localized emissions from construction-related activities and long-term operation of developments are also assessed using concentration based thresholds compared with ambient air quality standards or significance thresholds. As the SJVAB is in attainment for CO and SO<sub>2</sub> standards, the primary pollutants of concern during project construction and operation are ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

Ozone is a secondary pollutant that is formed in the atmosphere sometimes miles away from the source of emissions through reactions of ROG and NO<sub>x</sub> emissions in the presence of sunlight. Therefore, ROG and NO<sub>x</sub> are termed ozone precursors. As presented in **Table 3.3-3**, the SJVAB can exceed the state and national ozone standards. Therefore, if the Project emits a substantial quantity of ozone precursors, the Project may contribute to an exceedance of the ozone standard. The SJVAB also exceeds state air quality standards for PM<sub>10</sub>, and PM<sub>2.5</sub>; therefore, substantial Project emissions may contribute to an exceedance for these pollutants. The Air District's annual thresholds of significance for criteria pollutant emissions, which are based on Air District Rule 2201 (New and Modified Stationary Source Review offset thresholds, are provided in **Table 3.3-9**.

Emission Calculations

The Air District's Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) provides the following guidance on analyzing conformity with the applicable AQPs, "As presented in Chapter 8 [of the GAMAQI], the District has established thresholds of significance for criteria pollutant emissions, which are based on District New Source Review (NSR) offset requirements for stationary sources. Stationary sources in the District are subject to some of the toughest regulatory requirements in the nation. Emission reductions achieved through implementation of District offset requirements are a major component of the District's air quality plans. Thus, projects with emission below the thresholds of significance for criteria pollutants would be determined to "Not conflict or obstruct implementation of the District's air quality plan."<sup>72</sup>

Construction-related and operation-related emissions associated with the projected buildout of the Project, are identified in **Table 2-5 [3.3-12 of this DEIR]** and **Table 2-6 [3.3-13 of this DEIR]**, respectively.

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<sup>72</sup> Air District. *Guidance for Assessing and Mitigating Air Quality Impacts*. Page 65.

### Contribution to Air Quality Violations

A measure of determining if the Project is consistent with the AQPs is if the Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs. The SJVAB is in attainment for the federal PM<sub>10</sub> standards. Because of the region's nonattainment status for ozone (state and federal standards), PM<sub>2.5</sub> (state and federal standards), and PM<sub>10</sub> (state standards), if project-generated emissions of either of the ozone precursor pollutants (ROG and NO<sub>x</sub>), PM<sub>10</sub>, or PM<sub>2.5</sub> would exceed the Air District's significance thresholds and were not included in the AQP's growth forecast, then the project may be considered to conflict with the AQP. The following analysis and construction- and operations-related emissions estimations are provided by qualified and expert consultant ECORP Consulting Inc (ECORP):

#### *Project Construction-Generated Criteria Air Quality Emissions:*

“Construction associated with the Proposed Project would generate short-term emissions of criteria air pollutants, including ROG, CO, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The largest amount of ROG, CO, SO<sub>x</sub>, and NO<sub>x</sub> emissions would occur during the earthwork phase. PM<sub>10</sub> and PM<sub>2.5</sub> emissions would occur from fugitive dust (due to earthwork and excavation) and from construction equipment exhaust. Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the Project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to and from the site. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact.

During construction activities, the Project would be required to comply with SJVAPCD Regulation VIII (Fugitive PM<sub>10</sub> Prohibitions). The purpose of this regulation is to limit airborne particulate emissions associated with construction, demolition, excavation, extraction, and other earthmoving activities, as well as with open disturbed land and emissions associated with paved and unpaved roads. Accordingly, these rules include specific measures to be employed to prevent and reduce fugitive dust emissions from anthropogenic sources. For instance, the Project applicant would be required to prepare a dust control plan. Construction activities anywhere within the regulatory jurisdiction of the SJVAPCD, including the Proposed Project site, may not commence until the SJVAPCD has approved or conditionally approved the dust control plan, which must describe all fugitive dust control measures that are to be implemented before, during, and after any dust-generating activity. Regulation VIII specifies the following measures that may be included in the dust control plan to minimize fugitive dust emissions:

- Apply water to unpaved surfaces and areas.
- Use nontoxic chemical or organic dust suppressants on unpaved roads and traffic areas.

- Limit or reduce vehicle speed on unpaved roads and traffic areas to a maximum 15 miles per hour.
- Maintain areas in a stabilized condition by restricting vehicle access.
- Install wind barriers.
- During high winds, cease outdoor activities that disturb the soil.
- Keep bulk materials sufficiently wet when handling.
- Store and handle materials in a three-sided structure.
- When storing bulk materials, apply water to the surface or cover the storage pile with a tarp.
- Don't overload haul trucks. Overloaded trucks are likely to spill bulk materials.
- Cover haul trucks with a tarp or other suitable cover. Or, wet the top of the load enough to limit visible dust emissions.
- Clean the interior of cargo compartments on emptied haul trucks prior to leaving a site.
- Prevent trackout by installing a trackout control device.
- Clean up trackout at least once a day. If along a busy road or highway, clean up trackout immediately.
- Monitor dust-generating activities and implement appropriate measures for maximum dust control.

The SJVAPCD's (2015) Guidance for Assessing and Mitigating Air Quality Impacts identifies significance thresholds for ROG, CO, and NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Construction-generated criteria air pollutant emissions associated with the Proposed Project were calculated using CalEEMod. Predicted maximum annual construction-generated emissions of criteria air pollutants for the Proposed Project are summarized in Table 2-4 [in the Assessment, Table 3.3-11 in the Draft EIR].<sup>73</sup>

<b>Table 3-3-11.</b>						
<b>Construction-Related Emissions - Fugitive PM<sub>10</sub> Prohibitions Included</b>						
<b>Construction Year</b>	<b>Maximum Pollutants (tons per year)</b>					
	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>Annual (Maximum Tons per Year)</b>						
Year One Construction (2021)	0.71	2.65	2.62	0.00	0.21	0.14
Year Two Construction (2022)	0.20	0.71	0.78	0.00	0.05	0.03
<i>SJVAPCD Potentially Significant Impact Threshold</i>	<i>10</i>	<i>10</i>	<i>100</i>	<i>27</i>	<i>15</i>	<i>15</i>
<b>Exceed SJVAPCD Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<i>Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs.</i> <i>Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SJVAPCD Regulation VIII. The specific regulation applied in CalEEMod was watering unpaved surfaces two times per day. Emissions account for the site preparation and grading for 2.8 acres.</i>						

<sup>73</sup> "Air Quality & Greenhouse Gas Assessment Three Rivers Hampton Inn and Suites Project." July 2020. Pages 16-17. Prepared by ECORP Consulting Inc. and included in Appendix "A" of this Draft EIR.

“As shown in Table 2-4 [in the Assessment, **Table 3.3-11** in the Draft EIR], construction-generated emissions would not exceed SJVAPCD significance thresholds.

In addition to the SJVAPCD criteria air pollutant thresholds, SJVAPCD Rule 9510, Indirect Source Review, Section 2.2, aims to fulfill the District’s emission reduction commitments in the PM<sub>10</sub> and Ozone Attainment Plans. This rule applies to construction projects within the jurisdiction of the SJVAPCD which upon full build-out will include any one of the following:

- 250 residential units;
- 10,000 square feet of commercial space;
- 125,000 square feet of light industrial space;
- 500,000 square feet of heavy industrial space;
- 100,000 square feet of medical office space;
- 195,000 square feet of general office space;
- 45,000 square feet of educational space;
- 50,000 square feet of government space;
- 100,000 square feet of recreational space; or
- 45,000 square feet of space not identified above..

This rule also applies to any transportation or transit project where construction exhaust emissions equal or exceed two tons of NO<sub>x</sub> or two tons of PM<sub>10</sub>. The project developers are required to reduce concentrations of NO<sub>x</sub> by 20 percent and PM<sub>10</sub> by 45 percent during construction activities. Development projects that have a mitigated baseline below two tons per year of NO<sub>x</sub> and two tons per year of PM<sub>10</sub> shall be exempt from the requirements per Rule 9510 (SJVAPCD 2017).

The Project is proposing the construction of more than 10,000 square feet of commercial space, permitted by-right. Thus, adherence to Rule 9510 is required of the Proposed Project. In accordance with Rule 9510, the Project applicant is required to prepare a detailed air impact assessment (AIA) for submittal to the SJVAPCD, which demonstrates reduction of NO<sub>x</sub> emissions from the Project’s baseline by 20 percent and a reduction of PM<sub>10</sub> by 45 percent.”<sup>74</sup>

**Table 3.3.12** (Table 2.5 in the Assessment,) shows emission reduction following implementation of **Mitigation Measure AQ-1**.

“As demonstrated in Table 2-5 [in the Assessment, **Table 3.3-12** in the Draft EIR], implementation of mitigation measure AQ-1 would reduce annual NO<sub>x</sub> emissions by as much as 75 percent during each phase of construction and would reduce annual PM<sub>10</sub> emissions by

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<sup>74</sup> Ibid. 17-18.

more than 60 percent, which is far beyond the reduction needed to achieve the SJVAPCD Rule 9510 target. The actual emissions reduction would depend on the construction fleet utilized for construction, as clean fleet vehicles vary in emissions.

<b>Table 3.3-12</b>			
<b>Construction Related NO<sub>x</sub> and PM<sub>10</sub> Emissions</b>			
<b>Baseline and Mitigated (tons per year)</b>			
<b>Construction Year</b>	<b>NO<sub>x</sub> Baseline</b>	<b>NO<sub>x</sub> Mitigated</b>	<b>Percent Reduction</b>
Year One Construction (2021)	2.65	0.61	77%
Year Two Construction (2022)	0.71	0.18	75%
<b>SJVAPCD Potentially Significant Impact Threshold</b>			<b>20%</b>
<b>Construction Year</b>	<b>PM<sub>10</sub> Baseline</b>	<b>PM<sub>10</sub> Mitigated</b>	<b>Percent Reduction</b>
Year One Construction (2021)	0.19	0.07	63%
Year Two Construction (2022)	0.05	0.02	60%
<b>SJVAPCD Potentially Significant Impact Threshold</b>			<b>45%</b>
<i>Source: CalEEMod version 2013.2.2. See Attachment A for emission outputs</i>			
<i>Notes: Percent reduction calculated using ((baseline-mitigated) / baseline) = percent reduction</i>			

As previously stated, construction-generated emissions would not exceed SJVAPCD significance thresholds. However, the Project is the construction of a by-right commercial project over 10,000 square feet, instigating the implementation of Rule 9510. Rule 9510 requires a project to reduce NO<sub>x</sub> emissions from the Project's baseline by 20 percent and reduce annual PM<sub>10</sub> emissions by 45 percent. Mitigation measure AQ-1 would result in a greater than required reduction in NO<sub>x</sub> and PM<sub>10</sub> emissions from baseline for all construction activities. Note that the actual emissions reduction would depend on the construction fleet utilized for construction, as clean fleet vehicles vary in emissions. Since the project's emissions would not exceed SJVAPCD thresholds, no exceedance of the ambient air quality standards would occur, and no health effects from project criteria pollutants would occur.”<sup>75</sup> The Tulare County RMA agrees that the analysis and conclusions contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project's construction-related emissions would not significantly contribute to any air quality violations. As such, *Less Than Significant Project-specific Impacts With Mitigation* related to this Checklist Item will occur

In addition to construction-related emissions, ECORP also provided emissions estimates for the proposed Project's operations-related activities as follows:

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<sup>75</sup> Op. Cit. 18-19.

*Project Operations Criteria Air Quality Emissions*

“By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project’s individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project’s individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and SO<sub>2</sub> as well as ozone precursors such as ROG and NO<sub>x</sub>. Project-generated increases in emissions would be predominantly associated with motor vehicle use. Table 2-6 [in the Assessment, **Table 3.3-13** in the Draft EIR] summarizes operational emissions from the Proposed Project.

The SJVAPCD’s (2015) Guidance for Assessing and Mitigation Air Quality Impacts identifies significance thresholds for ROG, CO, and NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Operational-generated O<sub>3</sub> precursor emissions associated with the both Proposed Project were calculated using CalEEMod. Predicted maximum annual operational-generated emissions of criteria air pollutants for the Proposed Projects are summarized in Table 2-6 [in the Assessment, **Table 3.3-13** in the Draft EIR].

<b>Table 3.3-13 Operational Emissions</b>						
<b>Emission Source</b>	<b>Maximum Pollutants (tons per year) – Operations Commencing 2022</b>					
	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>Proposed Project Annual Emissions</b>						
Area	0.33	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.08	0.07	0.00	0.00	0.00
Mobile	0.24	2.05	2.24	0.00	0.60	0.16
<b>Total</b>	<b>0.58</b>	<b>2.14</b>	<b>2.32</b>	<b>0.00</b>	<b>0.60</b>	<b>0.17</b>
<i>SJVAPCD Significance Threshold</i>	<i>10</i>	<i>10</i>	<i>100</i>	<i>27</i>	<i>15</i>	<i>15</i>
<b>Exceed SJVAPCD Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<i>Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs.</i>						
<i>Notes: Emissions projections account for trip generation rates identified by VRPA Technologies, Inc. (2020) for weekend trips and CalEEMod default trips for Tulare County for weekday trips.</i>						

As indicated in Table 2-6 [in the Assessment, **Table 3.3-13** in the Draft EIR], operational-generated emissions would not exceed SJVAPCD significance thresholds. Therefore, “Since the project’s emissions do not exceed SJVAPCD thresholds, no exceedance of the ambient air

quality standards would occur, and no health effects from project criteria pollutants would occur.”<sup>76</sup>

As previously mentioned, SJVAPCD Rule 9510 [Indirect Source Review] is intended to fulfill the region’s emission reduction commitments in the SJVAPCD PM10 and Ozone Attainment Plans. The Proposed Project is subject to Rule 9510 and would be required to consult with the SJVAPCD regarding the specific applicability of Rule 9510 in relation to Project operations. In accordance with Rule 9510, the Project applicant would be required to prepare a detailed air impact assessment for submittal to the SJVAPCD demonstrating the reduction from the Project’s baseline of NOx emissions.”<sup>77</sup> As recommended by ECORP, Mitigation Measure AQ-2 shall be implemented to comply with Air District Rule 9510. The Tulare County RMA agrees that the analysis and conclusions contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project’s construction-related emissions would not significantly contribute to any air quality violations. As such, *Less Than Significant Project-specific Impacts With Mitigation* related to this Checklist Item will occur

#### Consistency with Assumptions in AQPs

The primary way of determining consistency with the AQP’s assumptions is determining consistency with the applicable General Plan to ensure that the Project’s population density and land uses are consistent with the growth assumptions used in the AQPs for the SJVAB. Projects requiring a General Plan Amendment might not be accounted for in the AQP growth forecast; however, amending land use designations and zoning for consistency with the General Plan would not result in an increase in the actual amount of land developed by the AQP’s attainment year. Furthermore, no expansion to the UDB has been proposed because the existing UDB has adequate developable land area to accommodate projected future growth through horizon Year 2030. As such, the Project is intended only to direct the density, intensity, and types of growth needed to meet the needs of the community.

The growth forecasts for Tulare County included in the applicable Air District AQPs are provided in **Table 3.3-10** [Table 1 of this Three Rivers Community Plan 2018 Update Draft EIR]. As presented in **Table 3.3-10**, the Air District has used an average annual growth rate for Tulare County ranging from 1.44% to 1.94% (with the exception for the rate provided in the *2008 PM2.5 Plan*). As such, the 1.3% annual growth rate applied in the Community Plan Update is lower than the growth rates applied in the applicable AQPs; therefore, the emissions presented in **Table 3.3-10** would be included in the AQPs emissions inventories.

As previously noted, there are no other development projects proposed within or in the vicinity the Three Rivers Urban Development Boundary area. Therefore, the Project would not result in an increase in the total amount (i.e., acreage) of land actually developed by the AQP’s attainment year. As such, Tulare County RMA agrees that the analysis and conclusions

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<sup>76</sup> Op. Cit. 21.

<sup>77</sup> Op. Cit. 19-20.



contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would not conflict with the assumptions made in the AQPs and ***Less Than Significant Project-specific Impacts With Mitigation*** related to this Checklist Item will occur.

#### Control Measures

The Air District's AQPs contains a number of control measures, which are enforceable requirements through the adoption of rules and regulations. A detailed description of rules and regulations that apply to this Project is provided in Section 3: Regulatory Setting. Furthermore, as noted earlier, the Tulare County General Plan includes Policies AQ-1.1, AQ-1.2, AQ-2.1 through AQ-2.3, and AQ-4.1 through AQ-4.6, which were specifically designed to ensure cooperation with the Air District and TCAG in effective planning of the County's future growth and development, and to ensure compliance with Air District rules and regulations included in the AQPs. These policies would be implemented for this and future development projects within the Community Plan Update Planning Area.

The Community Plan Update establishes the planning guidelines for the anticipated growth of the community through the horizon Year 2030. As previously discussed, the Community Plan Update growth projections and emissions inventory are consistent with the applicable AQPs. Future developments will comply with all applicable General Plan policies, Three Rivers Community Plan policies, and Air District rules and regulations. The proposed Project is consistent with the land uses (and zoning) contained in the Three Rivers Community Plan as it is within the Urban Area Boundary and would ultimately use 2.8 acres (1.03%) of the 271 acres identified as commercial compatible in the Community Plan. As such, the proposed Project would not conflict with or obstruct implementation of the applicable AQPs. As such, The Tulare County RMA agrees that the analysis and conclusions contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would result in ***Less Than Significant Project-specific Impacts With Mitigation*** related to this Checklist Item.

As stated in the Assessment, "Since the project's emissions do not exceed SJVAPCD thresholds, no exceedance of the ambient air quality standards would occur, and no health effects from project criteria pollutants would occur. As previously identified, the Tulare County portion of the SJVAB is listed as a nonattainment area for the federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>. O<sub>3</sub> is a health threat to persons who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. PM can adversely affect the human respiratory system. As shown in Table 2-6 [in the Assessment, **Table 3.3-13** in the Draft EIR], the Proposed Project would result in increased emissions of the O<sub>3</sub> precursor pollutants ROG and NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>, however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the SJVAB is contained in the SJVAPCD air quality planning documents, previously described. The SJVAPCD air quality attainment plans and reports

provide control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines such as the application of available cleaner technologies, best management practices, incentive programs, as well as development and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SJVAPCD are designed to meet the objectives of regional air quality planning efforts and in doing so achieve attainment status with state and federal standards. As noted above, the Project would increase the emission of these pollutants, but would not exceed the thresholds of significance established by the SJVAPCD for purposes of reducing air pollution and its deleterious health effects.”<sup>78</sup>

“On December 24, 2018, the California Supreme Court issued an opinion identifying the need to provide sufficient information connecting a project’s air emissions to health impacts or explain why such information could not be ascertained (*Sierra Club v. County of Fresno* [Friant Ranch, L.P.] [2018] 6 Cal.5<sup>th</sup> 502, Case No. S219783). Pursuant to Rule 8.520(f) of the Rules of the California Court, the SJVAPCD filed an amicus curiae brief in regard to this case. In the brief, SJVAPCD provided technical explanations as to why it may not be feasible for a project to relate the expected adverse air quality impacts to likely health consequences. As summarized below, for the reasons set forth by the SJVAPCD, the Proposed Project’s air pollutant contribution currently cannot feasibly be directly related to likely health consequences. The technical demands for feasibly and accurately relating regional air pollutants to likely health consequences are too high for this Proposed Project at this time. The technical challenges are listed below, with the SJVAPCD amicus brief providing support on the findings for the Proposed Project:

- O<sub>3</sub> is not formed at the location of sources/emissions, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time.

“For the so-called criteria pollutants, such as O<sub>3</sub>, it may be more difficult to quantify health impacts. O<sub>3</sub> is formed in the atmosphere from the chemical reaction of NO<sub>x</sub> and VOC [ROG] in the presence of sunlight. It takes time and the influence of meteorological conditions for these reactions to occur, so O<sub>3</sub> may be formed at a distance downwind from the sources.” [SJVAPCD p.11]

- O<sub>3</sub> and secondary PM formation is complex, which necessitates the use of more sophisticated modeling that is not reasonably feasible for the Project at this time. The Proposed Project, while much smaller in scale to the Friant Ranch project, similarly includes area wide sources and mobile sources.

“Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of O<sub>3</sub> or PM. This is especially true for a project like Friant Ranch where most of the criteria pollutant emissions derive not from a single ‘point source,’ but from area wide sources

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<sup>78</sup> “Air Quality & Greenhouse Gas Assessment Three Rivers Hampton Inn and Suites Project.” July 2020. Pages 16-17. Prepared by ECORP Consulting Inc. and included in Appendix “A” of this Draft EIR.

(consumer products, paint, etc.) or mobile sources (cars and trucks) driving to, from and around the site.” [SJVAPCD p.9]

- The quantity of precursor emissions is not proportional to local O<sub>3</sub> and secondary PM concentration, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time.

“Ground level O<sub>3</sub> (smog) is not directly emitted into the air but is formed when precursor pollutants such as NO<sub>x</sub> and VOCs [ROG] are emitted into the atmosphere and undergo complex chemical reactions in the process of sunlight. Once formed, O<sub>3</sub> can be transported long distances by wind. Because of the complexity of O<sub>3</sub> formation, a specific tonnage amount of NO<sub>x</sub> or VOCs [ROG] emitted in a particular area does not equate to a particular concentration of O<sub>3</sub> in that area.” [SJVAPCD p.4]

“Secondary PM, like O<sub>3</sub>, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO<sub>x</sub> and NO<sub>x</sub>. Because of the complexity of secondary PM formation, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area.” [SJVAPCD p.5]

- Emissions do not cause health effects – it is the resulting concentration of criteria pollutants, which is influenced by sunlight, complex reactions, and transport, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time.

“The disconnect between the tonnage of precursor pollutants (NO<sub>x</sub>, SO<sub>x</sub> and VOCs [ROG]) and the concentration of O<sub>3</sub> or PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting O<sub>3</sub> or PM.” [SJVAPCD p.5]

- Currently available modeling tools are appropriate for regional evaluations, but not individual projects like the Proposed Project.

“For instance, the computer models used to simulate and predict an attainment date for the O<sub>3</sub> or particulate matter NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NO<sub>x</sub>, SO<sub>x</sub> and VOCs [ROG]) and the atmospheric chemistry and meteorology of the Valley... the models simulate future O<sub>3</sub> or PM levels based on predicted changes in precursor emissions Valley wide... The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the Valley attains the NAAQS. Rather, the Air District's modeling and planning strategy is regional in nature and based on the extent to which all of the emission-generating sources in the Valley (current and future) must be controlled in order to reach attainment.” [SJVAPCD p.6-7]

“Thus, the CEQA air quality analysis for criteria pollutants is not really a localized, project-level impact analysis but one of regional, "cumulative impacts."” [SJVAPCD p.8]

- “...the currently available modeling tools are equipped to model the impact of all emission sources in the Valley on attainment... Running the photochemical grid model used for predicting O<sub>3</sub> attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO<sub>x</sub> and VOC [ROG] in the Valley) is not likely to yield valid information given the relative scale involved.” [SJVAPCD p.9-10]
- The SJVAPCD indicates that it is currently impossible to accurately correlate project level emissions to specific health impacts.

“Finally, even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like O<sub>3</sub> and some particulates, it remains impossible, using today's models, to correlate that increase in concentration to a specific health impact. The reason is the same: such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level.” [SJVAPCD p.10]

For the reasons set forth above, it is not currently feasible to relate the Proposed Project's contribution of regional air pollutants to likely health consequences. The SJVAPCD is responsible for assessing air pollutant impacts regionally, and the potential health consequences from those on a regional basis. The current evaluation on the limitations and uncertainties of existing tools is consistent with SJVAPCD findings. Currently available regional modeling tools are not designed to capture changes in pollutant concentrations for this Proposed Project that would be meaningful. This is due in part to a relatively coarse spatial resolution (e.g., greater than 4 x 4 kilometers) which makes it speculative to discern regional Project impacts on air quality.”<sup>79</sup>

Cumulative Impact Analysis:

***Less Than Significant Impact With Mitigation***

The geographic area of this cumulative analysis is San Joaquin Air Basin.

Annual construction-related emissions do not exceed the Air District's annual significance thresholds for construction, nor do the annual operation-related emissions exceed the Air District's annual significance thresholds for operations. Buildout of the Community Plan Update at an annual growth rate of 1.3% is lower than, and therefore consistent with, the growth forecasts included in the applicable Air District AQPs. Future developments will be required to implement all applicable Tulare County General Plan policies, Three Rivers Community Plan policies, and all applicable Air District rules and regulations. Therefore, Tulare County RMA agrees that the analysis and conclusions contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would result in ***Less Than Significant Cumulative Impacts*** related to this Checklist Item.

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<sup>79</sup> Ibid. 21-23.

Mitigation Measure(s): *AQ-1 and AQ-2.*<sup>80</sup>

**AQ-1** In accordance with SJVAPCD Rule 9510, a detailed air impact assessment (AIA) shall be prepared detailing the specific construction requirement (i.e., equipment required, hours of use, etc.). In accordance with this rule, emissions of NO<sub>x</sub> from construction equipment greater than 50 horsepower used or associated with the development Project shall be reduced by 20 percent from baseline (unmitigated) emissions and PM<sub>10</sub> shall be reduced by 45 percent. The Project shall demonstrate compliance with Rule 9510, including payment of all applicable fees, before issuance of the first building permit.

While the specific emission reduction measures will be developed to the satisfaction of the SJVAPCD, the following measures would reduce short-term air quality impacts attributable to the Proposed Project consistent with Rule 9510:

- During all construction activities, all diesel-fueled construction equipment including, but not limited to, rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, and tractors shall be of a certified clean fleet.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. Equipment maintenance records shall be kept on-site and made available upon request by the SJVAPCD or the County.
- The Project applicant shall comply with all applicable SJVAPCD rules and regulations. Copies of any applicable air quality permits and/or monitoring plans shall be provided to the County.

**AQ-2** In accordance with SJVAPCD Rule 9510, a detailed air impact assessment shall be prepared detailing the operational characteristics associated with the Proposed Project. In accordance with this rule, operational emissions of NO<sub>x</sub> shall be reduced by a minimum of 33.3 percent and operational emissions of PM<sub>10</sub> must be reduced by a minimum of 50 percent over a period of ten years. (Emissions reductions are in comparison to the Project's operational baseline emissions presented in Table 2-6.) The Project would demonstrate compliance with Rule 9510, including payment of all applicable fees, before issuance of the first building permit.

Based on the findings of the air impact assessment, the applicant shall pay the SJVAPCD a monetary sum necessary to offset the required operational emissions that are not reduced by the emission reduction measures contained in the air impact assessment. The quantity of operational emissions that need to be offset will be calculated in accordance with the methodologies identified in Rule 9510, Indirect Source Review, and approved by the SJVAPCD. Operational emissions reduction methods will be selected under the direction of the SJVAPCD according to the air

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<sup>80</sup> Op. Cit. 18 and 20-21.

impact assessment process detailed in, and required by Rule 9510, Indirect Source Review (see Rule 9510, subsection 5).

Conclusion:

***Less Than Significant Impact With Mitigation***

As noted earlier, there are no other hotel (or motel) or other development projects proposed within or in the vicinity the Three Rivers Urban Development Boundary area. Projected growth of the community is below, and therefore consistent with, the assumptions and emissions inventories of the applicable AQPs. The proposed Project, has been evaluated for potential air quality impacts in an Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., (seen Appendix “A” of the DEIR). Also, consultation with the Air District, and implementation of County policies and compliance with Air District rules and regulations would reduce potential impacts by the proposed Project through implementation of **Mitigation Measures AQ-1 and AQ-2**, above. As noted earlier, there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, and the proposed Project would utilize approximately 1.03% of projected commercially zoned properties within the Three Rivers Urban Development Boundary area. The Tulare County RMA agrees that the analysis and conclusions contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would result in ***Less Than Significant Project-specific and Cumulative Impacts With Mitigation*** related to this Checklist Item.

**c) Expose sensitive receptors to substantial pollutant concentrations?**

Project - Impact Analysis:

***Less Than Significant Impact***

Sensitive receptors are those individuals who are sensitive to air pollution and include children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. The Air District considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include schools, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential dwelling units.<sup>81</sup> In addition to sensitive receptors, the Air District considers potential impacts on worker receptors when evaluating a project’s potential health risks. Worker receptors are those workers that are employed in adjacent or nearby business that can be exposed to emissions during construction and/or operations from another nearby source.

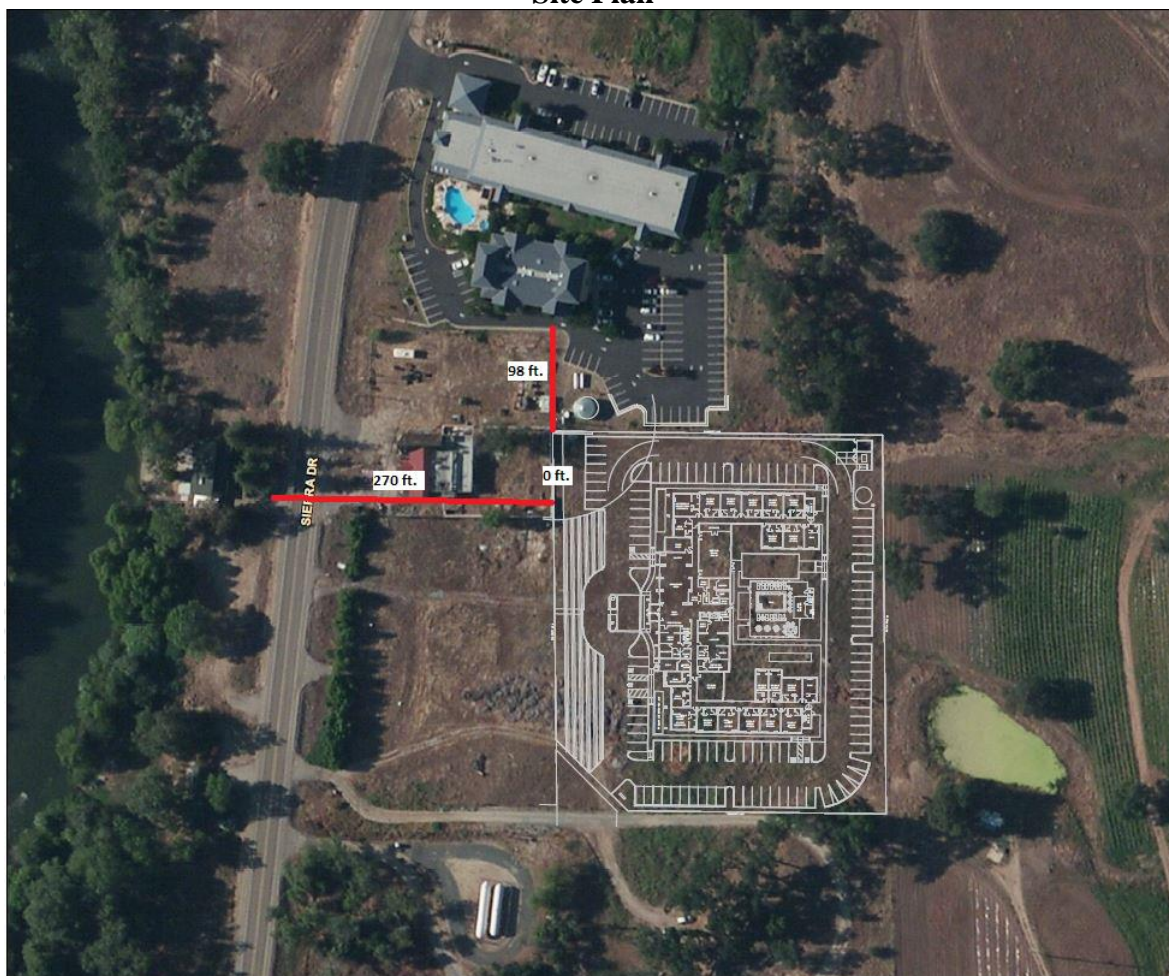
As noted in the Assessment prepared by ECORP, “Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptors to the Project site are the Comfort Inn and Suites located approximately 98 feet north of the Project site boundary,

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<sup>81</sup> Air District. *Guidance for Assessing and Mitigating Air Quality Impacts*. Page 10.

the vacant commercial building located approximately zero feet west of the Project site boundary, and a residence located across State Highway 198 from the site, approximately 270 feet to the west. As stated previously, the distance to the Comfort Inn and Suites was measured from the property line of the Proposed Project to the portion of the Comfort Inn and Suites property line which is located adjacent to the nearest hotel building on the property (see Figure 1[in the Assessment, **Figure 3.3-1** in the Draft EIR]). The parking lot located in the southeast section of the Comfort Inn and Suites site is not considered to be the nearest point to the sensitive receptor, as visitors to the hotel would spend the majority of their stay in their hotel room, at the nearby community center, and/or in Sequoia and Kings Canyon National Parks, thus remaining in the parking lot for a relatively short duration. In addition, hotel staff would spend relatively little time in the hotel parking lot.”<sup>82</sup>

**Figure 3.3-1**  
**Site Plan**<sup>83</sup>



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<sup>82</sup> “Air Quality & Greenhouse Gas Assessment Three Rivers Hampton Inn and Suites Project.” July 2020. Pages 24-25. Prepared by ECORP Consulting Inc. and included in Appendix “A” of this Draft EIR.

<sup>83</sup> Ibid. Figure 1. Page 2.



Ambient air quality standards are the levels at which criteria pollutant levels considered safe for the public. The Air District's GAMAQI contains screening thresholds that were established for determining whether a project could potentially violate AAQS. "When assessing the significance of project-related impacts on air quality, it should be noted that the impacts may be significant when on-site emission increases from construction activities or operational activities exceed the 100 pounds per day screening level of any criteria pollutant after implementation of all enforceable mitigation measures. As such, projects that emit less than 100 pounds per day of criteria pollutants would not result in an ambient air quality standard violation or a significant health risk and would not require an Ambient Air Quality Assessment (AAQA).

The Community Plan Update establishes the planning guidelines for the anticipated growth of the community through the horizon Year 2030. As the Community Plan Update Planning Area is built out, the potential exists for exposure to substantial pollutant concentrations during both construction-related activities and the daily operations of new residential, commercial, and industrial facilities. The Tulare County General Plan includes Policies AQ-1.1 through AQ-1.4, AQ-3.1 through AQ-3.6, LU-1.1 through LU-1.4, and LU-1.8, which were specifically designed to address potential impacts from siting incompatible uses in close proximity to each other. These policies would be implemented for future development projects.

#### Construction-Generated Air Contaminants

"Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of diesel particulate matter (DPM), ROG, NO<sub>x</sub>, CO, and PM<sub>10</sub> from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. However, as shown in Tables 2-4 [in the Assessment, **Table 3.3-11** in the DEIR], the Project would not exceed the SJVAPCD construction emission thresholds. The portion of the SJVAB which encompasses the Project area is classified nonattainment area for the federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub> (CARB 2018). Thus, existing O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> levels in the SJVAB are at unhealthy levels during certain periods.

The health effects associated with O<sub>3</sub> are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in O<sub>3</sub> precursor emissions (ROG or NO<sub>x</sub>) in excess of the SJVAPCD thresholds, the Project is not anticipated to substantially contribute to regional O<sub>3</sub> concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the SJVAPCD thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.



Particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary toxic air contaminant (TAC) of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by the CARB in 1998. The potential cancer risk from the inhalation of DPM outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Based on the emission modeling conducted, the maximum onsite construction-related daily emissions (mitigated) of exhaust PM<sub>2.5</sub>, considered a surrogate for DPM, would be 0.07 pounds/day (see Attachment A). (PM<sub>2.5</sub> exhaust is considered a surrogate for DPM because more than 90 percent of DPM is less than 1 microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter (i.e., PM<sub>2.5</sub>). Most PM<sub>2.5</sub> derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.) As with O<sub>3</sub> and NO<sub>x</sub>, the Project would not generate emissions of PM<sub>10</sub> or PM<sub>2.5</sub> that would exceed the SJVAPCD's thresholds. Additionally, the Project would be required to comply with Regulation VIII, Rules 8021–8071- Fugitive PM<sub>10</sub> Prohibitions and Rule 9510- Indirect Source Review, as described above, which limit the amount of fugitive dust generated during construction. Accordingly, the Project's PM<sub>10</sub> and PM<sub>2.5</sub> emissions are not expected to cause any increase in related regional health effects for these pollutants. Although health risk due to TACs cannot be accurately quantified, based on quantitative and qualitative analysis of anticipated Project emissions, a significant health risk would not result.

In summary, the Project would not result in a potentially significant contribution to regional or localized concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants.

### ***Naturally Occurring Asbestos***

Another potential air quality issue associated with construction-related activities is the airborne entrainment of asbestos due to the disturbance of naturally-occurring asbestos-containing soils. The Proposed Project is not located within an area designated by the State of California as likely to contain naturally-occurring asbestos (DOC 2011). As a result, construction-related activities would not be anticipated to result in increased exposure of sensitive land uses to asbestos.

### ***Valley Fever***

*Coccidioidomycosis* (CM), often referred to as San Joaquin Valley Fever or Valley Fever, is one of the most studied and oldest known fungal infections. Valley Fever most commonly affects people who live in hot dry areas with alkaline soil and varies with the season. This disease, which affects both humans and animals, is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). CI spores are found in the top few inches of

soil and the existence of the fungus in most soil areas is temporary. The cocci fungus (an organism that grows and feeds on dead or decaying organic matter) lives as a saprophyte [an organism (especially a plant or plant-like) that feeds, absorbs or grows on decaying organic matter] in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-moving activities and become airborne. Agricultural workers, construction workers, and other people who work outdoors and who are exposed to wind and dust are more likely to contract Valley Fever. Children and adults whose hobbies or sports activities expose them to wind and dust are also more likely to contract Valley Fever. After the fungal spores have settled in the lungs, they change into a multicellular structure called a spherule. Fungal growth in the lungs occurs as the spherule grows and bursts, releasing endospores, which then develop into more spherules.

Valley fever (Coccidioidomycosis) is found in California, including Tulare County. In about 50 to 75 percent of people, valley fever causes either no symptoms or mild symptoms and those infected never seek medical care; when symptoms are more pronounced, they usually present as lung problems (cough, shortness of breath, sputum production, fever, and chest pains). The disease can progress to chronic or progressive lung disease and may even become disseminated to the skin, lining tissue of the brain (meninges), skeleton, and other body areas.

Tulare County is considered a highly endemic area for valley fever. When soil containing this fungus is disturbed by ground-disturbing activities such as digging or grading, by vehicles raising dust, or by the wind, the fungal spores get into the air. When people breathe the spores into their lungs, they may get valley fever. Fungal spores are small particles that can grow and reproduce in the body. The highest infection period for valley fever occurs during the driest months in California, between June and November. Infection from valley fever during ground-disturbing activities can be partially mitigated through the control of Project-generated dust. As noted, Project-generated dust would be controlled by adhering to SJVAPCD dust-reducing measures (Regulation VIII), which includes the preparation of a SJVAPCD-approved dust control plan describing all fugitive dust control measures that are to be implemented before, during, and after any dust-generating activity.

With minimal site grading and conformance with SJVAPCD Regulation VIII, dust from the construction of the Project would not add significantly to the existing exposure level of people to this fungus, including construction workers.”<sup>84</sup>

### Operational Air Contaminants

Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract additional heavy-duty trucks that spend long periods queuing and idling at the site. Onsite Project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. The maximum operation-related

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<sup>84</sup> Op. Cit. 25-27.

emissions of exhaust PM<sub>2.5</sub>, considered a surrogate for DPM, would be 0.09 pounds per day, produced by the estimated 860 additional one-way vehicle trips per day on Saturdays, 625 additional one-way vehicle trips per day on Sundays, and 858 additional one-way vehicle trips per day on weekdays. Therefore, the Project would not be a source of TACs and there would be no impact as a result of the Project during operations. The Project would not have a high carcinogenic or non-carcinogenic risk during operation.

### ***Monoxide Hot Spots***

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or “hot spots,” are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. In 1993, much of the state was designated nonattainment under the CAAQS and NAAQS for CO. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration across the entire state is now designated as attainment. Detailed modeling of Project-specific CO “hot spots” is not necessary and thus this potential impact is addressed qualitatively.

A CO “hot spot” would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. A study conducted in Los Angeles County by the South Coast Air Quality Management District (SCAQMD) is helpful in showing the amount of traffic necessary to result in a CO Hotspot, and can be used to demonstrate the traffic necessary to create a hot spot anywhere in California, including the Central Valley. The SCAQMD analysis prepared for CO attainment in the SCAQMD’s 1992 *Federal Attainment Plan for Carbon Monoxide* in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 Air Quality Management Plan can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). To establish a more accurate record of baseline CO concentrations affecting the SoCAB, a CO “hot spot” analysis was conducted in 2003 at the

same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This “hot spot” analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

Furthermore, the SJVAPCD Guidance for Assessing and Mitigating Impacts (2015b) includes the following CO hot spot criteria:

If neither of the following criteria are met at all intersections affected by the developmental project, the project will result in no potential to create a violation of the CO standard:

- A traffic study for the project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F; or
- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at more or more intersections in the project vicinity.

According to the Traffic Study [included in Appendix “E” of the DEIR] prepared for the Project, LOS [level of service] at the SR 198 (Sierra Drive) and Project Driveway and SR 198 (Sierra Drive) and Old 3 Rivers Road intersections would not exceed target LOS ‘D’ for all the study scenarios. In addition, the Project is expected to generate 860 trips generated per day on Saturdays and the estimated 625 trips generated per day on Sundays (VRPA Technologies, Inc. 2020). Using CalEEMod trip generation defaults for Tulare County, 858 trips are anticipated to be generated on weekdays. Thus, based on Project traffic generation and resultant LOS on affected roadways, it can be determined that the Project would not result in CO hotspots.

It is acknowledged that the Project site is located relatively close to the entrance of the Sequoia National Park entrance. Historically, there have been instances when a substantial amount of automobiles are queued for entrance into the park and idling along the road as far out as to Three Rivers. However, such instances are uncommon and very unlikely to result in traffic volumes of over 100,000 vehicles per day. Thus, neither the Proposed Project nor the cumulative park plus Project traffic would not generate traffic volumes of more than 100,000 vehicles per day, there is no likelihood of the Project traffic exceeding CO values.

As such, Tulare County RMA agrees that the analysis and conclusions contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would result in ***Less Than Significant Project-specific Impacts*** related to this Checklist Item.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is San Joaquin Valley Air Basin.

The Three Rivers Community Plan Update is a planning document intended to direct the density, intensity, and types of growth within the community. The proposed Project and future developments will be evaluated on a project-by-project basis and will not expose the public to substantial pollutant concentrations. The Tulare County General Plan includes Policies AQ-1.1 through AQ-1.4, AQ-3.1 through AQ-3.6, LU-1.1 through LU-1.4, and LU-1.8, which were specifically designed to address potential impacts from siting incompatible uses in close proximity to each other. These policies would be implemented for the proposed Project and future development projects. The County will consult with the Air District on a project-by-project to determine whether screening or modeling would be required to identify potential health risks. Compliance with applicable District rules and regulations would reduce potential impacts from exposure to pollutants. As such, Tulare County RMA agrees that the analysis and conclusions contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would not expose the public to substantial pollutant concentrations. Therefore, a ***Less Than Significant Cumulative Impact*** related to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***Less Than Significant Impact***

The Three Rivers Community Plan Update is a planning document intended to direct the density, intensity, and types of growth within the Three Rivers UDB. Implementation of General Plan and Community Plan policies and compliance with Air District regulations designed to address potential impacts associated with the inappropriate siting of incompatible uses would reduce potential impacts. To ensure that sensitive receptors would not be exposed to substantial pollutant concentrations Tulare County will consult with the Air District on a project-by-project basis to identify and mitigate, if necessary, potential health risks. As noted in the Air Quality Assessment, the proposed Project is not anticipated to create new permanent sources of odor, nor is it anticipated to expose substantial numbers of people to existing sources of potential nuisance odors. Therefore, Tulare County RMA agrees that the analysis and conclusions contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would result in ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist Item.

**d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

Project - Impact Analysis:

*Less Than Significant Impact t*

Operation of the proposed Project would not create odorous emissions. However, proposed Project construction-related activities would include fuels and other odor sources (such as diesel-fueled equipment), could result in the creation of objectionable odors. Since construction-related activities would be short-term, temporary, and spatially dispersed (i.e., intermittent), and occur in a predominantly rural area, these activities would not affect a substantial number of people.

“Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person’s reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word “strong” to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not include any uses considered to be associated with odors.

In addition, per the SJVAPCD's Guidance to Conduct Detailed Analysis for Assessing Odor Impacts to Sensitive Receptors, this analysis of potential odor impacts contains a review of odor complaints for "similar facilities". Specifically, a records request for odor complaints submitted within the last three years involving the adjacent Comfort Inn and Suites was submitted on October 12, 2020. The SJVAPCD confirmed no odor complaints were found to be on file for the Three Rivers Comfort Inn and Suites within the last three years (SJVAPCD 2020b). As such, it is also expected that substantial odors would not be generated by the proposed hotel Project."<sup>85</sup>

Implementation of the applicable General Plan and Community Plan policies and compliance with applicable District rules and regulations specifically designed to address air quality and odor impacts, would reduce potential odor impacts. The proposed Project was evaluated for potential odor, and as noted earlier, it was concluded that the Proposed Project does not include any uses considered to be associated with odors. Therefore, Tulare County RMA agrees that the analysis and conclusions contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would result in ***Less Than Significant Project-specific Impacts*** related to this Checklist Item.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin.

As noted earlier, the Three Rivers Community Plan Update is a planning document intended to direct the density, intensity, and types of growth within the Three Rivers UDB. The proposed Project was evaluated to determine if it would generate odors. As noted in the Air Quality Assessment, the proposed Project is not anticipated to create new permanent sources of odor, nor is it anticipated to expose substantial numbers of people to existing sources of potential nuisance odors. Therefore, Tulare County RMA agrees that the analysis and conclusions contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would result in ***Less Than Significant Cumulate Impacts*** related to this Checklist Item.

Mitigation Measure(s): ***None Required.***

Conclusion: ***Less Than Significant Impact***

Implementation of County policies and Air District regulation designed to address potential conflicts and nuisance odor issues associated with the inappropriate siting of incompatible uses would reduce potential odor impacts. As noted in the Air Quality Assessment, the proposed Project is not anticipated to create new permanent sources of odor, nor is it anticipated to expose substantial numbers of people to existing sources of potential nuisance odors. Therefore, Tulare County RMA agrees that the analysis and conclusions contained within and supported in the Air Quality Assessment prepared by qualified expert consultant ECORP

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<sup>85</sup> Op. Cit. 30.

Consulting, Inc., that the proposed Project would result in *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item.

## DEFINITIONS

### Definitions

**Air Quality Plan (AQP)** - An air quality plan is a plan for reaching attainment of an air quality standard. The assumptions, inputs, and control measures are analyzed to determine if the air basin can reach attainment for the ambient air quality standard for the subject pollutant. In order to show attainment of the standard, the Air District analyzes the growth projections in the valley, contributing factors in air pollutant emissions and formations, and existing and future emissions controls. The Air District then formulates a control strategy to reach attainment.

**Ambient Air Quality Standards** - These standards measure outdoor air quality. They identify the maximum acceptable average concentrations of air pollutants during a specified period of time. These standards have been adopted at a State and Federal level.

**Best Available Control Measures (BACM)** - A set of programs that identify and implement potentially best available control measures affecting local air quality issues.

**Carbon Monoxide (CO)** - Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels and is emitted directly into the air (unlike ozone).

**Criteria Pollutant** - Air pollutants for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. The six criteria pollutants are ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, PM<sub>10</sub> and PM<sub>2.5</sub>.

**Hydrogen Sulfide (H<sub>2</sub>S)** - Hydrogen sulfide is a highly toxic flammable gas. Because it is heavier than air, it tends to accumulate at the bottom of poorly ventilated spaces.

**Lead (Pb)** - Lead is the only substance which is currently listed as both a criteria air pollutant and a toxic air contaminant. Smelters and battery plants are the major sources of the pollutant "lead" in the air. The highest concentrations of lead are found in the vicinity of nonferrous smelters and other stationary sources of lead emissions. The EPA's health-based national air quality standard for lead is 1.5 micrograms per cubic meter (µg/m<sup>3</sup>) [measured as a quarterly average].

**Mobile Source** - A mobile emission source is a moving object, such as on-road and off-road vehicles, boats, airplanes, lawn equipment, and small utility engines.

**Nitrogen Oxides (Oxides of Nitrogen, NO<sub>x</sub>)** - NO<sub>x</sub> are compounds of nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>). NO<sub>x</sub> are primarily created from the combustion process and are a major contributor to ozone smog and acid rain formation. NO<sub>x</sub> also forms ammonium nitrate particulate



in chemical reactions that occur when NO<sub>x</sub> forms nitric acid and combines with ammonia. Ammonium nitrate particulate is an important contributor to PM<sub>10</sub> and PM<sub>2.5</sub>.

**Ozone (O<sub>3</sub>)** - Ozone is a pungent, colorless, toxic gas created in the atmosphere rather than emitted directly into the air. O<sub>3</sub> is produced in complex atmospheric reactions involving oxides of nitrogen, reactive organic gases (ROG), and ultraviolet energy from the sun in a photochemical reaction. Motor vehicles are the major sources of O<sub>3</sub> precursors.

**Ozone Precursors** - Chemicals such as non-methane hydrocarbons, also referred to as ROG, and oxides of nitrogen, occurring either naturally or as a result of human activities, which contribute to the formation of ozone, a major component of smog.

**Photochemical** - Some air pollutants are direct emissions, such as the CO produced by an automobile's engine. Other pollutants, primarily O<sub>3</sub>, are formed when two or more chemicals react (using energy from the sun) in the atmosphere to form a new chemical. This is a photochemical reaction.

**Particulate Matter 2.5 Micrometers (PM<sub>2.5</sub>)** - The federal government has recently added standards for smaller dust particulates. PM<sub>2.5</sub> refers to dust/particulates/aerosols that are 2.5 microns in diameter or smaller. Particles of this size can be inhaled more deeply in the lungs and the chemical composition of some particles is toxic and has serious health impacts.

**Particulate Matter 10 Micrometers (PM<sub>10</sub>)** - Dust and other particulates exhibit a range of particle sizes. Federal and State air quality regulations reflect the fact that smaller particles are easier to inhale and can be more damaging to health. PM<sub>10</sub> refers to dust/particulates that are 10 microns in diameter or smaller. The fraction of PM between PM<sub>2.5</sub> and PM<sub>10</sub> is comprised primarily of fugitive dust. The particles between PM<sub>10</sub> and PM<sub>2.5</sub> are primarily combustion products and secondary particles formed by chemical reactions in the atmosphere.

**Reactive Organic Gas (ROG)** - A photo chemically reactive chemical gas composed of non-methane hydrocarbons that may contribute to the formation of smog. This is also sometimes referred to as Volatile Organic Compounds (VOCs).

**Reasonable Available Control Measures (RACM)** - A broadly defined term referring to technologies and other measures that can be used to control pollution. They include Reasonably Available Control Technology and other measures. In the case of PM<sub>10</sub>, RACM refers to approaches for controlling small or dispersed source categories such as road dust, woodstoves, and open burning. Regional Transportation Planning Agencies are required to implement RACM for transportation sources as part of the federal ozone attainment plan process in partnership with the Air District.

**Reasonable Available Control Technologies (RACT)** - Devices, systems, process modifications, or other apparatus or techniques that are reasonably available, taking into account: the necessity of imposing such controls in order to attain and maintain a national ambient air quality standard;

the social, environmental, and economic impact of such controls; and alternative means of providing for attainment and maintenance of such a standard.

**San Joaquin Valley Air Basin (SJVAB)** - An air basin is a geographic area that exhibits similar meteorological and geographic conditions. California is divided into 15 air basins to assist with the statewide regional management of air quality issues. The SJVAB extends in the Central Valley from San Joaquin County in the north to the valley portion of Kern County in the south (including San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and Kern Counties).

**San Joaquin Valley Unified Air Pollution Control District (Air District)** - The Air District is the regulatory agency responsible for developing air quality plans (AQPs), monitoring air quality, developing air quality regulations, and permitting programs on stationary/industrial sources and agriculture and reporting air quality data for the SJVAB. The Air District also regulates indirect sources and has limited authority over transportation sources through the implementation of transportation control measures (TCM).

**Sensitive Receptors** - Sensitive receptors are defined as land uses that typically accommodate sensitive population groups such as long-term health care facilities, rehabilitation centers, retirement homes, convalescent homes, residences, schools, childcare centers, and playgrounds.

**Sensitive Population Groups** - Sensitive population groups are a subset of the general population that are at greater risk than the general population to the effects of air pollution. These groups include the elderly, infants and children, and individuals with respiratory problems, such as asthma.

**Sulfur Dioxide (SO<sub>2</sub>)** - Sulfur dioxide belongs to the family of SO<sub>x</sub>. These gases are formed when fuel containing sulfur (mainly coal and oil) is burned, and during metal smelting and other industrial processes.

**Stationary Source** - A stationary emission source is a non-mobile source, such as a power plant, refinery, or manufacturing facility.

**Sulfates** - Sulfates occur as microscopic particles (aerosols) resulting from fossil fuel and biomass combustion. SO<sub>x</sub> can form sulfuric acid in the atmosphere that in the presence of ammonia forms ammonium sulfate particulates, a small but important component of PM<sub>10</sub> and PM<sub>2.5</sub>. Sulfates increase the acidity of the atmosphere and form acid rain.

**Transportation Conformity** - A federal requirement for transportation plans and Projects to demonstrate that they will not result in emissions that exceed attainment plan emission budgets or exceed air quality standards.

**Transportation Control Measures (TCMs)** - Any measure that is identified for the purposes of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions.

**Transportation Management Associations (TMAs)** - Groups of employers uniting together to work collectively to manage transportation demand in a particular area.

**Tulare County Association of Governments (TCAG)** - TCAG is the Transportation Planning Agency (TPA) for Tulare County. TCAG is also designated as a Metropolitan Planning Organization (MPO), the agency responsible for preparing long range Regional Transportation Plans and demonstrating Transportation Conformity with air quality plans (AQPs).

**Wood-burning Devices** - Wood-burning devices are designed to burn “solid fuels” such as cordwood, pellet fuel, manufactured logs, or any other non-gaseous or non-liquid fuels.

#### Abbreviations and Acronyms

Air District	San Joaquin Valley Unified Air Pollution Control District (SJVAPCD)
AAQA	Ambient Air Quality Assessment
AB	Assembly Bill
ACTM	Airborne Toxic Control Measure
AIA	Air Impact Assessment
AQI	Air Quality Index
ARB	California Air Resources Board
AQP	Air Quality Plan
BAAQMD	Bay Area Air Quality Management District
BACM	Best Available Control Measures
CAA	Clean Air Act (Federal)
CAAQS	California Ambient Air Quality Standards
CAPCOA	California Air Pollution Control Officers Associations
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CH <sub>4</sub>	Methane
CM	Coccidioidomycosis
CI	Coccidioides immitis
CO	Carbon Monoxide
DEIR	Draft Environmental Impact Report
DPM	Diesel Particulate Matter
ECORP	ECORP Consulting, Inc.
FIP	Federal Implementation Plan
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
HI	Hazard Index
H <sub>2</sub> S	Hydrogen Sulfide
LEV	Low-Emission Vehicle
NAAQS	National Ambient Air Quality Standards
NO <sub>2</sub>	Nitrogen Dioxide
NSR	New Source Review

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NESHAPs	National Environmental Standards for Hazardous Air Pollutants
O <sub>3</sub>	Ozone
Pb	Lead
PM <sub>2.5</sub>	Particulate Matter 2.5 Micrometers (in diameter)
PM <sub>10</sub>	Particulate Matter 10 Micrometers (in diameter)
RACM	Reasonable Available Control Measures
RACT	Reasonable Available Control Technologies
RDEIR	Recirculated Draft Environmental Impact Report
ROG	Reactive Organic Gases
SB	Senate Bill
SIP	State Implementation Plan
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SO <sub>2</sub>	Sulfur Dioxide
SJVAPCD	San Joaquin Valley Unified Air Pollution Control District
SJVAB	San Joaquin Valley Air Basin
UDB	Urban Development Boundary
USEPA	Environmental Protection Agency
TAC	Toxic Air Contaminants
TCAG	Tulare County Association of Governments
TCM	Transportation Control Measures
TMA	Transportation Management Associations
VOC	Volatile Organic Compound

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# Biological Resources

## Chapter 3.4

### SUMMARY OF FINDINGS

The proposed Project will result in ***Less Than Significant Impacts with Mitigation*** to Biological Resources. A detailed review of potential impacts is provided in the following analysis. A Biological Evaluation (“*Biological Resources Assessment [BRA] Hampton Inn and Suites Three River, Tulare County, California.*” October 2020) conducted by consultants ECORP Consulting, Inc. is included in Appendix “B” of this document which is used as the basis for determining this Project will result in less than significant impacts. As noted in the BRA, “The purpose of the assessment was to collect information on the biological resources present or with the potential to occur in the Project Study Area, assess potential biological impacts related to Project activities, and identify potential mitigation measures to inform and support the Project’s California Environmental Quality Act (CEQA) documentation for biological resources.”<sup>1</sup>

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

Whenever possible, public agencies are required to avoid or minimize environmental impacts by implementing practical alternatives or mitigation measures. According to Section 15382 of the CEQA Guidelines, a significant effect on the environment means a “substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.”<sup>2</sup>

The California Environmental Quality Act (CEQA; California Public Resources Code §§ 21000-21177) requires that State agencies, local governments, and special districts evaluate and disclose impacts from “projects” in the State. CEQA Guidelines Section 15380 clearly indicates that species of special concern (SSCs) should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity.<sup>3</sup>

CEQA Guidelines Sections 15063 and 15065 address how an impact is identified as significant. These sections are particularly relevant to SSCs. Project-level impacts on listed rare, threatened, or endangered species are generally considered significant, and therefore require lead agencies to prepare an Environmental Impact Report to fully analyze and evaluate the impacts. In determining to assign “impact significance” to populations of non-listed species, factors which are usually

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<sup>1</sup> “*Biological Resources Assessment [BRA] Hampton Inn and Suites Three River, Tulare County, California.*” Page 1. October 2020. Prepared by consultants ECORP Consulting, Inc. (ECORP) is included in Appendix “B” of this Draft EIR.

<sup>2</sup> CEQA Guidelines Section 15382.

<sup>3</sup> California Department of Fish and Wildlife. Wildlife: Nongame: Species of Special Concern. “*How are SSCs addressed under the California Environmental Quality Act*” Accessed February 2021 at: <https://wildlife.ca.gov/Conservation/SSC>



considered include population-level effects, proportion of the species' range affected by a project, regional effects, and impacts to habitat features.<sup>4</sup>

As stated in the BRA, "Sections 15063-15065 of the CEQA Guidelines address how an impact is identified as significant. Generally, impacts to listed (rare, threatened, or endangered) species are considered significant. Assessment of "impact significance" to populations of non-listed species (e.g., SSC) usually considers the proportion of the species' range that will be affected by a project, impacts to habitat, and the regional and population level effects.

Specifically, § 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant under CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis."<sup>5</sup>

This section of the Draft Environmental Impact Report (DEIR) for the Project meets CEQA requirements by addressing potential impacts to biological resources on the proposed Project site, which is located in the unincorporated community of Three Rivers, California east of State Highway 198 (Sierra Drive). The "Environmental Setting" section provides a description of biological resources in the region, with special emphasis on the proposed Project site and vicinity. The "Regulatory Setting" provides a description of applicable State and local regulatory policies. A description of the potential impacts of the proposed project is also provided and includes the identification of feasible mitigation to avoid or lessen the impacts.

#### Thresholds of Significance

The geographical area may be either statewide or nationwide, depending on the sensitive status of the species. Standards for listing as federal endangered species are determined by the Federal Endangered Species Act, administered by U.S. Department of Fish and Wildlife. Standards for listing of California special status species (Endangered, Threatened, Candidate Endangered, Candidate Threatened, and Sensitive Species) are administered by the California Department of Fish and Wildlife (DFW). These requirements are described in further detail in the "Regulatory" section of this document.

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<sup>4</sup> Ibid.

<sup>5</sup> "Biological Resources Assessment [BRA] Hampton Inn and Suites Three River, Tulare County, California." Pages 8-9. October 2020. Prepared by consultants ECORP Consulting, Inc. (ECORP) is included in Appendix "B" of this Draft EIR.

### Purpose of this Biological Resources Assessment

The purpose of the BRA is to assess the potential for occurrence of special-status plant and animal species and their habitats, and sensitive habitats such as wetlands and riparian communities within the Project Study Area. The BRA includes information generated from the reconnaissance-level site assessment and does not include a wetland delineation performed according to U.S. Army Corps of Engineers' (USACE's) standards, nor does it include determinate field surveys for special-status plant and animal species.<sup>6</sup>

As note din the BRA, "This assessment includes a preliminary analysis of impacts on biological resources anticipated to result from the Project as presently defined. The mitigation recommendations presented in this assessment are based on a preliminary impact analysis, a review of existing literature, and the results of the site reconnaissance survey.

For the purposes of this assessment, special-status species are defined as plants or animals that:

- are listed, proposed for listing, or candidates for future listing as threatened or endangered under the federal Endangered Species Act (ESA);
- are listed or candidates for future listing as threatened or endangered under the California ESA;
- meet the definitions of endangered or rare under § 15380 of the CEQA Guidelines;
- are identified as a species of special concern (SSC) by the California Department of Fish and Wildlife (CDFW);
- are birds identified as birds of conservation concern (BCC) by the U.S. Fish and Wildlife Service (USFWS);
- are considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered in California," "plants about which more information is needed," or "plants of limited distribution – a watch list" (i.e., species with a California Rare Plant Rank [CRPR] of 1B, 2, 3, or 4);
- are plants listed as rare under the California Native Plant Protection Act (NPPA) (California Fish and Game Code, § 1900 et seq.); or
- are fully protected in California in accordance with the California Fish and Game Code, § 3511 (birds), § 4700 (mammals), § 5050 (amphibians and reptiles), and § 5515 (fishes).

## **ENVIRONMENTAL SETTING**

As indicated in the biological resources assessment (BRA) included in Appendix "B" of this EIR, "The proposed Project entails the development of a 105-room hotel to be located off State Route 198 (Sierra Drive), approximately 1,100 feet north of Old Three Rivers Road."<sup>7</sup>

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<sup>6</sup> Ibid. 1-3.

<sup>7</sup> Ibid.

### Site Reconnaissance

“ECORP biologist Hannah Stone conducted a site assessment on May 15, 2020. During the field assessment, meandering transects were walked through the Study Area searching for aquatic resources, potential Waters of the U.S./State, special-status species or their habitat. The findings of this site 3.assessment have been incorporated into this BRA.

- During the field survey, biological communities occurring onsite were characterized and the following biological resource information was collected:
- Vegetation communities within the Project site;
- Plant and animal species directly observed;
- Animal evidence (e.g., scat, tracks);
- Existing active raptor nest locations;
- Burrows and any other special habitat features.

In addition, soil types were identified using the NRCS Web Soil Survey (NRCS 2020a).”<sup>8</sup>

### Site Characteristics and Land Use

“The Study Area is currently undeveloped and is situated at an elevation range of approximately 750 to 775 feet above mean sea level (MSL) in the southern Sierra Nevada foothills subregion of the Sierra Nevada region of the California floristic province (Baldwin et. al. 2012). The Study Area appears to have been historically disturbed as remnant vehicles tracks are found throughout the site. According to Google Earth aerial photographs, an area of oak woodland was present in the eastern portion of the site through 2005 but had been cut down and removed by 2009. Remnants of the root balls can be found onsite in the form of shallow basins.

Representative photographs of the Study Area are provided in Attachment B [in the BRA].

The surrounding lands include undeveloped lands, the Comfort Inn and Suites, and rural residences.”<sup>9</sup>

### Vegetation Communities and Land Cover Types

“The Project is currently comprised primarily of annual grassland with remnant oak woodland and ruderal roadside areas along the boundaries (Figure 2. Vegetation Community and Land Cover Types/Preliminary Wetland Assessment [in the BRA, **Figure 3.4-1** in the Draft EIR]).”<sup>10</sup>

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<sup>8</sup> Op. Cit. 11.

<sup>9</sup> Op. Cit. 13.

<sup>10</sup> Op. Cit.



### Annual Grassland

“The annual grassland is dominated by ripgut brome (nonnative, *Bromus diandrus*), rancher’s fireweed (native, *Amsinckia menziesii*), white-stemmed filaree (nonnative, *Erodium brachycarpum*), and yellow star-thistle (non-native, *Centaurea solstitialis*). Other plants found in the annual grassland include contorted primrose (native, *Camissonia strigulosa*), pink spineflower (native, *Chorizanthe membranacea*), cat’s ear (nonnative, *Hypochaeris* species), and ragweed (native, *Ambrosia* species). Scattered interior live oak (native, *Quercus wislizenii*) and elderberry (native, *Sambucus* species) are found within the annual grassland.”<sup>11</sup>

### Oak Woodland

“A small area of oak woodland is located in the southeastern corner of the Study Area. The oak woodland is largely situated on the adjacent property to the south but the dripline of the trees overlaps into the Study Area. The trees within the oak woodland include Valley oak (native, *Quercus lobata*) and interior live oak.”<sup>12</sup>

### Ruderal/Roadside

“The ruderal areas found at the property boundaries include weedy annual grassland species. The roadside along Sierra Drive includes a number of planted cottonwoods (non-native, *Populus* sp. cultivar) trees that have been topped.”<sup>13</sup>

### Soils

“According to the Web Soil Survey (NRCS 2020a), there are two soil units mapped within the Study Area: (105) Blasingame sandy loam, 9 to 15 percent slopes and (164) Tujunga sand (Figure 3. Natural Resources Conservation Service Soil Types, [in the BRA]). Neither of these soil units are considered hydric (NRCS 2020b).”<sup>14</sup>

### Potential Aquatic Resources

“There is one seasonal wetland swale, totaling ±0.011 acre, within the northeastern corner of the Study Area that had flowing water during the May 2020 site visit (Figure 2 [in the BRA]). The flows were coming from an adjacent property, possibly from agricultural or rural residential runoff. The water was flowing through a shallow topographic drainage, which did not appear to support an ordinary high-water mark and bed-and-bank, but the plant composition of this area included arroyo willow (native, *Salix lasiolepis*), which is facultative wetland (FACW, occurs usually in wetlands, occasionally in non-wetlands). According to the California Aquatic Resources Inventory (CARI), there one previously mapped aquatic resource for the Study Area (Figure 4. California

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<sup>11</sup> Op. Cit. 15.

<sup>12</sup> Op. Cit.

<sup>13</sup> Op. Cit.

<sup>14</sup> Op. Cit.

Aquatic Resources Inventory, [in the BRA]). A “fluvial natural” feature has been mapped from the northeastern corner to the southern central portion of the Study Area (San Francisco Estuary Institute [SFEI] 2017). It is worth noting that some CARI data contain “varying levels of detail, vintages, coverage, and classification” (SFEI 2020). Much of these data were not been ground-truthed. During the field assessment, these areas were dominated by weedy upland plants such as ripgut brome, rancher’s fireweed, and white-stemmed filaree, with no evidence of wetland plants or wetland hydrology.”<sup>15</sup>

### Wildlife

“Wildlife use onsite is expected to be minimal due to the close proximity of the Comfort Inn and Suites to the north, the highway to the west and surrounding rural residences and businesses and the absence of significant onsite woodland or aquatic habitats. Several California ground squirrels (*Otospermophilus beecheyi*) and their burrows were found in scattered locations within the Study Area. Birds observed onsite during the May 2020 site visit included turkey vulture (*Cathartes aura*), acorn woodpecker (*Melanerpes formicivorus*), American crow (*Corvus brachyrhynchos*), tree swallow (*Tachycineta bicolor*), American robin (*Turdus migratorius*), and Brewer’s blackbird (*Euphagus cyanocephalus*).”<sup>16</sup>

### Evaluation of Special-Status Species Identified in the Literature Search

“A list of all special status plant and wildlife species identified in the literature search as potentially occurring within the Project site is provided in Table 1 [in the BRA, **Table 3.4-1** in the Draft EIR]. This table includes the listing status for each species, a brief habitat description, and a determination on the potential to occur in the Project site. The potential to occur is based upon species’ known distribution, the vegetation communities and habitats present onsite, and the site elevation. Following the table is a brief description of each species with potential to occur. One special-status reptile, Blainville’s horned lizard (*Phrynosoma blainvillii*), is included in this assessment even though it did not come up on the database searches because the Study Area is located within the known range of this species.

Species that were considered “Absent” included those not known to occur in the region and/or elevation of the Study Area or an absence of suitable habitat. These species are not discussed further in this assessment. The species were identified through the database queries that are only tracked by the CNDDDB and possess no special-status are not included in this assessment. Sensitive habitats that were identified through the database queries that are not located within the Study Area are not discussed in this assessment.

There are no special-status species previously documented within the Study Area, but several special-status species are known to occur within an approximate five-mile radius of the Project (see Attachment A [in the BRA]).”

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<sup>15</sup> Op. Cit. 15 and 18.

<sup>16</sup> Op. Cit. 18.

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Table 3.4-1. Potentially Occurring Special-Status Species						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
Plants						
Abrams’ onion <i>(Allium abramsii)</i>	–	–	1B.2	Lower montane coniferous forest, upper montane coniferous forest, on sandy soils derived from disintegrated granite (4,593’–6,562’).	May–July	Absent-Suitable habitat is absent.
Call’s angelica <i>(Angelica callii)</i>	–	–	4.3	Mesic soils in cismontane woodland and lower montane coniferous forest (3,609’–6,562’).	June–July	Absent-Suitable habitat is absent.
Kaweah brodiaea <i>(Brodiaea insignis)</i>	–	CE	1B.2	Granitic or clay soils in cismontane woodland, meadows and seeps, and valley and foothill grassland (492’–4,594’).	April–June	Potential-suitable habitat is present.
Shirley Meadows star-tulip <i>(Calochortus westonii)</i>	–	–	1B.2	Granitic soils in broadleaved upland forest, lower montane coniferous forest, and meadows and seeps (4,921’–6,906’).	May–June	Absent-Suitable habitat is absent.
Berry's morning-glory <i>(Calystegia malacophylla</i> var. <i>berryi)</i>	–	–	3.3	Chaparral and lower montane coniferous forest (2,001’–8,005’).	July–August	Absent-Suitable habitat is absent.
Bolander's woodreed <i>(Cinna bolanderi)</i>	–	–	1B.2	Mesic soils and streamsides within meadows and seeps and upper montane coniferous forests (5,479’–8,005’).	July– September	Absent-Suitable habitat is absent.
Springville clarkia <i>(Clarkia springvillensis)</i>	FT	CE	1B.2	Granitic soils in chaparral, cismontane woodland, and valley and foothill grassland (803’–4003’).	March–July	Potential-suitable habitat is present.
Marsh claytonia <i>(Claytonia palustris)</i>	–	–	4.3	Meadows and seeps (mesic), marshes and swamps, and upper montane coniferous	May–October	Absent-Suitable habitat is absent.

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**Table 3.4-1.  
Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
				forest (3,280'–8,202').		
Streambank spring beauty ( <i>Claytonia parviflora</i> ssp. <i>grandiflora</i> )	–	–	4.2	Occurs in rocky cismontane woodland (820'–3,937').	February–May	Low Potential-marginally suitable habitat is present.
Jepson's dodder ( <i>Cuscuta jepsonii</i> )	–	–	1B.2	Upper montane coniferous forest; lower montane coniferous forest; broadleaved upland forest; primary host species are <i>Ceanothus diversifolius</i> and <i>Ceanothus prostratus</i> (3,937'–7,546).	July–September	Absent-Suitable habitat is absent.
Rose-flowered larkspur ( <i>Delphinium purpusii</i> )	–	–	1B.3	Rocky, often carbonate soils in chaparral, cismontane woodland, pinyon and juniper woodland (984'–4,396').	April–May	Absent-Suitable habitat is absent.
Recurved larkspur ( <i>Delphinium recurvatum</i> )	–	–	1B.2	Chenopod scrub, cismontane woodland, and valley and foothill grasslands (10'–2,592').	March–June	Potential-suitable habitat is present.
Calico monkeyflower ( <i>Diplacus pictus</i> )	–	–	1B.2	Granitic, disturbed areas in broadleaf upland forest and cismontane woodland (328'–4,692').	March–May	Potential-suitable habitat is present.
Pierpoint Springs dudleya ( <i>Dudleya cymosa</i> ssp. <i>costatifolia</i> )	–	–	1B.2	Carbonate soils in chaparral and cismontane woodland (4,708'–5,249').	May–July	Absent-Suitable habitat is absent.
Mouse Buckwheat ( <i>Eriogonum nudum</i> var. <i>murinum</i> )	–	–	1B.2	Sandy soils in chaparral, cismontane woodland, and valley and foothill grassland (1,197'–3,707').	June–November	Potential-suitable habitat is present.
Spiny-sepaed button-celery ( <i>Eryngium spinosepalum</i> )	–	–	1B.2	Vernal pools and valley and foothill grassland (262'–3,199').	April–June	Low Potential-marginally suitable habitat is present.



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**Table 3.4-1.  
Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
Kaweah monkeyflower ( <i>Erythranthe norrisii</i> )	–	–	1B.3	Carbonate, rocky soils in chaparral and cismontane woodland (1,197'–4,265').	March–May	Absent-Suitable habitat is absent.
Sierra Nevada monkeyflower ( <i>Erythranthe sierrae</i> )	–	–	4.2	Openings of cismontane woodland and lower montane coniferous forest or dry meadows and seeps (607'–7,497').	March–July	Low Potential-marginally suitable habitat is present.
Striped adobe-lily ( <i>Fritillaria striata</i> )	–	CT	1B.1	Cismontane woodland, valley and foothill grassland; heavy clay adobe soils in oak grassland (0'–3,281').	February–April	Absent-Suitable habitat is absent.
American manna grass ( <i>Glyceria grandis</i> )	–	–	2B.3	Bogs and fens, meadows and seeps, and streambanks and lake margins of marshes and swamps (49'–6,496').	June–August	Low Potential-marginally suitable habitat is present.
Winter's sunflower ( <i>Helianthus winteri</i> )	–	–	1B.2	Openings on relatively steep south-facing slopes, granitic, often rocky, often roadsides in cismontane woodland, and valley and foothill grassland (410'–8,415').	January–December	Absent-Suitable habitat is absent.
Munz's iris ( <i>Iris munzii</i> )	–	–	1B.3	Cismontane woodland (1,000'–2,625).	March–April	Potential-suitable habitat is present.
Madera leptosiphon ( <i>Leptosiphon serrulatus</i> )	–	–	1B.2	Cismontane woodland and lower montane coniferous forest (984'–4,265').	April–May	Potential-suitable habitat is present.
San Joaquin Valley Orcutt grass ( <i>Orcuttia inaequalis</i> )	FT	CE	1B.1	Vernal pools (33'–2,477').	April–September	Absent-Suitable habitat is absent.
San Joaquin adobe sunburst ( <i>Pseudobahia peirsonii</i> )	FT	CE	1B.1	Adobe clay soils in cismontane woodland and valley and foothill grassland (295'–2,625').	February–April	Low Potential-marginally suitable habitat is present.

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<b>Table 3.4-1. Potentially Occurring Special-Status Species</b>						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
Aromatic canyon gooseberry ( <i>Ribes menziesii</i> var. <i>nixoderm</i> )	–	–	1B.2	Chaparral and cismontane woodland (2,001'–3,806').	April	Absent-Suitable habitat is absent.
Sequoia gooseberry ( <i>Ribes tulareense</i> )	–	–	1B.3	Lower montane coniferous forest and upper montane coniferous forest (4,921'–6,808').	May	Absent-Suitable habitat is absent.
Greene's tuctoria ( <i>Tuctoria greeniei</i> )	FE	CR	1B.1	Vernal pools (98'–3,510').	May–July	Absent-Suitable habitat is absent.
<b>Invertebrates</b>						
Vernal pool fairy shrimp ( <i>Branchinecta lynchi</i> )	FT	-	-	Vernal pools/wetlands.	November-April	Absent-there is no suitable habitat onsite.
Crotch bumble bee ( <i>Bombus crotchii</i> )	-	CC	-	Primarily nests underground in open grassland and scrub habitats from the California coast east to the Sierra Cascade and south to Mexico.	March - September	Potential
Western bumble bee ( <i>Bombus occidentalis</i> )	-	CC	-	Meadows and grasslands with abundant floral resources. Primarily nests underground. Largely restricted to high elevation sites in the Sierra Nevada, although rarely detected on the California coast.	April - November	Potential
Valley elderberry longhorn beetle ( <i>Desmocerus californicus dimorphus</i> )	FT	-	-	Elderberry shrubs.	Any season	Absent-Tulare County is south of the current range of this species.
<b>Fish</b>						
Delta smelt ( <i>Hypomesus transpacificus</i> )	FT	CE	-	Sacramento-San Joaquin Delta.	N/A	Absent-there is no suitable habitat onsite.

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**Table 3.4-1.  
Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
Amphibians						
California red-legged frog <i>(Rana draytonii)</i>	FT	-	SSC	Lowlands or foothills at waters with dense shrubby or emergent riparian vegetation. Adults must have aestivation habitat to endure summer dry down.	May 1- November 1	Absent-there is no suitable habitat onsite.
California tiger salamander (Central California DPS) <i>(Ambystoma californiense)</i>	FT	CT	SSC	Vernal pools, wetlands (breeding) and adjacent grassland or oak woodland; needs underground refuge (e.g., ground squirrel and/or gopher burrows). Largely terrestrial as adults.	March-May	Absent-there is no suitable habitat onsite.
Foothill yellow-legged frog <i>(Rana boylei)</i>	-	CT	SSC	Foothill yellow-legged frogs can be active all year in warmer locations but may become inactive or hibernate in colder climates. At lower elevations, foothill yellow-legged frogs likely spend most of the year in or near streams. Adult frogs, primarily males, will gather along main-stem rivers during spring to breed.	May - October	Absent-there is no suitable habitat onsite.
Mountain yellow-legged frog <i>(Rana muscosa)</i>	FE	CE	-	Lakes, ponds, marshes, meadows, and streams at elevations ranging from 4,500 to 12,000 feet, but can occur as low as 3,500 feet.	May 1- November 1	Absent-there is no suitable habitat onsite.
Western spadefoot <i>(Spea hammondi)</i>	-	-	SSC	California endemic species of vernal pools, swales, wetlands and adjacent grasslands throughout the Central Valley.	March-May	Absent-there is no suitable habitat onsite.

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Table 3.4-1. Potentially Occurring Special-Status Species						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
Reptiles						
Northern legless lizard <i>(Anniella pulchra)</i>	-	-	SSC	The most widespread of California's <i>Anniella</i> species. Occurs in sandy or loose soils under sparse vegetation from Antioch south coastally to Ventura. Bush lupine is often an indicator plant.	Generally spring, but depends on location and conditions	Low Potential-there is marginally suitable habitat onsite.
Blainville's ("Coast") horned lizard <i>(Phrynosoma blainvillii)</i>	-	-	SSC	Formerly a wide-spread horned lizard found in a wide variety of habitats, often in lower elevation areas with sandy washes and scattered low bushes. Also occurs in Sierra Nevada foothills. Requires open areas for basking, but with bushes or grass clumps for cover, patches of loamy soil or sand for burrowing and an abundance of ants (Stebbins and McGinnis 2012). In the northern Sacramento area, this species appears restricted to the foothills between 1,000 to 3,000 feet from Cameron Park (El Dorado County) north and west to Grass Valley and Nevada City.	April-October	Potential-suitable habitat is present onsite.
Western pond turtle <i>(Actinemys marmorata)</i>	-	-	SSC	Requires basking sites and upland habitats up to 0.5 km from water for egg laying. Uses ponds, streams, detention basins, and irrigation ditches.	April-September	Absent-there is no suitable habitat onsite.
Birds						
Clark's grebe <i>(Aechmophorus clarkii)</i>	-	-	BCC	Winters on salt or brackish bays, estuaries, sheltered seacoasts, freshwater lakes, and	June-August (breeding)	Absent-there is no suitable nesting or foraging habitat onsite.

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**Table 3.4-1.  
Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
				rivers. Breeds on freshwater to brackish marshes, lakes, reservoirs and ponds, with a preference for large stretches of open water fringed with emergent vegetation.		
Black swift <i>(Cypseloides niger)</i>	-	-	BCC, SSC	In California, nests from Cascade-Sierra Nevada region south to Tulare and Mono counties; coastal ranges (Santa Cruz south to San Luis Obispo counties), San Gabriel, San Bernardino, and San Jacinto mountains. Nests on ledges or shallow caves on steep rock faces, usually behind waterfalls. Winter range, unknown, but thought to be northern and western South America, and West Indies.	May-September	Absent-there is no suitable nesting habitat onsite.
Costa's hummingbird <i>(Calypte costae)</i>	-	-	BCC	In California, breeds in coastal scrub and chaparral communities from Santa Barbara County south into Baja California; from Mexico north into Mojave Desert scrub of Eastern Sierra Nevada;	February-June	Absent-there is no suitable nesting habitat onsite.
Rufous hummingbird <i>(Selasphorus rufus)</i>	-	-	BCC	Breeds in British Columbia and Alaska (does not breed in California). Winters in coastal Southern California south into Mexico. Common migrant during March-April in Sierra Nevada foothills and June-August in Lower Conifer to Alpine zone of Sierra Nevada. Nesting habitat includes secondary	April-July	Absent-this species does not nest in this region.

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**Table 3.4-1.  
Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
				succession communities and openings, mature forests, parks and residential area.		
California condor <i>(Gymnogyps californianus)</i>	FE	CE	CFP	Nests on cliff ledges and rarely in large tree cavities; foraging occurs over vast expanses of coastline, grassland, meadows, savannahs	Non-migratory; can be observed during any season; nesting: eggs (late January-May), nestlings to fledge (March-December)	Absent-there is no suitable nesting or foraging habitat onsite.
Golden eagle <i>(Aquila chrysaetos)</i>	-	-	BCC, CFP	Nesting habitat includes mountainous canyon land, rimrock terrain of open desert and grasslands, riparian, oak woodland/ savannah, and chaparral. Nesting occurs on cliff ledges, riverbanks, trees, and human-made structures (e.g., windmills, platforms, and transmission towers). Breeding occurs throughout California, except the immediate coast, Central Valley floor, Salton Sea region, and the Colorado River region, where they can be found during Winter.	Nest (February-August); winter CV (October-February)	Absent-there is no suitable nesting or foraging habitat onsite.
Northern goshawk <i>(Accipiter gentilis)</i>	-	-	SSC	Nesting occurs in mature to old-growth forests composed primarily of large trees with high canopy closure. In California, nests are built primarily in conifer trees in the Sierra Nevada, Cascade and northwestern coastal Ranges.	March-August	Absent-there is no suitable nesting or foraging habitat onsite.

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**Table 3.4-1.  
Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
Bald eagle <i>(Haliaeetus leucocephalus)</i>	Delisted	CE	CFP, BCC	Typically nests in forested areas near large bodies of water in the northern half of California; nest in trees and rarely on cliffs; wintering habitat includes forest and woodland communities near water bodies (e.g., rivers, lakes), wetlands, flooded agricultural fields, open grasslands	February – September (nesting); October-March (wintering)	Absent-there is no suitable nesting or foraging habitat onsite.
Lewis' woodpecker <i>(Melanerpes lewis)</i>	-	-	BCC	In California, breeds in Siskiyou and Modoc counties, warmer mountains, inner coast ranges from Tehama to San Luis Obispo counties, San Bernardino Mountains, and Big Pine Mountain (Inyo County); nesting habitat includes open ponderosa pine forest, open riparian woodland, logged/burned forest, and oak woodlands. Does not breed on the west side of Sierran crest (Beedy and Pandalfino 2013).	April-September (breeding); September-March (winter in Central Valley).	Absent-this species does not nest in this region.
Nuttall's woodpecker <i>(Dryobates nuttallii)</i>	-	-	BCC	Resident from northern California south to Baja California. Nests in tree cavities in oak woodlands and riparian woodlands.	April-July	Potential-suitable nesting habitat is present onsite.
Oak titmouse <i>(Baeolophus inornatus)</i>			BCC	Nests in tree cavities within dry oak or oak-pine woodland and riparian; where oaks are absent, they nest in juniper woodland, open forests (gray, Jeffrey, Coulter, pinyon pines and Joshua tree)	March-July	Potential-suitable nesting habitat is present onsite.

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**Table 3.4-1.  
Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
Wrentit ( <i>Chamaea fasciata</i> )	-	-	BCC	Coastal sage scrub, northern coastal scrub, chaparral, dense understory of riparian woodlands, riparian scrub, coyote brush and blackberry thickets, and dense thickets in suburban parks and gardens.	March-August	Absent-there is no suitable nesting or foraging habitat onsite.
California thrasher ( <i>Toxostoma redivivum</i> )	-	-	BCC	Resident and endemic to coastal and Sierra Nevada-Cascade foothill areas of California. Nests are usually well hidden in dense shrubs, including scrub oak, California lilac, and chamise.	February-July	Absent-there is no suitable nesting or foraging habitat onsite.
Lawrence's goldfinch ( <i>Spinus lawrencei</i> )	-	-	BCC	Breeds in Sierra Nevada and inner Coast Range foothills surrounding the Central Valley and the southern Coast Range to Santa Barbara County east through southern California to the Mojave Desert and Colorado Desert into the Peninsular Range. Nests in arid and open woodlands with chaparral or other brushy areas, tall annual weed fields, and a water source (e.g., small stream, pond, lake), and to a lesser extent riparian woodland, coastal scrub, evergreen forests, pinyon-juniper woodland, planted conifers, and ranches or rural residences near weedy fields and water.	March-September	Potential-suitable nesting habitat is present onsite.
Song sparrow "Modesto" ( <i>Melospiza melodia heermanni</i> )	-	-	BCC, SSC	Resident in central and southwest California, including Central Valley;	April-June	Absent-there is no suitable nesting or foraging habitat onsite.



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**Table 3.4-1.  
Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
				nests in marsh, scrub habitat		
San Clemente spotted towhee  ( <i>Pipilo maculatus clementae</i> )	-	-	BCC, SSC	Resident on Santa Catalina and Santa Rosa islands; extirpated on San Clemente Island, California. Breeds in dense, broadleaf shrubby brush, thickets, and tangles in chaparral, oak woodland, island woodland, and Bishop pine forest.	Year-round resident; breeding season is April-July	Absent-this subspecies is only found on the Channel Islands. It does not occur in the Project vicinity.
Tricolored blackbird  ( <i>Agelaius tricolor</i> )	-	CT	BCC, SSC	Breeds locally west of Cascade-Sierra Nevada and southeastern deserts from Humboldt and Shasta counties south to San Bernardino, Riverside and San Diego counties. Central California, Sierra Nevada foothills and Central Valley, Siskiyou, Modoc and Lassen counties. Nests colonially in freshwater marsh, blackberry bramble, milk thistle, triticale fields, weedy (mustard, mallow) fields, giant cane, safflower, stinging nettles, tamarisk, riparian scrublands and forests, fiddleneck and fava bean fields.	March-August	Absent-there is no suitable nesting habitat onsite.
Saltmarsh common yellowthroat  ( <i>Geothlypis trichas sinuosa</i> )	-	-	BCC, SSC	Breeds in salt marshes of San Francisco Bay; winters in San Francisco south along coast to San Diego County	March-July	Absent-this subspecies is only found nesting in the San Francisco Bay area. It does not occur in the Project vicinity.

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Table 3.4-1. Potentially Occurring Special-Status Species						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
Mammals						
Spotted bat  ( <i>Euderma maculatum</i> )	-	-	SSC	Roost in cracks, crevices, and caves, usually high in fractured rock cliffs. Found in desert, sub-alpine meadows, desert-scrub, pinyon-juniper woodland, ponderosa pine, mixed conifer forest, canyon bottoms, rims of cliffs, riparian areas, fields, and open pastures.	April-September	Absent-there is no suitable habitat onsite.
Townsend's big-eared bat  ( <i>Corynorhinus townsendii</i> )	-	-	SSC	Caves, mines, buildings, rock crevices, trees.	April-September	Potential-Trees onsite represent potential roosting habitat.
Pallid bat  ( <i>Antrozous pallidus</i> )	-	-	SSC	Crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of redwoods, cavities of oaks, exfoliating pine and oak bark, deciduous trees in riparian areas, and fruit trees in orchards). Also roosts in various human structures such as bridges, barns, porches, bat boxes, and human-occupied as well as vacant buildings.	April-September	Potential-Trees onsite represent potential roosting habitat.
Greater mastiff bat  ( <i>Eumops perotis californicus</i> )	-	-	SSC	Primarily a cliff-dwelling species, found in similar crevices in large boulders and buildings.	April-September	Absent-no suitable habitat is present onsite.
San Joaquin kit fox  ( <i>Vulpes macrotis mutica</i> )	FE	CT	-	Grasslands, sagebrush scrub.	April 15 - July 15, September 1 - December 1	Absent-the Project is east of the known range of San Joaquin Kit Fox. Nearest CNDDDB occurrence is 9 miles west of the Project.

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**Table 3.4-1.  
Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur Onsite
	FESA	CESA/ NPPA	Other			
Sierra Nevada red fox <i>(Vulpes vulpes necator)</i>	FC	CT	-	Found in the Cascades in Siskiyou County, and from Lassen County south to Tulare County, rare in the Sierra Nevada. Sierra Nevada populations may be found in a variety of habitats, including alpine dwarf-shrub, wet meadow subalpine conifer, lodgepole pine, red fir, aspen, montane chaparral, montane riparian, mixed conifer, and ponderosa pine. Most sightings in Sierra Nevada area above 7,000' but range from 3,900' to 11,900'.	Any season	Absent-no suitable habitat is present onsite.
Fisher- West Coast DPS <i>(Pekania pennanti)</i>	FPT	CT	SSC	Northern coniferous and mixed forests of Canada and northern United States.	Any season	Absent-no suitable habitat is present onsite.
California wolverine <i>(Gulo gulo)</i>	FPT	CT	-	Scarce resident of North Coast mountains and Sierra Nevada. Wide variety of high elevation habitats.	Any season	Absent-no suitable habitat is present onsite.

Status Codes:

Status Codes NOTE:

FESA	Federal Endangered Species Act
CESA	California Endangered Species Act
FE	FESA listed, Endangered.
FPT	Formally Proposed for FESA listing as Threatened.
FT	FESA listed, Threatened.
Delisted	Formally Delisted (delisted species are monitored for 5 years).
BCC	USFWS Bird of Conservation Concern (USFWS 2002).
CR	CESA- or NPPA-listed, Rare.
CT	CESA- or NPPA-listed, Threatened.
CC	Candidate for CESA listing as Endangered or Threatened.
CE	CESA or NPPA listed, Endangered.
CFP	California Fish and Game Code Fully Protected Species (§ 3511-birds, § 4700-mammals, §5 050-reptiles/amphibians).
SSC	CDFW Species of Special Concern (CDFW, updated July 2017).
1B	CRPR/Rare or Endangered in California and elsewhere.
3	CRPR/Plants About Which More Information is Needed – A Review List.
4	CRPR/Plants of Limited Distribution – A Watch List.
0.1	Threat Rank/Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2	Threat Rank/Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3	Threat Rank/Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

### ***Plants***

The BRA (pages 32-34) contains a brief discussion of special-status plants with the potential to occur within the Study Area. Among the plants discussed are Kaweah Brodiaea, Springville Clarkia, Streambank Spring Beauty, Recurved Larkspur, Calico Monkeyflower, Mouse Buckwheat, Spiny-Sepaled Button-Celery, Sierra Nevada Monkeyflower, American Manna Grass, Munz's Iris, Madera Leptosiphon, and San Joaquin Adobe Sunburst

The BRA (pages 34-36) contains a brief discussion of special-status reptiles and birds such as reptiles Northern California Legless Lizard, Blainville's Horned Toad, and birds Nuttall's Woodpecker, Oak Titmouse, and Lawrence's Goldfinch.

### ***Migratory Bird Treaty Act Protected Birds***

"While not considered species status as previously defined, the Study Area supports potential nesting habitat for other, more common, bird species that are protected under the MBTA and the Fish and Game Code of California. These could include common species such as northern mockingbird and house finch, among others. Trees, shrubs, and annual grassland onsite represents potential nesting habitat for protect birds."<sup>17</sup>

In addition to the earlier special status species, the BRA also contains a brief discussion (on pages 36 and 37) of special-status mammals with the potential to occur within the Study area including Townsend Big-ear Bat and Pallid Bat.

As noted in the BRA, the proposed Project site does not contain sensitive natural communities or critical habitat.<sup>18</sup>

### ***Wildlife Movement/Corridors***

"Woodland habitat that was once found within the Study Area has been removed (circa 2005-2009). The Study Area is adjacent to an existing hotel and State Highway 198/Sierra Drive within a matrix of rural residences and farms. There are no significant habitat features (e.g., wetlands) within or adjacent to the Study Area. Project development is not expected to impact wildlife movement. The Survey Area does not support known nursery sites or mule deer fawning areas (CDFW 2020). No nursery sites were identified during the field assessment."<sup>19</sup>

## **REGULATORY SETTING**

### ***Federal Agencies & Regulations***

#### **Endangered Species Act**

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<sup>17</sup> Op. Cit. 36.

<sup>18</sup> Op. Cit. 37.

<sup>19</sup> Op. Cit.

“The ESA protects plants and animals that are listed as endangered or threatened by USFWS and the National Marine Fisheries Service (NMFS). Section 9 of the ESA prohibits, without authorization, the taking of listed wildlife, where take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant under federal jurisdiction and removing, cutting, digging up, damaging, or destroying any listed plant in any other area in knowing violation of state law (16 U.S. Code [USC] 1538).

Under Section 7 of the ESA, federal agencies are required to consult with USFWS and/or NMFS if their actions, including permit approvals and funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion (BO), USFWS and NMFS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of ESA provides for the issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

#### Section 7 Consultation

Section 7 of the ESA mandates that all federal agencies consult with USFWS and/or NMFS to ensure that federal agencies’ actions do not jeopardize the continued existence of a listed species or adversely modify critical habitat for listed species. If direct and/or indirect effects will occur to critical habitat that appreciably diminish the value of critical habitat for both the survival and recovery of a species, the adverse modifications will require formal consultation with USFWS or NMFS. If adverse effects are likely, the federal lead agency must prepare a biological assessment (BA) for the purpose of analyzing the potential effects of the proposed Project on listed species and critical habitat to establish and justify an "effect determination." Often a third-party, non-federal applicant drafts the BA for the lead federal agencies. The USFWS/NMFS reviews the BA; if it concludes that the Project may adversely affect a listed species or its habitat, it prepares a BO. The BO may recommend "reasonable and prudent alternatives" to the project to avoid jeopardizing or adversely modifying habitat.

#### Critical Habitat

Critical Habitat is defined in Section 3 of the ESA as:

1. the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the ESA, on which are found those physical or biological features essential to the conservation of the species and that may require special management considerations or protection; and
2. specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

For inclusion in a Critical Habitat designation, habitat within the geographical area occupied by the species at the time it was listed must first have features essential to the conservation of the species (16 USC 1533). Critical Habitat designations identify, to the extent known and using the best scientific data available, habitat areas that provide essential life cycle needs of the species (areas on which are found the primary constituent elements). Primary constituent elements are the physical and biological features that are essential to the conservation of the species and that may require special management considerations or protection. These include but are not limited to the following:

1. Space for individual and population growth and for normal behavior.
2. Food, water, air, light, minerals, or other nutritional or physiological requirements.
3. Cover or shelter.
4. Sites for breeding, reproduction, or rearing (or development) of offspring.
5. Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

#### Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized under the MBTA, USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of nongame birds in § 3800, migratory birds in § 3513, and birds of prey in § 3503.5 of the California Fish and Game Code.

#### Clean Water Act

The purpose of the federal Clean Water Act (CWA) is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Section 404 of the CWA prohibits the discharge of dredged or fill material into “Waters of the United States” without a permit from the USACE. The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas “that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (USEPA) also has authority over wetlands, including the authority to veto permits issued by USACE under CWA Section 404(c).

Projects involving activities that have no more than minimal individual and cumulative adverse environmental effects may meet the conditions of one of the Nationwide Permits already issued by USACE (Federal Register 82:1860, January 6, 2017). If impacts on wetlands could be substantial, an individual permit is required. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).”<sup>20</sup>

### ***State and Local Regulations***

#### “California Endangered Species Act

The California ESA (California Fish and Game Code §§ 2050-2116) protects species of fish, wildlife, and plants listed by the State as endangered or threatened. Species identified as candidates for listing may also receive protection. Section 2080 of the California ESA prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit. Take is defined in Section 86 of the California Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The California ESA allows for take incidental to otherwise lawful projects under permits issued by CDFW.

#### Fully Protected Species

The State of California first began to designate species as “fully protected” prior to the creation of the federal and the California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESAs. Fully protected species are identified in the California Fish and Game Code § 4700 for mammals, § 3511 for birds, § 5050 for reptiles and amphibians, and § 5515 for fish.

These sections of the California Fish and Game Code provide that fully protected species may not be taken or possessed at any time, including prohibition of CDFW from issuing incidental take permits for fully protected species under the California ESA. CDFW will issue licenses or permits for take of these species for necessary scientific research or live capture and relocation pursuant to the permit, and may allow incidental take for lawful activities carried out under an approved Natural Community Conservation Plan within which such species are covered.

#### Native Plant Protection Act

The NPPA of 1977 (California Fish and Game Code §§ 1900-1913) was established with the intent to “preserve, protect and enhance rare and endangered plants in this state.” The NPPA is administered by CDFW. The Fish and Game Commission has the authority to designate native plants as “endangered” or “rare.” The NPPA prohibits the take of plants listed under the NPPA,

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<sup>20</sup> Op. Cit. 3-5.

but the NPPA contains a number of exemptions to this prohibition that have not been clarified by regulation or judicial rule. In 1984, the California ESA brought under its protection all plants previously listed as endangered under the NPPA. Plants listed as rare under the NPPA are not protected under the California ESA, but are still protected under the provisions of NPPA. The Fish and Game Commission no longer lists plants under the NPPA, referring all listings to the California ESA.

#### California Fish and Game Code Special Protections for Birds

In addition to protections contained within the California ESA and California Fish and Game Code § 3511 described above, the California Fish and Game Code includes a number of sections that specifically protect certain birds.

Section 3800 states that it is unlawful to take nongame birds, such as those occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds, except when in accordance with regulations of the California Fish and Game Commission or a mitigation plan approved by CDFW for mining operations.

Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird.

Section 3503.5 protects birds of prey (which includes eagles, hawks, falcons, kites, ospreys, and owls) and prohibits the take, possession, or destruction of any birds and their nests

Section 3505 makes it unlawful to take, sell, or purchase egrets, ospreys, and several exotic non-native species, or any part of these birds.

Section 3513 specifically prohibits the take or possession of any migratory nongame bird as designated in the MBTA.

#### Lake or Streambed Alteration Agreements

Section 1602 of the California Fish and Game Code requires individuals or agencies to provide a Notification of Lake or Streambed Alteration to CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.” CDFW reviews the proposed actions and, if necessary, proposed measures to protect affected fish and wildlife resources. The final proposal mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement.

#### Porter-Cologne Water Quality Act

The RWQCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of stormwater runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of



land require development and implementation of a Storm Water Pollution Prevention Plan. Under the Porter-Cologne Water Quality Act, the RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, with any region that could affect the water of the state” [Water Code 13260(a)]. Waters of the State are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” [Water Code 13050 (e)]. The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State, that are not regulated by USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of a Waste Discharge Requirements for these activities.

### California Environmental Quality Act

In accordance with CEQA Guidelines § 15380, a species or subspecies not specifically protected under the federal or California ESAs or NPPA may be considered endangered, rare, or threatened for CEQA review purposes if the species meets certain criteria specified in the Guidelines. These criteria include definitions similar to definitions used in the ESA, the California ESA, and the NPPA. Section 15380 was included in the CEQA Guidelines primarily to address situations in which a project under review may have a significant effect on a species that has not been listed under the ESA, the California ESA, or the NPPA, but that may meet the definition of endangered, rare, or threatened. Animal species identified as SSC by CDFW and plants identified by the CNPS as rare, threatened, or endangered may meet the CEQA definition of rare or endangered.

### Species of Special Concern

SSC are defined by the CDFW as a species, subspecies, or distinct population of an animal native to California that are not legally protected under ESA, the California ESA, or the California Fish and Game Code, but currently satisfies one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role.
- The species is listed as federally (but not State) threatened or endangered, or meets the State definition of threatened or endangered but has not formally been listed.
- The species has or is experiencing serious (nonscyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status.
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for State threatened or endangered status.
- SSC are typically associated with habitats that are threatened.

Depending on the policy of the lead agency, projects that result in substantial impacts to SSC may be considered significant under CEQA.

### U.S. Fish and Wildlife Service Birds of Conservation Concern

The 1988 amendment to the Fish and Wildlife Conservation Act mandates USFWS “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under ESA.” To meet this requirement, USFWS published a list of BCC for the U.S. (USFWS 2008) The list identifies the migratory and nonmigratory bird species (beyond those already designated as federally threatened or endangered) that represent USFWS’ highest conservation priorities. Depending on the policy of the lead agency, projects that result in substantial impacts to BCC may be considered significant under CEQA.

### California Rare Plant Ranks

The CNPS maintains the Inventory of Rare and Endangered Plants of California (CNPS 2020), which provides a list of plant species native to California that are threatened with extinction, have limited distributions, and/or low populations. Plant species meeting one of these criteria are assigned to one of six CRPRs. The rank system was developed in collaboration with government, academia, non-governmental organizations, and private sector botanists, and is jointly managed by CDFW and the CNPS. The CRPRs are currently recognized in the California Natural Diversity Database (CNDDB). The following are definitions of the CNPS CRPRs:

- Rare Plant Rank 1A – presumed extirpated in California and either rare or extinct elsewhere.
- Rare Plant Rank 1B – rare, threatened, or endangered in California and elsewhere.
- Rare Plant Rank 2A – presumed extirpated in California, but more common elsewhere.
- Rare Plant Rank 2B – rare, threatened, or endangered in California but more common elsewhere.
- Rare Plant Rank 3 – a review list of plants about which more information is needed.
- Rare Plant Rank 4 – a watch list of plants of limited distribution.

Additionally, CNPS has defined Threat Ranks that are added to the CRPR as an extension. Threat Ranks designate the level of threat on a scale of 1 through 3, with 1 being the most threatened and 3 being the least threatened. Threat Ranks are generally present for all plants ranked 1B, 2B, or 4, and for the majority of plants ranked 3. Plant species ranked 1A and 2A (presumed extirpated in California), and some species ranked 3, which lack threat information, do not typically have a Threat Rank extension. The following are definitions of the CNPS Threat Ranks:

- Threat Rank 0.1 – Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat).
- Threat Rank 0.2 – Moderately threatened in California (20-80 percent of occurrences threatened/moderate degree and immediacy of threat).
- Threat Rank 0.3 – Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known).

Factors such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Rank; and differences in Threat Ranks do not constitute additional or different protection (CNPS 2018).

Depending on the policy of the lead agency, substantial impacts to plants ranked 1A, 1B, or 2, and 3 are typically considered significant under CEQA Guidelines § 15380. Significance under CEQA is typically evaluated on a case-by-case basis for plants ranked 4 and at the discretion of the CEQA lead agency.

#### California Environmental Quality Act Significance Criteria

Sections 15063-15065 of the CEQA Guidelines address how an impact is identified as significant. Generally, impacts to listed (rare, threatened, or endangered) species are considered significant. Assessment of "impact significance" to populations of non-listed species (e.g., SSC) usually considers the proportion of the species' range that will be affected by a project, impacts to habitat, and the regional and population level effects.

Specifically, § 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant under CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.”<sup>21</sup>

#### Tulare County General Plan Policies

As noted in the BRA, “In 2012, the Tulare County General Plan 2030 Update (Tulare County 2012) was approved. The General Plan provides guidance for the protection of natural and cultural resources and the protection of the health and safety of County residents with an emphasis on enhancing scenic landscapes, reducing pollutants, minimizing the threat of manmade natural hazards, and maintaining adequate water supplies.”

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<sup>21</sup> Op. Cit. 5-10.

The Biological Resources section of the Environmental Resource Management Element of the Tulare County General Plan includes the following goals that are pertinent to development of the Survey Area listed as follows

**ERM-1.1 Protection of Rare and Endangered Species** - The County shall ensure the protection of environmentally sensitive wildlife and plant life, including those species designated as rare, threatened, and/or endangered by State and/or Federal government, through compatible land use development.

**ERM-1.2 Development in Environmentally Sensitive Areas** - The County shall limit or modify proposed development within areas that contain sensitive habitat for special status species and direct development into less significant habitat areas. Development in natural habitats shall be controlled so as to minimize erosion and maximize beneficial vegetative growth.

**ERM-1.4 Protect Riparian Areas** - the County shall protect riparian areas through habitat preservation, designation as open space or recreational land uses, bank stabilization, and development controls.

**ERM-1.6 Management of Wetlands** - the County shall support the preservation and management of wetland and riparian plant communities for passive recreation, groundwater recharge, and wildlife habitats.

**ERM-1.7 Planting of Native Vegetation** - The County shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation and wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained;

**ERM-1.12** - The County shall support the conservation and management of oak woodland communities and their habitats

**ERM-1.15 Minimize Lighting Impacts** - The County shall ensure that lighting associated with new development or facilities (including street lighting, recreational facilities, and parking) shall be designed to prevent artificial lighting from illuminating adjacent natural areas at a level greater than one foot candle above ambient conditions.

**ERM-1.16 Cooperate with Wildlife Agencies** - The County shall cooperate with State and federal wildlife agencies to address linkages between habitat areas.

#### Three Rivers Community Plan

In addition to Tulare County General Plan policies (summarized below), the Three Rivers Community Plan contains Three Rivers-specific policies applicable to biological resources such as: Vision Statement 7 to “protect and preserve oak, sycamore and cottonwood woodlands.” Goal 4 (Protection and Conservation of the Environment) of the Community Plan includes objectives

that are pertinent to biological resources, including: 4.1.1 Preserving the Natural Environment; and 4.1.2 CEQA Compliance

Also, as noted in the BRA, “As part of the Community Plan, a Voluntary Oak Woodlands Management Plan (Tulare County 2018b) has been adopted. If the County determines that a project will result in a significant effect to oak woodlands, the County shall require one or more oak woodland mitigation alternatives to mitigate for the significant effect associated with the conservation of oak woodlands.”<sup>22</sup>

## IMPACT EVALUATION

### Would the project:

- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

#### Project Impact Analysis:

#### ***Less Than Significant Impact With Mitigation***

As noted earlier, the proposed Project entails the development of a 105-room hotel to be located off State Route 198 in Three Rivers. Also as noted earlier, the BRA indicates that the Study Area is currently undeveloped and is situated at an elevation range of approximately 750 to 775 feet above mean sea level (MSL) in the southern Sierra Nevada foothills subregion of the Sierra Nevada region of the California floristic province. The BRA further notes that the Study Area appears to have been historically disturbed as remnant vehicle tracks are found throughout the site. Consultant utilized Google Earth aerial photographs which previously showed an area of oak woodland was present in the eastern portion of the site through 2005 but had been cut down and removed by 2009. Surrounding lands include undeveloped lands, the Comfort Inn and Suites, and rural residences.

The BRA concludes that there is potential suitable habitat for special-status plants, as such **Mitigation Measures BIO-1 through BIO-3**, which are summarized in **Table 3.4-2** and contained in their entirety in Chapter 8 Mitigation Monitoring and Reporting Program (MMRP). The BRA also concludes that there is potential suitable habitat for special-status reptiles (lizards), as such **Mitigation Measures BIO-4 through BIO-5**, are included below. **Mitigation Measures BIO-6 through BIO-9** have been included to mitigate potential of impacts to nesting raptors and migratory birds as recommended in the BRA. The proposed Project will not require removal of any native valley oaks or other trees. However, there is a possibility that migratory birds and raptors may be present within the vicinity of the proposed Project site, or due to the transient and migratory nature of some species.

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<sup>22</sup> Op. Cit. 10

As such, **Mitigation Measures BIO-1** through **BIO 9** would be implemented reduce potential impacts on special status species to less than significant, as applicable. **Table 3.4-2 Summary of Mitigation Measures** lists **Mitigation Measures BIO-1** through **BIO-9** which can be found in their entirety in BRA report in Appendix “B” of this Draft EIR.

Based on the analysis contained in the BRA, qualified expert consultant ECORP determined that the proposed Project would result in a less than significant impact with mitigation. Tulare County RMA agrees with and support the assessment and conclusion. Therefore, the proposed Project will not significantly impact any biological plant or animal species. The proposed Project will not have a significant direct or cumulative impact, or create an unusual circumstance that will cause the proposed Project to have a significant effect on the biological resources of the area and environment with implementation of **Mitigation Measures BIO-1** through **BIO-9** which would reduce potential Project-specific impacts related to this Checklist Item to *Less Than Significant With Mitigation*.

#### Cumulative Impact Analysis

#### *Less Than Significant Impact With Mitigation*

The geographic area of this cumulative analysis is the San Joaquin Valley and the foothill areas in vicinity of the proposed Project site. While the study area is limited to Tulare County (i.e., the proposed Project vicinity and site), sensitive species with similar habitat requirements may exist in other portions of the San Joaquin Valley, and therefore cumulative impacts would extend beyond Tulare County’s political boundaries.

The proposed Project would only contribute to cumulative impacts related to this Checklist Item if Project-specific impacts were to occur. As the proposed Project does not result in significant loss of habitat or direct impact to these special status species, *Less Than Significant Cumulative Impacts with Mitigation* will occur. Consultants ECORP recommended the following Mitigation Measures as contained in the Biological Resources Assessment (See Appendix “B” of this DEIR). For easier reading, the mitigation measures recommended in the Biological Resources Assessment have been sequenced differently and numbered rather than using the format contained in the Biological Resources Assessment.

#### Mitigation Measure(s):

**See Table 3.4-2.**

Compliance with **Mitigation Measures BIO-1** through **BIO-9** would reduce impacts to special status plant, reptile, nesting raptors and migratory birds, and mammal species, thereby resulting in a *Less Than Significant Impact With Mitigation*.

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TABLE 3.4-2 SUMMARY OF MITIGATION MEASURES <sup>23</sup>		
MITIGATION	TYPE OF MITIGATION	SUMMARIZED DESCRIPTION
<b>Measures for Special Status Plant Species</b>		
BIO-1	Pre-construction Survey	Perform focused plan surveys.
BIO-2	Plants absent	If no special-status plants are found within the Project Area, no further measures pertaining to special-status plants are necessary
BIO-3	Avoidance	If avoidance not possible, seed collection, transplantation, and/or other mitigation measures.
<b>Measures for Special Status Reptiles</b>		
BIO-4	Pre-construction Survey	Qualified biologist conducts pre-construction surveys for special status reptile species.
BIO-5	Presence	Qualified biologist relocates the individuals, with the concurrence of CDFW, to a site with suitable habitat.
<b>Measures for Nesting Raptors and Migratory Birds</b>		
BIO-6	Pre-construction Survey	If Project activities occur during the nesting season (February 1-August 31), a qualified biologist will conduct preconstruction surveys).
BIO-7	Buffers	Upon active nest discovery, the biologist determines appropriate construction setback distances and a behavioral baseline using applicable CDFW guidelines and/or the biology of the affected species.
<b>Measures for Special Status Mammals (Bats)</b>		
BIO-8	Pre-construction Survey: Absence	Qualified biologist will conduct pre-construction surveys; if roosting habitat or bats are not present, no further measures are necessary.
BIO-9	Pre-construction Survey: Presence	Qualified biologist will conduct a bat habitat assessment. If suitable roosting habitat present, a qualified biologist will conduct bat emergence survey to determine whether or not bats are present. If special-status bats are found, consult with CDFW.
<b>Measures for Waters of the United States and State</b>		
BIO-10	Perform Delineation	Perform an aquatic resources delineation according to USACE standards.
BIO-11	Avoidance	Potentially jurisdictional features should be avoided and fenced.
BIO-12	Section 404 Permit	If Waters of the U.S./State cannot be avoided obtain Section 404 Permit.
BIO-13	Section 401 Permit	Obtain Section 401 Permit from the RWQCB.
BIO-14	RWQCB permit	Obtain RWQCB permit for discharge of material as applicable.
<b>Measures for Oak Woodlands</b>		
BIO-15	Avoidance/Conservation	If feasible, avoid/conserv oak woodlands.
BIO-16	Replacement	If oak woodlands are proposed for impact, plant an appropriate number of trees, including maintain planting and replacing dead or diseased trees .
BIO-17	Contribution	Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of the Section 1363 of the California Fish and Game Code.
BIO-18	Other	County determines mitigation; possible implementation of <i>Three Rivers Voluntary Oak Woodland Plan</i>

Conclusion:

***Less Than Significant Impact With Mitigation***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts With Mitigation*** related to this Checklist Item will occur.

<sup>23</sup> Ibid. 5.0 Recommendations. 37-40.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game [Wildlife] or U.S. Fish and Wildlife Service?**

Project Impact Analysis: *No Impact*

As concluded in the BRA (included in Appendix “B”) in the discussion regarding potential impacts to riparian or other sensitive habits, “There are no sensitive natural communities onsite. No measures are recommended.”<sup>24</sup> As such, the proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. Based on the analysis contained in the BRA, qualified expert consultant ECORP determined that the proposed Project would result in no impact. Tulare County RMA agrees with and supports the assessment and conclusion. Therefore, there are no sensitive riparian or natural habitats in the immediate proposed Project area and as such, *No Project-specific Impacts* related to this Checklist Item will occur.

Cumulative Impact Analysis: *No Impact*

The geographic area of this cumulative analysis is the San Joaquin Valley and the foothill areas in vicinity of the proposed Project site. While the study area is limited to Tulare County (i.e., the proposed Project vicinity and site), sensitive species with similar habitat requirements may exist in other portions of the San Joaquin Valley.

The proposed Project would only contribute to cumulative impacts related to this Checklist Item if Project-specific impacts were to occur. As the proposed Project does not result in loss of riparian or otherwise sensitive habitat, *No Cumulative Impacts* will occur.

Mitigation: *None Required.*

Conclusion: *No Impact*

As noted earlier, *No Project-specific or Cumulative Impacts* related to this Checklist Item will occur.

- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

Project Impact Analysis: *Less Than Significant Impact With Mitigation*

Based on the analysis contained in the BRA, qualified expert consultant ECORP determined that the proposed Project would result in less than significant impact. Tulare County RMA

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<sup>24</sup> Op. Cit. 31.



agrees with and supports the assessment and conclusion. As noted in the BRA, “Approximately 0.011 acre of aquatic resources is located within the Study Area (Figure 2 [in the BRA]). The following mitigation measures [included in this Draft EIR as **BIO-10** through **BIO-14**] are recommended to minimize potential impacts to Waters of the U.S./State if the Project proposes to place fill in these features...”<sup>25</sup> As an aside, the BRA also indicates, “The seasonal wetland swale identified onsite does not appear to qualify as a “river, stream, or lake”, so a CDFW Section 1602 Lake and Streambed Alteration Agreement is not likely to be necessary”<sup>26</sup> As such, the proposed Project would not result in an adverse effect on federally protected wetlands. **Mitigation Measures BIO-1 through BIO-14** would result in a ***Less Than Significant Project-specific Impact With Mitigation*** related to this Checklist Item.

Cumulative Impact Analysis: ***Less Than Significant Impact With Mitigation***

The geographic area of this cumulative analysis is the San Joaquin Valley and the foothill areas in vicinity of the proposed Project site. While the study area is limited to Tulare County (i.e., the proposed Project vicinity and site), sensitive species with similar habitat requirements may exist in other portions of the San Joaquin Valley.

The proposed Project would only contribute to cumulative impacts related to this Checklist Item if Project-specific impacts were to occur. As the proposed Project does not result in the loss of federally protected wetlands, therefore, a ***Less Than Significant Cumulative Impact With Mitigation*** will occur.

Mitigation: ***See Table 3.4-2.***

Conclusion: ***Less Than Significant Impact With Mitigation***

As noted earlier, ***Less than Significant Project-specific or Cumulative Impacts With Mitigation*** related to this Checklist Item will occur with implementation of **BIO-1** through **BIO-14**.

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Project Impact Analysis ***Less Than Significant Impact***

The proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. As noted in the BRA, “Wildlife have potential to use the Project site for localized wildlife movement. However, Project development would not constitute a significant loss of the available wildlife habitat in

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<sup>25</sup> Op. Cit. 37-38.

<sup>26</sup> Op. Cit. 38.

the area. No measures are recommended.”<sup>27</sup>. Based on the analysis contained in the BRA, qualified expert consultant ECORP determined that the proposed Project would result in less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. Therefore, the project will not substantially impede the movement of native fish or wildlife species, nor impede their use of a nursery site. Project impacts to wildlife movements, movement corridors, and nursery sites are considered less than significant under CEQA.”<sup>28</sup> Therefore, the proposed Project will result in a ***Less Than Significant Impact*** on regional wildlife movements.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is the San Joaquin Valley and the foothill areas in vicinity of the proposed Project site. While the study area is limited to Tulare County (i.e., the proposed Project vicinity and site), corridors for fish and wildlife species with similar habitat requirements may exist in other portions of the San Joaquin Valley.

The proposed Project would only contribute to cumulative impacts related to this Checklist Item if Project-specific impacts were to occur. As the proposed Project does not impact federally protected wetlands, ***Less Than Significant Cumulative Impacts*** will occur.

Mitigation: ***None Required.***

Conclusion: ***Less Than Significant Impacts***

As noted earlier, ***Less Than Significant Project-specific or Cumulative Impacts*** related to this Checklist Item will occur.

**e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

Project Impact Analysis: ***Less than Significant Impact With Mitigation***

There are no oak woodlands within the proposed Project site; however, there are two oaks adjacent to the site. As described in the BRA, “There are two isolated small oak trees located within the annual grassland. The oaks that make up the oak woodland mapped in the Study Area are located on the adjacent property with only the dripline overlapping into the Study Area. Although direct impacts to the oak woodland is not anticipated, indirect impacts may occur. If impacts are considered significant, one or more of the following measures should be implemented to reduce the impact to oak woodlands (per the Three Rivers Voluntary Oak Woodland Plan).”<sup>29</sup> As such, **Mitigation Measures BIO-15 through BIO-18** summarized in **Table 3.4-2** would reduce potential impact to less than significant: Based on the analysis

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<sup>27</sup> Op. Cit. 41.

<sup>28</sup> Op. Cit.

<sup>29</sup> Op. Cit.

contained in the BRA, qualified expert consultant ECORP determined that the proposed Project would result in less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. The proposed Project will not conflict with any policies or ordinances protecting biological resources. ***Less Than Significant Project-specific Impact With Mitigation*** related to this Checklist Item will occur.

Cumulative Impact Analysis: ***Less Than Significant Impact With Mitigation***

The geographic area of this cumulative analysis is Tulare County.

There will be no impacts to policies or ordinances relating to biological resources, and therefore there will be ***No Cumulative Impacts*** related to this Checklist Item.

Mitigation: ***See Table 3.4-2.***

Conclusion: ***Less Than Significant Impact With Mitigation***

As noted earlier, ***Less Than Significant Project-specific or Cumulative Impacts With Mitigation*** related to this Checklist Item will occur.

**f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

Project Impact Analysis: ***No Impact***

The proposed Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances. Moreover, the proposed Project is not expected to conflict with the goals or policies of the Tulare County General Plan that protect biological resources. Also, as the proposed Project is not within or in the vicinity of any approved habitat conservation plans, natural community conservation plans, or regional or state habitat conservation plans in effect, the proposed Project would result in no impact to these resources within the vicinity of the proposed Project site. Based on the analysis contained in the BRA, qualified expert consultant ECORP concluded that the proposed Project would result in less than significant impact to biological resources. Tulare County RMA agrees with and supports the assessment and conclusion. As such, ***No Project-specific Impact*** related to this Checklist Item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is California. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

There are *No Impacts* related to habitat conservation plans, and therefore there are *No Cumulative Impacts* that will conflict with local policies or ordinances.

Mitigation: *None Required.*

Conclusion: *No Impact*

As noted earlier, *No Project-specific or Cumulative Impacts* related to this Checklist Item will occur.

## ACRONYMS AND ABBREVIATIONS

BA	Biological Assessment
BCC	Birds of Conservation Concern
BIOS	Biogeographic Information and Observation System
BO	Biological Opinion
BRA	Biological Resources Assessment
CARI	California Aquatic Resources Inventory
CBOC	California Burrowing Owl Consortium
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Community Plan	Three Rivers Community Plan
CRPR	California Rare Plant Rank
CWA	Clean Water Act
ESA	Endangered Species Act
MBTA	Migratory Bird Treaty Act
MSL	Mean sea level
NAD	North American Datum
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
Project	±4.57-acre Hampton Inn and Suites Three Rivers Project
RMA	Resource Management Agency
RWQCB	Regional Water Quality Control Board
SFEI	San Francisco Estuary Institute
SSC	CDFW Species of Special Concern
USACE	U.S. Army Corps of Engineers

USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group

## REFERENCES

*“Biological Resources Assessment [BRA] Hampton Inn and Suites Three River, Tulare County, California.”* October 2020. Prepared by consultants ECORP Consulting, Inc. (ECORP) is included in Appendix “B” of this Draft EIR.

California Department of Fish and Wildlife. Wildlife: Nongame: Species of Special Concern. “How are SSCs addressed under the California Environmental Quality Act” Accessed February 2021 at: <https://wildlife.ca.gov/Conservation/SSC>.

California Natural Resources Agency. CEQA Guidelines Accessed February 2020 at: [https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2018\\_CEQA\\_FINAL\\_TEXT\\_122818.pdf](https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf)

Tulare County General Plan 2030 Update Background Report. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents.html> then locate “Background Report February 2010”, select “February 2010 Background Report”.

Tulare County General Plan 2030 Update Recirculated DEIR. Accessed in October 2020 at: <http://generalplan.co.tulare.ca.us/documents.html> then locate “Recirculated Draft Environmental Impact Report February 2010 Draft”, select “Recirculated DEIR”.

Tulare County. Three Rivers Community Plan 2018 Update. Accessed October 2020 at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>.

# Cultural Resources

## Chapter 3.5

### SUMMARY OF FINDINGS

The proposed Three River-Hampton Inn & Suites (Project) will result in ***Less Than Significant Impacts With Mitigation*** to Cultural Resources. “*The Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers*” (CRIR or Report) was prepared by ECORP Consulting, Inc. (Consultant) in June 2020 which is included as Appendix “C” of this Draft EIR. The Report is used as the basis for determining that, based on the evidence/documentation (including incorporation of recommendations contained in the Report) and the expertise of qualified consultant ECORP Consulting, Inc. (Consultant), the proposed Project will result in a less than significant impact. Also, Item 18 Tribal Cultural Resources provides additional historical context more specific to Native American history/resources.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

Several CEQA statutes and guidelines address requirements for cultural resources, including historic and archaeological resources. If a proposed Project may cause a substantial adverse effect on the significance of a historical resource, then the Project may be considered to have a significant effect on the environment, and the impacts must be evaluated under CEQA (Section 21084.1).<sup>1</sup> The definition of “historical resources” is included in Section 15064.5(b) of CEQA Guidelines, and includes both historical and archaeological resources. “Substantial adverse change” is defined as “physical demolition, destruction, relocation, or alteration of the resource...”<sup>2</sup>

Section 15064.5 also provides guidelines when there is a probable likelihood of Native American remains existing in the Project site.<sup>3</sup> Provisions for the accidental discovery of historical or unique archaeological resources accidentally discovered during construction include a recommendation for evaluation by a qualified archaeologist, with follow up as necessary.

Public Resources Code Section 5097.5 prohibits excavation, removal or destruction of any vertebrate paleontological site...or any other archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands.<sup>4</sup>

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<sup>1</sup> CEQA Statute and Guidelines. § 21084.1.

<sup>2</sup> Ibid.

<sup>3</sup> Op. Cit.

<sup>4</sup> Public Resources Code Section 5097-5097.993. 5097.5. Accessed October 2020 at:  
<http://online.sfsu.edu/mgriffin/California%20Public%20Resources%20Code%205097.pdf>

This section of the DEIR for the Project meets CEQA requirements by addressing potential impacts to cultural resources on the proposed Project site. The “Environmental Setting” section provides a description of cultural resources in the region, with special emphasis on the proposed Project site and vicinity. The “Regulatory Setting” section provides a description of applicable State and local regulatory policies. Results of cultural resources reports from CHRIS are included. A description of potential impacts is provided, along with feasible mitigation measures to reduce the impacts to less than significant.

#### CEQA Thresholds of Significance

Under CEQA Guidelines Section 15064.5. (b) “A Project with an effect that may cause a substantial adverse change in the significance of an historical resource is a Project that may have a significant effect on the environment.”<sup>5</sup>

- Cause a significant adverse change in the significance of a historical resource
- Cause a substantial adverse change in the significance of an archaeological resource
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature
- Disturb any human remains, including those interred outside of formal cemeteries
- The significance of an historical resource is materially impaired when a Project:

1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

(2) The significance of an historical resource is materially impaired when a project:

- (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
- (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the Project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

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<sup>5</sup> CEQA Section 15064.5.

- (C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.
- (3) Generally, a Project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource.
- (4) A lead agency shall identify potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource. The lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures.
- (5) When a Project will affect state-owned historical resources, as described in Public Resources Code Section 5024, and the lead agency is a state agency, the lead agency shall consult with the State Historic Preservation Officer as provided in Public Resources Code Section 5024.5. Consultation should be coordinated in a timely fashion with the preparation of environmental documents.”<sup>6</sup>

## ENVIRONMENTAL SETTING

“Tulare County lies within a culturally rich province of the San Joaquin Valley. Studies of the prehistory of the area show inhabitants of the San Joaquin Valley maintained fairly dense populations situated along the banks of major waterways, wetlands, and streams. Tulare County was inhabited by aboriginal California Native American groups consisting of the Southern Valley Yokuts, Foothill Yokuts, Monache, and Tubatulabal. Of the main groups inhabiting the Tulare County area, the Southern Valley Yokuts occupied the largest territory.

California's coast was initially explored by Spanish (and a few Russian) military expeditions during the late 1500s. However, European settlement did not occur until the arrival into southern California of land-based expeditions originating from Spanish Mexico starting in the 1760s. Early settlement in the Tulare County area focused on ranching. In 1872, the Southern Pacific Railroad entered Tulare County, connecting the San Joaquin Valley with markets in the north and east. About the same time, valley settlers constructed a series of water conveyance systems (canals, dams, and ditches) across the valley. With ample water supplies and the assurance of rail transport for commodities such as grain, row crops, and fruit, a number of farming colonies soon appeared throughout the region.

The colonies grew to become cities such as Tulare, Visalia, Porterville, and Hanford. Visalia, the County seat, became the service, processing, and distribution center for the growing number of

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<sup>6</sup> CEQA Guidelines, Section 15064.5 (b).



farms, dairies, and cattle ranches. By 1900, Tulare County boasted a population of about 18,000. New transportation links such as SR 99 (completed during the 1950s), affordable housing, light industry, and agricultural commerce brought steady growth to the valley. The California Department of Finance estimated the 2007 Tulare County population to be 430,167”<sup>7</sup>

“Tulare County’s known and recorded cultural resources were identified through historical records, such as those found in the National Register of Historic Places, the Historic American Building Survey/Historic American Engineering Record (HABS/HAER), the California Register of Historic Resources, California Historical Landmarks, and the Tulare County Historical Society list of historic resources.

Due to the sensitivity of many prehistoric, ethno-historic, and historic archaeological sites, locations of these resources are not available to the general public. The Information Center at California State University Bakersfield houses records associated with reported cultural resources surveys, including the records pertinent to sensitive sites, such as burial grounds, important village sites, and other buried historical resources protected under state and federal laws. The San Joaquin Valley is rich in such sites, and part of a local government’s cultural resources program should include the education of project participants, agency representatives, and concerned citizens as to the laws, codes, and ordinances that forbid the collecting of items such as grave goods, pottery, arrowheads, glass, and pottery associated with archaeological sites of any kind.”<sup>8</sup>

As described in the “*Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers*” (CRIR or Report, included in Appendix “C” of this Draft EIR), “The Project Area is located in a rural residential and commercial center in the unincorporated community of Three Rivers along Sierra Drive/Highway [SR] 198. This area is in the foothills of the Sierra Nevada at the edge of the San Joaquin Valley. Three Rivers is in the Kaweah River canyon, the gateway to the entrance to Sequoia and Kings Canyon National Parks. The Project Area is along the southern bank of the Kaweah River, which is 200 feet west, and is approximately five miles northwest of Kaweah Lake. Highway [SR] 198 separates the Project Area land from the Kaweah River. Elevations range from 755 to 765 feet above mean sea level”<sup>9</sup>

#### Project Description and Area of Potential Effects

“The proposed Project entails the construction of a commercial hotel, Hampton Inn and Suites. The Area of Potential Effects (APE) consists of the horizontal and vertical limits of a project and includes the area within which significant impacts or adverse effects to Historical Resources or Historic Properties could occur as a result of the project. The APE is defined for projects subject to regulations implementing Section 106 (federal law and regulations). For projects subject to the

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<sup>7</sup> Tulare County General Plan Update 2030. Part I. Pages 8-4 thru -5. Accessed October 2020 at:

[http://generalplan.co.tulare.ca.us/documents/GeneralPlan2008/Goals%20and%20Policies%20Report%20\(Component%20C\).pdf](http://generalplan.co.tulare.ca.us/documents/GeneralPlan2008/Goals%20and%20Policies%20Report%20(Component%20C).pdf)

<sup>8</sup> Tulare County 2010. General Plan Background Report, Page 9-56, Accessed October 2020 at:

<http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>.

<sup>9</sup> “*Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers*” (CRIR or Report). Page 4. June 2020. Prepared by ECORP Consulting, Inc. and included in Appendix “C” of this Draft EIR.

California Environmental Quality Act (CEQA), the term Project Area is used rather than APE. For the purpose of this document, the terms Project Area and APE are interchangeable.

The horizontal APE consists of all areas where activities associated with a project are proposed and in the case of the current Project, equals the Project Area subject to environmental review under the National Environmental Policy Act (NEPA) and CEQA. This includes areas proposed for construction, vegetation removal, grading, trenching, stockpiling, staging, paving, and other elements described in the official project description. The horizontal APE is illustrated on Figure 1 [of the CRIR] and also represents the survey coverage area. It measures approximately 550 feet in length by 400 feet in width.

The vertical APE is described as the maximum depth below the surface to which excavations for project foundations and facilities will extend. Therefore, the vertical APE includes all subsurface areas where archaeological deposits could be affected. The subsurface vertical APE varies across the Project, depending on construction activities. This study assumes the depth of ground disturbance will not exceed six feet, and therefore, review of geologic and soils maps was necessary to determine the potential for buried archaeological sites that cannot be seen on the surface.

The vertical APE is also described as the maximum height of structures that could impact the physical integrity and the integrity of the setting of cultural resources, including districts and traditional cultural properties. The current study assumes the above-surface vertical APE will not exceed 60 feet above the surface, which is assumed to be the height of the hotel.”<sup>10</sup> It is noted that in the zone where the proposed Project is located the maximum height allowed is 75 feet

#### Environmental Setting as described in the Report

“The Project Area is located in a rural residential and commercial center in the unincorporated community of Three Rivers along Sierra Drive/Highway [SR] 198. This area is in the foothills of the Sierra Nevada at the edge of the San Joaquin Valley. Three Rivers is in the Kaweah River canyon, the gateway to the entrance to Sequoia and Kings Canyon National Parks. The Project Area is along the southern bank of the Kaweah River, which is 200 feet west, and is approximately five miles northwest of Kaweah Lake. Highway [SR] 198 separates the Project Area land from the Kaweah River. Elevations range from 755 to 765 feet above mean sea level”<sup>11</sup>

The CRIR also describes the geology; soils; vegetation and wildlife; regional pre-contact history (approximately 10,000 before the present); local pre-contact history and ethnology, generally the Native American history of the area; regional history (generally European exploration and settlement, Mexican and, American history) and; proposed Project area history.<sup>12</sup> Additional historical context is provided in Item 18 Tribal Cultural Resources of this Initial Study.

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<sup>10</sup> Ibid. 1.

<sup>11</sup> Op. Cit. 4.

<sup>12</sup> Op. Cit. 4-12.

## Records Search Results

Consultant undertook a records search with the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS) at California State University, Bakersfield on May 18, 2020 (SSJVIC, included in the Report). As indicated in the Report, “The purpose of the records search was to determine the extent of previous surveys within a 0.5-mile (800-meter) radius of the proposed Project location, and whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area.”<sup>13</sup>

“In addition to the official records and maps for archaeological sites and surveys in Tulare County, the following historic references were also reviewed: Historic Property Data File for Tulare County (OHP 2012); The National Register Information System (NPS 2020b); Office of Historic Preservation, California Historical Landmarks (OHP 2020); California Historical Landmarks (OHP 1996 and updates); California Points of Historical Interest (OHP 1992 and updates); Directory of Properties in the Historical Resources Inventory (1999); Caltrans Local Bridge Survey (Caltrans 2019); Caltrans State Bridge Survey (Caltrans 2018); and Historic Spots in California (Kyle 2002). Other references examined include a RealQuest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM] 2020).”<sup>14</sup> Historic maps reviewed include: 1870 BLM GLO Plat map for Township 17 South Range 28 East; 1885 BLM GLO Plat map for Township 17 South Range 28 East; 1892 Tulare County, California Map (published by Thos. H. Thompson, page 046, Sequoia National Park 3, Kaweah); 1957 USGS Kaweah, California topographic quadrangle map (15-minute scale); 1986 USGS Kaweah, California topographic quadrangle map (1:62,500 scale); and 1986 photo revised 1994 USGS Kaweah, California topographic quadrangle map (1:24,000 scale).<sup>15</sup> Historic aerial photos taken in 1955, 1989, 2005, 2009, 2010, and 2012 were also reviewed for any indications of property usage and built environment.<sup>16</sup>

## Native American Consultation (See Item 17 Tribal Cultural Resources of this Draft EIR)

Lastly, it is noted that due to the sensitive nature of confidential information contained in the Report, it will not be readily available to the public; however, Tulare County will allow access to the Report within legal limitations.

## **Regulatory Setting**

### ***Federal***

#### The National Historic Preservation Act

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<sup>13</sup> Op. Cit. 12-13.

<sup>14</sup> Op. Cit. 13.

<sup>15</sup> Op. Cit.

<sup>16</sup> Op. Cit.

“The Advisory Council on Historic Preservation (ACHP) is an independent federal agency with the primary mission to encourage historic preservation in the government and across the nation. The National Historic Preservation Act (NHPA), which established the ACHP in 1966, directs federal agencies to act as responsible stewards when their actions affect historic properties. The ACHP is given the legal responsibility to assist federal agencies in their efforts and to ensure they consider preservation during project planning. The ACHP serves as the federal policy advisor to the President and Congress; recommends administrative and legislative improvements for protecting the nation’s diverse heritage; and reviews federal programs and policies to promote effectiveness, coordination, and consistency with national preservation policies. A key ACHP function is overseeing the federal historic preservation review process established by Section 106 of the NHPA. Section 106 requires federal agencies to consider the effects of projects, carried out by them or subject to their assistance or approval, on historic properties and provide the ACHP an opportunity to comment on these projects prior to a final decision on them.”<sup>17</sup>

Although cultural resources are protected by several federal regulations, the project applicant is not requesting federal funding and does not require any permits from any federal agencies.

### *State*

#### California State Office of Historic Preservation (OHP)

“The California State Office of Historic Preservation (OHP) is responsible for administering federally and state mandated historic preservation programs to further the identification, evaluation, registration and protection of California's irreplaceable archaeological and historical resources under the direction of the State Historic Preservation Officer (SHPO), a gubernatorial appointee, and the State Historical Resources Commission.”<sup>18</sup>

“OHP's responsibilities include: Identifying, evaluating, and registering historic properties; Ensuring compliance with federal and state regulatory obligations; Encouraging the adoption of economic incentives programs designed to benefit property owners; Encouraging economic revitalization by promoting a historic preservation ethic through preservation education and public awareness and, most significantly, by demonstrating leadership and stewardship for historic preservation in California.”<sup>19</sup>

A historical resource may be eligible for inclusion in the California Register of Historical Resources (CRHR) if it:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Is associated with the lives of persons important to our past;

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<sup>17</sup> Advisory Council on Historic Preservation. Accessed October 2020 at: [https://www.achp.gov/sites/default/files/documents/2018-06/AboutTheACHPFactSheet2015v3\\_1.pdf](https://www.achp.gov/sites/default/files/documents/2018-06/AboutTheACHPFactSheet2015v3_1.pdf).

<sup>18</sup> State of California Office of Historic Preservation, Mission and Responsibilities. Accessed October 2020 at: [http://ohp.parks.ca.gov/?page\\_id=1066](http://ohp.parks.ca.gov/?page_id=1066).

<sup>19</sup> Ibid.

- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.<sup>20</sup>

As mentioned in the CRIR, the use of both federal and state regulatory requirements apply to the proposed Project. “To meet the regulatory requirements of this Project, this cultural resources investigation was conducted pursuant to the provisions for the treatment of cultural resources contained within Section 106 of the National Historic Preservation Act (NHPA) and in CEQA (Public Resources Code [PRC] § 21000 et seq.) The goal of NHPA and CEQA is to develop and maintain a high-quality environment that serves to identify the significant environmental effects of the actions of a proposed project and to either avoid or mitigate those significant effects where feasible. CEQA pertains to all proposed projects that require State or local government agency approval, including the enactment of zoning ordinances, the issuance of conditional use permits, and the approval of development project maps. The NHPA pertains to projects that entail some degree of federal funding or permit approval.

The NHPA and CEQA (Title 54 U.S. Code [USC] Section 100101 et seq. and Title 14, California Code of Regulations [CCR], Article 5, § 15064.5) apply to cultural resources of the historical and pre-contact periods. Any project with an effect that may cause a substantial adverse change in the significance of a cultural resource, either directly or indirectly, is a project that may have a significant effect on the environment. As a result, such a project would require avoidance or mitigation of impacts to those affected resources. Significant cultural resources must meet at least one of four criteria that define eligibility for listing on either the California Register of Historical Resources (CRHR) (PRC § 5024.1, Title 14 CCR, § 4852) or the National Register of Historic Places (NRHP) (36 Code of Federal Regulations [CFR] 60.4). Cultural resources eligible for listing on the NRHP are considered Historic Properties under 36 CFR Part 800 and are automatically eligible for the CRHR. Resources listed on or eligible for inclusion in the CRHR are considered Historical Resources under CEQA.

Tribal Cultural Resources are defined in Section 21074 of the California PRC as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either included in or determined to be eligible for inclusion in the CRHR, or are included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or are a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. Section 1(b)(4) of Assembly Bill (AB) 52 established that only California Native American tribes, as defined in Section 21073 of the California PRC, are experts in the identification of Tribal Cultural Resources and impacts thereto. Because ECORP does not meet the definition of a California Native American tribe, this report only addresses information for which ECORP is qualified to identify and evaluate, and that which is needed to inform the cultural resources section of CEQA documents. This report, therefore, does not identify

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<sup>20</sup> Office of Historic Preservation, California Register of Historic Places. Accessed October 2020 at: [http://www.ohp.parks.ca.gov/?page\\_id=21238](http://www.ohp.parks.ca.gov/?page_id=21238), accessed October 2020.

or evaluate Tribal Cultural Resources. Should California Native American tribes ascribe additional importance to or interpretation of archaeological resources described herein, or provide information about non-archeological Tribal Cultural Resources, that information is documented separately in the AB 52 tribal consultation record between the tribe(s) and lead agency, and summarized in the Tribal Cultural Resources section of the CEQA document, if applicable.”<sup>21</sup>

#### Native American Heritage Commission

“The California Native American Heritage Commission (NAHC or Commission), created in statute in 1976 (Chapter 1332, Statutes of 1976), is a nine-member body whose members are appointed by the Governor. The NAHC identifies, catalogs, and protects Native American cultural resources -- ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California. The NAHC is also charged with ensuring California Native American tribes’ accessibility to ancient Native American cultural resources on public lands, overseeing the treatment and disposition of inadvertently discovered Native American human remains and burial items, and administering the California Native American Graves Protection and Repatriation Act (CalNAGPRA), among many other powers and duties.”<sup>22</sup>

#### Tribal Consultation Requirements: AB 52 (CEQA)

The California State Legislature added the new requirements regarding tribal cultural resources in Assembly Bill 52 (Gatto, 2014). By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflict in the environmental review process.<sup>23</sup>

#### Tribal Consultation Requirements: SB 18 (General and Specific Plans)

“The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government. SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in

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<sup>21</sup> “Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers” (CRIR or Report). Page 3. June 2020. Prepared by ECORP Consulting, Inc. and included in Appendix “C” of this Draft EIR.

<sup>22</sup> State of California Native American Heritage Commission. Welcome. Accessed October 2020 at: <http://nahc.ca.gov/>.

<sup>23</sup> Office of Planning and Research. Technical Advisory: AB52 and Tribal Cultural Resources in CEQA. June 2017. II. Legislative Intent. Accessed October 2020 at: <http://nahc.ca.gov/wp-content/uploads/2017/06/Technical-Advisory-AB-52-and-Tribal-Cultural-Resources-in-CEQA.pdf>.

Government Code §65300 et seq.) and specific plans (defined in Government Code §65450 et seq.). Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, existing state planning law requires local governments to use the same processes for adoption and amendment of specific plans as for general plans (see Government Code §65453). Therefore, where SB 18 requires consultation and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment.”<sup>24</sup>

#### CEQA Guidelines: Historical Resources Definition

CEQA Guidelines Section 15064.5(a) defines a historical resource as:

- (1) “A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4850 et seq.).
- (2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4852) including the following:
  - (A) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
  - (B) Is associated with the lives of persons important in our past;
  - (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
  - (D) Has yielded, or may be likely to yield, information important in prehistory or history.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an

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<sup>24</sup> Office of Planning and Research. California Tribal Consultation Guidelines. Page 3, I. Introduction. Accessed October 2020 at: <http://nahe.ca.gov/wp-content/uploads/2019/04/SB-18-Tribal-Consultation-Guidelines.pdf>.



historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.”<sup>25</sup>

#### CEQA Guidelines: Archaeological Resources

Section 15064.5(c) of CEQA Guidelines provides specific guidance on the treatment of archaeological resources as noted below.

- (1) “When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subdivision (a).
- (2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.
- (3) If an archaeological site does not meet the criteria defined in subdivision (a), but does meet the definition of a unique archeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c–f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
- (4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.”<sup>26</sup>

#### CEQA Guidelines: Human Remains

Public Resources Code Sections 5097.94 and 5097.98 provide guidance on the disposition of Native American burials (human remains), and fall within the jurisdiction of the Native American Heritage Commission:

- (d) “When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any Items associated with Native American burials with the appropriate Native Americans as

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<sup>25</sup> CEQA Guidelines, Section 15064.5(a)

<sup>26</sup> California Natural Resources Agency. 15064.5. Determining the Significance of Impacts to Archeological and Historical Resources, Section 15064.5(c). Accessed October 2020 at: <http://resources.ca.gov/ceqa/guidelines/art5.html>.



identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:

- (1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
  - (2) The requirements of CEQA and the Coastal Act.”<sup>27</sup>
- (e) “In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:
- (1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
    - (A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and
    - (B) If the coroner determines the remains to be Native American:
      1. The coroner shall contact the Native American Heritage Commission within 24 hours.
      2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
      3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or
  - (2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
    - (A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
    - (B) The descendant identified fails to make a recommendation; or
    - (C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.”<sup>28</sup>

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<sup>27</sup> Ibid. Section 15064.5(d).

<sup>28</sup> Ibid. Section 15064.5(e).

- (f) “As part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place.”<sup>29</sup>

### ***Local Policy & Regulations***

#### **Tulare County General Plan 2030 Update**

The General Plan has a number of policies that apply to Projects within Tulare County. General Plan policies that relate to the proposed Project are listed as follows:

**ERM-6.1 Evaluation of Cultural and Archaeological Resources** - The County shall participate in and support efforts to identify its significant cultural and archaeological resources using appropriate State and Federal standards.

**ERM-6.2 Protection of Resources with Potential State or Federal Designations** - The County shall protect cultural and archaeological sites with demonstrated potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation’s California Points of Interest and California Inventory of Historic Resources. Such sites may be of Statewide or local significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, or other values as determined by a qualified archaeological professional.

**ERM-6.3 Alteration of Sites with Identified Cultural Resources** - When planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development can be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and Mitigation Measures proposed for any impacts the development may have on the resource.

**ERM-6.4 Mitigation** - If preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records.

**ERM-6.8 Solicit Input from Local Native Americans** - The County shall continue to solicit input from the local Native American communities in cases where development may result in

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<sup>29</sup> Ibid. Section 15064.5(f).

disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance

**ERM-6.9 Confidentiality of Archaeological Sites** - The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

**ERM-6.10 Grading Cultural Resources Sites** - The County shall ensure all grading activities conform to the County's Grading Ordinance and California Code of Regulations, Title 20, § 2501 et. seq.

**LU-7.12 Historic Buildings and Areas** - The County shall encourage preservation of buildings and areas with special and recognized historic, architectural, or aesthetic value. New development should respect architecturally and historically significant buildings and areas.

Three Rivers Community Plan 2018 Update's objectives/policies<sup>30</sup> that relate to the proposed Project are listed as follows:

**Objective 4.6 Historical, Cultural and Archaeological Resources:** Preserve historical, cultural, and archaeological resources including the Kaweah post office, historical bridges, and Native American cultural resources.

**Policy 4.6.2 Preserve Cultural & Historical Value** - Limit to the extent feasible and appropriate development on sites with identified significant cultural or historical value.

**Policy 4.6.4 ERM-6.3 Alteration of Sites with Identified Cultural Resources** - When planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development can be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and mitigation measures proposed for any impacts the development may have on the resource.

**Policy 4.6.5 ERM-6.4 Mitigation** - If preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of record.

**Policy 4.6.6 ERM-6.8 Solicit Input from Local Native Americans** - The County shall continue to solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

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<sup>30</sup> Three Rivers Community Plan 2018 Update. Pages 265-266. Accessed February 2021 at <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>

**Policy 4.6.7 ERM-6.9 Confidentiality of Archaeological Sites** - The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

**Policy 4.6.8 ERM-6.10 Grading Cultural Resources Sites** - The County shall ensure all grading activities conform to the County's Grading Ordinance and California Code of Regulations, Title 14, Chapter 3 § 15064.5 et. seq.

## IMPACT EVALUATION

### Would the Project:

- a) **Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?**

Project Impact Analysis:

***Less Than Significant Impact With Mitigation***

Consultant used a variety of accepted methodologies to research/investigate the proposed Project's location in determining presence of Tribal Cultural Resources. As noted in the CRIR, Consultant provided evidence of its personnel's qualifications; a search of records by the Southern San Joaquin Valley Information Center of the California Historical Resources Information System; RealQuest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM]; aerial photos taken in 1955, 1989, 2005, 2009, 2010, and 2012 were also reviewed for any indications of property usage and built environment; Sacred Lands File Search (SLF) by the California Native America Heritage commission (NAHC); contacted the Tulare County Historical society and; an intensive pedestrian survey under the guidance of the Secretary of the Interior's Standards for the Identification of Historic Properties (NPS 1983).

To summarize the findings contained in the CRIR, Consultant concluded, "No cultural resources were identified on the property as a result of the records search and field survey. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA will be affected by the proposed Project." However, the CRIR conclusions do not eliminate the possibility of subsurface cultural resources, to wit; "Due to the presence of alluvium along the Kaweah River, and given the likelihood of pre-contact archaeological sites located along perennial waterways, the potential exists for buried pre-contact archaeological sites in the Project Area. This potential is considered to be high, as the Kaweah River exhibits significant sinuosity that reflects a meandering channel over time, which has the potential to bury archaeological sites that were once along the river's edge." To that end, consultant provides recommendation in the event of post-review discovery. The proposed Project is not anticipated to impact human remains, including those interred outside of formal cemeteries.

Consultant provided recommendations that, “Due to the sensitive nature of the Project Area location, it is recommended that all contractors be given a cultural resources awareness training prior to any ground disturbing activity on the Project. In all cases, the lead agency will require that any unanticipated (or post-review) discoveries found during Project construction be managed through a procedure designed to assess and treat the find as quickly as possible and in accordance with applicable State and federal law.”<sup>31</sup>

As noted in the CRIR regarding post-review discoveries, “There always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources. Both CEQA and Section 106 of the NHPA require the lead agency to address any unanticipated cultural resource discoveries during Project construction.”<sup>32</sup> Therefore, ECORP recommends mitigation measures be adopted and implemented by the lead agency to reduce potential adverse impacts to less than significant:

As an abundance of caution, in the unlikely event that subsurface resources or if any previously unknown human remains were encountered during ground disturbing activities, **Mitigation Measures CUL-1** and **CUL-2** subsets a – c, as recommended in the CRIR (at pages 22-23), would be implemented thereby reducing the potential level of impact to this resource as less than significant for resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or to a resource consider significant to a California Native American tribe. Based on the analysis contained in the CRIR, qualified expert consultant ECORP determined that the proposed Project would result in a less than significant impact with mitigation. Tulare County RMA agrees with and support the assessment and conclusion. Therefore, the Project would result in a ***Less Than Significant Impact With Mitigation*** to this resource.

Cumulative Impact Analysis: ***Less Than Significant Impact With Mitigation***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County 2030 General Plan Recirculated Draft Environmental Impact Report (RDEIR), and/or Three Rivers Community Plan 2018 Update.

The proposed Project will only contribute to cumulative impacts related to this Checklist Item if Project-specific impacts were to occur. Based on the analysis contained in the CRIR, qualified expert consultant ECORP determined that the proposed Project would result in a less than significant impact with mitigation. Tulare County RMA agrees with and support the assessment and conclusion. As the proposed Project would be mitigated to a level considered less than significant, cumulative impacts would also be considered ***Less Than Significant With Mitigation***.

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<sup>31</sup> “Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers” (CRIR or Report). Page 21. June 2020. Prepared by ECORP Consulting, Inc. and included in Appendix “C” of this Draft EIR.

<sup>32</sup> Ibid.

**Mitigation Measure CUL-1:**

Prior to the start of construction, all field personnel shall receive worker's environmental awareness training on cultural resources. The training, which may be conducted with other environmental or safety trainings, will provide a description of cultural resources that may be encountered during construction and outline the steps to follow in the event that a discovery is made. Documentation of this training should be reviewed and approved by the lead agency prior to the start of construction.

**Mitigation Measure CUL-2:**

If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for pre-contact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

**(a):** If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.

**(b):** If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead federal agency, the lead CEQA agency, and applicable landowner. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.

**(c):** If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Tulare County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the

landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

Conclusion:

***Less Than Significant Impact With Mitigation***

With implementation of **Mitigation Measures CUL-1 and CUL-2**, potential Project-specific and cumulative impacts related to this Checklist Item will be reduced to a level of ***Less Than Significant With Mitigation***.

**b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?**

Project Impact Analysis:

***Less Than Significant Impact With Mitigation***

As noted in Response to Item 3.5.a), in the CRIR, consultant concluded, “No cultural resources were identified on the property as a result of the records search and field survey. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA will be affected by the proposed Project.” However, the CRIR conclusions do not eliminate the possibility of subsurface cultural resources, to wit; “Due to the presence of alluvium along the Kaweah River, and given the likelihood of pre-contact archaeological sites located along perennial waterways, the potential exists for buried pre-contact archaeological sites in the Project Area. This potential is considered to be high, as the Kaweah River exhibits significant sinuosity that reflects a meandering channel over time, which has the potential to bury archaeological sites that were once along the river’s edge.” Based on the analysis contained in the CRIR, qualified expert consultant ECORP determined that the proposed Project would result in a less than significant impact with mitigation. Tulare County RMA agrees with and support the assessment and conclusion. With the implementation of **Mitigation Measures CUL-1 and CUL-2**, ***Less Than Significant Impacts With Mitigation*** related to this Checklist Item will occur.

Cumulative Impact Analysis:

***Less Than Significant Impact With Mitigation***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County 2030 General Plan Recirculated Draft Environmental Impact Report (RDEIR) and/or Three Rivers Community Plan 2018 Update.

The proposed Project will only contribute to cumulative impacts related to this Checklist Item if Project-specific impacts were to occur. Based on the analysis contained in the CRIR, qualified expert consultant ECORP determined that the proposed Project would result in a less than significant impact with mitigation. Tulare County RMA agrees with and support the assessment and conclusion. The proposed Project will be mitigated to ***Less Than Significant Project-specific and Cumulative*** levels.

Mitigation Measure(s): ***See Mitigation Measures CUL-1 and CUL 2***

Conclusion: ***Less Than Significant Impact With Mitigation***

With implementation of **Mitigation Measures CUL-1**, potential Project-specific and cumulative impacts related to this Checklist Item will be reduced ***Less Than Significant Impact With Mitigation***.

**c) Disturb any human remains, including those interred outside of formal cemeteries?**

Project Impact Analysis: ***Less Than Significant Impact With Mitigation***

See discussion at Item a), earlier. Similar to the conclusion in Items a) and b), the CRIR did not locate or identify any human remains. However, as an abundance of caution, in the unlikely event of discovery of human remains, **Mitigation Measures CUL-1** would be implemented. With implementation of **Mitigation Measure CUL-1**, this Checklist Item will be reduced to a ***Less Than Significant Project-specific Impact***.

Cumulative Impact Analysis: ***Less Than Significant Impact With Mitigation***

The geographic area of this cumulative analysis is Tulare County. The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County 2030 General Plan Recirculated Draft Environmental Impact Report (RDEIR), and/or Three Rivers Community Plan 2018 Update.

It is not anticipated that Native American remains will be found at any site. However, consistent with CEQA requirements, **Mitigation Measure CUL-1** is included in the unlikely event that if Native American remains are unearthed during any ground disturbance activities, all work will immediately halt and the Native American Heritage Association will be contacted to assess the findings and make appropriate mitigation recommendations. Based on the analysis contained in the CRIR, qualified expert consultant ECORP determined that the proposed Project would result in a less than significant impact with mitigation. Tulare County RMA agrees with and support the assessment and conclusion. As Project-specific impacts will be mitigated to a less than significant level, Cumulative Impacts will result in a level of ***Less Than Significant Project-specific and Cumulative Impacts With Mitigation***.



Conclusion:

***Less Than Significant Impact With Mitigation***

With implementation of **Mitigation Measures CUL-1** and **CUL-2**, potential ***Project-specific and cumulative impacts*** related to this Checklist Item will be reduced ***Less Than Significant*** levels.

## DEFINITIONS/ACRONYMS

### Acronyms

AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
BLM	Bureau of Land Management
CalNAGPRA	California Native American Graves Protection and Repatriation Act
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHRIS	California Historic Resources Information System
CRHR	California Register of Historical Resources
CRIR	“Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers”
GLO	General Land Office
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act of 1966
NRHP	National Register of Historic Places
OHP	California State Office of Historic Preservation
RDEIR	Recirculated Draft Environmental Impact Report
RMA	Resource Management Agency
SB	Senate Bill
SHPO	State Historic Preservation Officer
SSJVIC	Southern San Joaquin Valley Information Center
USGS	United States Geological Survey
UTM	Universal Transverse Mercator

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# Energy

## Chapter 3.6

### SUMMARY OF FINDINGS

Based on the impact analysis below, potential impacts to Energy as a result of the proposed Project are determined to be ***Less Than Significant***. The impact determinations in this chapter are based upon information obtained from the Project Description, the applicant's agent providing estimates of pertinent energy-related consumption, and numerous State of California energy-related sources that are publicly and readily available. A detailed review of potential impacts is provided in the analysis below.

### INTRODUCTION

Energy consumption is analyzed in an EIR because of the environmental impacts associated with its production and usage. Such impacts include the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emission of pollutants during both the production and consumption phases. Energy usage is typically quantified using the British Thermal Unit (BTU). The BTU is the amount of energy that is required to raise the temperature of one pound of water by one degree Fahrenheit. As points of reference, the approximate amount of energy contained in a gallon of gasoline, a cubic foot of natural gas, and a kilowatt hour (kWhr) of electricity are 123,000 BTUs, 1,000 BTUs, and 3,400 BTUs, respectively. Natural gas usage is expressed in therms. A therm is equal to 100,000 BTU. Energy conservation is embodied in many federal, state and local statutes and policies. At the federal level, energy standards apply to numerous products (e.g., the EnergyStar™ program) and transportation (e.g., fuel efficiency standards). At the state level, Title 24 of the California Administrative Code sets energy standards for buildings, rebates/tax credits are provided for installation of renewable energy systems, and the Flex Your Power program promotes conservation in multiple areas. Also, as described further in this section, the Tulare County General Plan currently contains policies that promotes energy conservation and efficiency measures, energy conservation awareness, and renewable energy.

### California Environmental Quality Act (CEQA) Requirements

“In 1974, the Legislature adopted the Warren-Alquist State Energy Resources Conservation and Development Act. (Pub. Resources Code, § 25000 et seq.) That act created what is now known as the California Energy Commission, and enabled it to adopt building energy standards. (See, e.g., id. at § 25402.) At that time, the Legislature found the “rapid rate of growth in demand for electric energy is in part due to wasteful, uneconomic, inefficient, and unnecessary uses of power and a continuation of this trend will result in serious depletion or irreversible commitment of energy, land and water resources, and potential threats to the state’s environmental quality.” (Id. at § 25002; see also § 25007 (“It is further the policy of the state and the intent of the Legislature to

employ a range of measures to reduce wasteful, uneconomical, and unnecessary uses of energy, thereby reducing the rate of growth of energy consumption, prudently conserve energy resources, and assure statewide environmental, public safety, and land use goals”))

The same year that the Legislature adopted Warren-Alquist, it also added section 21100(b)(3) to CEQA, requiring environmental impact reports to include “measures to reduce the wasteful, inefficient, and unnecessary consumption of energy.” As explained by a court shortly after it was enacted, the “energy mitigation amendment is substantive and not procedural in nature and was enacted for the purpose of requiring the lead agencies to focus upon the energy problem in the preparation of the final EIR.” (People v. County of Kern (1976) 62 Cal.App.3d 761, 774 (emphasis added)). It compels an affirmative investigation of the project’s potential energy use and feasible ways to reduce that use.

Though Appendix F of the CEQA Guidelines has contained guidance on energy analysis for decades, implementation among lead agencies has not been consistent. (See, e.g., California Clean Energy Committee v. City of Woodland, supra, 225 Cal.App.4th 173, 209.) While California is a leader in energy conservation, the importance of addressing energy impacts has not diminished since 1974. On the contrary, given the need to avoid the effects of climate change, energy use is an issue that we cannot afford to ignore. As the California Energy Commission’s Integrated Energy Policy Report (2016) explains:

Energy fuels the economy, but it is also the biggest source of greenhouse gas emissions that lead to climate change. Despite California’s leadership, Californians are experiencing the impacts of climate change including higher temperatures, prolonged drought, and more wildfires. There is an urgent need to reduce greenhouse gas emissions and increase the state’s resiliency to climate change. . . . ¶ . . . With transportation accounting for about 37 percent of California’s greenhouse gas emissions in 2014, transforming California’s transportation system away from gasoline to zero emission and near-zero-emission vehicles is a fundamental part of the state’s efforts to meet its climate goals. Energy efficiency and demand response are also key components of the state’s strategy to reduce greenhouse gas emissions. (Id. at pp. 5, 8, 10.) Appendix F was revised in 2009 to clarify that analysis of energy impacts is mandatory. OPR today proposes to add a subdivision in section 15126.2 on energy impacts to further elevate the issue, and remove any question about whether such an analysis is required.”<sup>1</sup>

Further, an “Explanation of Proposed Amendments” contained in the Proposed Update (and now adopted amendments) to the CEQA Guidelines documents stated that OPR proposed to add a new subdivision (b) to section 15126.2 which discusses the required contents of an environmental impact report. The new subdivision would specifically address the analysis of a project’s potential energy impacts. This addition is necessary for several reasons explained as follows.<sup>2</sup>

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<sup>1</sup> State of California. Office of Planning and Research. Proposed Update to the CEQA Guidelines/ November 2017. Pages 65-66. Accessed June 2019 at: [http://opr.ca.gov/docs/20171127\\_Comprehensive\\_CEQA\\_Guidelines\\_Package\\_Nov\\_2017.pdf](http://opr.ca.gov/docs/20171127_Comprehensive_CEQA_Guidelines_Package_Nov_2017.pdf)

<sup>2</sup> Ibid. 66.

“The first sentence clarifies that an EIR must analyze whether a project will result in significant environmental effects due to “wasteful, inefficient, or unnecessary consumption of energy.” This clarification is necessary to implement Public Resources Code section 21100(b)(3). Since the duty to impose mitigation measures arises when a lead agency determines that the project may have a significant effect, section 21100(b)(3) necessarily requires both analysis and a determination of significance in addition to energy efficiency measures. (Pub. Resources Code, § 21002.)

The second sentence further clarifies that all aspects of the project must be considered in the analysis. This clarification is consistent with the rule that lead agencies must consider the “whole of the project” in considering impacts. It is also necessary to ensure that lead agencies consider issues beyond just building design. (See, e.g., *California Clean Energy Com. v. City of Woodland*, supra, 225 Cal.App.4th at pp. 210-212.) The analysis of vehicle miles traveled provided in proposed section 15064.3 (implementing Public Resources Code section 21099 (SB 743)) on transportation impacts may be relevant to this analysis.

The third sentence signals that the analysis of energy impacts may need to extend beyond building code compliance. (Ibid.) The requirement to determine whether a project’s use of energy is “wasteful, inefficient, and unnecessary” compels consideration of the project in its context. (Pub. Resources Code, § 21100(b)(3).) While building code compliance is a relevant factor, the generalized rules in the building code will not necessarily indicate whether a particular project’s energy use could be improved. (*Tracy First v. City of Tracy* (2009) 177 Cal.App.4th 912, 933 (after analysis, lead agency concludes that project proposed to be at least 25% more energy efficient than the building code requires would have a less than significant impact); see also CEQA Guidelines, Appendix F, § II.C.4 (describing building code compliance as one of several different considerations in determining the significance of a project’s energy impacts).) That the Legislature added the energy analysis requirement in CEQA at the same time that it created an Energy Commission authorized to impose building energy standards indicates that compliance with the building code is a necessary but not exclusive means of satisfying CEQA’s independent requirement to analyze energy impacts broadly.

The new proposed [now adopted] subdivision (b) also provides a cross-reference to Appendix F. This cross-reference is necessary to direct lead agencies to the more detailed provisions contained in that appendix. Finally, new proposed subdivision (b) cautions that the analysis of energy impacts is subject to the rule of reason, and must focus on energy demand actually caused by the project. This sentence is necessary to place reasonable limits on the analysis. Specifically, it signals that a full “lifecycle” analysis that would account for energy used in building materials and consumer products will generally not be required. (See also Cal. Natural Resources Agency, Final Statement of Reasons for Regulatory

Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97 (Dec. 2009) at pp. 71-72.)”<sup>3</sup>

Specifically, Section 15121.6 added new sub-section (b), to wit: “(b) Energy Impacts. If the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary consumption of energy, the EIR shall analyze and mitigate that energy use. This analysis should include the project’s energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project’s size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project. (Guidance on information that may be included in such an analysis is presented in Appendix F.) This analysis is subject to the rule of reason and shall focus on energy demand that is caused by the project. This analysis may be included in related analyses of air quality, greenhouse gas emissions or utilities in the discretion of the lead agency.”<sup>4</sup>

#### CEQA Thresholds of Significance

- Result in significant environmental effects due to wasteful, inefficient, or unnecessary consumption of energy.
- The project’s energy use for all project phases and components, including transportation-related energy, during construction and operation.
- The project’s size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project.
- Analysis is subject to the rule of reason and shall focus on energy demand that is caused by the project.

### **ENVIRONMENTAL SETTING**

#### Natural Gas and Electric Service

“Southern California Edison provides electric service to the majority of Tulare County, including the majority of the San Joaquin Valley and the foothills. Natural gas service is primarily provided by The Gas Company (formerly Southern California Gas Company). Pacific Gas & Electric also serves northern Tulare County’s electric needs on limited basis. The electrical facilities network includes both overhead and underground lines, with new development required to install underground service lines. All utility providers indicate that additional service should be available to new development, depending on the necessary load of the services requested.”<sup>5</sup>

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<sup>3</sup> Op. Cit. 66-67.

<sup>4</sup> Op. Cit. 67-68.

<sup>5</sup> Tulare County General Plan 2030 Update Recirculated Draft EIR. 3.4 Energy and Global Climate Change. February 2010. Page 3.4-13  
Accessed June 2019 at: <http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf>

### Existing Energy Consumption

Electrical and natural gas services for the Project area are provided by Southern California Edison (SCE), and Southern California Gas Company (SoCal Gas), respectively. In 2018, SCE provided 4,422.976762 gigawatt-hours (GWh) of electricity to Tulare County customers.<sup>6</sup> Also in 2016, SoCal Gas provided a total of 157.285390 million therms in Tulare County<sup>7</sup> See **Table 3.6-1**.

<b>Table 3.6-1</b>		
<b>2018 County and State Energy Demands on Energy Providers</b>		
<b>Southern California Gas and Southern California Edison<sup>89</sup></b>		
<b>Demand by:</b>	<b>Electricity (in MWh)</b>	<b>Gas (in Therms)</b>
Tulare County	<sup>1</sup> 4,433,976.762	<sup>2</sup> 157,285,390
SCE and SCG Service Areas	<sup>1</sup> 83,399,988.199	<sup>2</sup> 5,156,078,935
<i>Notes: 1 Converted to MWh as CEC Energy Reports expresses in Millions of kWh (GWh).</i>		
<i>2 Converted to MWh as CEC Energy Reports expresses in Millions of Therms.</i>		

It is noted that the Project site anticipates being served by electricity from SCE, but will rely on liquid propane gas (LPG) as the fuel source to heat the oil which will be mixed with the asphalt. As such, SoCal Gas will not be utilized or impacted.

## **REGULATORY SETTING**

### ***Federal Agencies & Regulations***

#### Energy Policy Act of 2005

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Act, consumers and businesses can obtain federal tax credits for purchasing fuel efficient appliances and products, including buying hybrid vehicles, building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

### ***State Agencies & Regulations***

#### California Energy Commission

The California Energy Commission (CEC) was created in 1974 to serve as the state's primary energy policy and planning agency. The CEC is tasked with reducing energy costs and

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<sup>6</sup> California Energy Commission. California Energy Consumption Database. Electricity Consumption by County. Energy reports accessed August 2019 at: <http://ecdms.energy.ca.gov/elecbycounty.aspx>.

<sup>7</sup> Ibid. Gas Consumption by County. Accessed August 2019 at: <http://ecdms.energy.ca.gov/gasbycounty.aspx>.

<sup>8</sup> Op. Cit. Accessed August 2019 at: <http://ecdms.energy.ca.gov/elecbycounty.aspx>

<sup>9</sup> Op. Cit. Accessed August 2019 at: <http://ecdms.energy.ca.gov/elecbyplan.aspx>



environmental impacts of energy use - such as greenhouse gas emissions - while ensuring a safe, resilient, and reliable supply of energy.

California 2008 Energy Action Plan Update<sup>10</sup>

The 2008 update to the 2005 Energy Action Plan II is the State's principal energy planning and policy document (State of California 2008). The updated document examines the state's ongoing actions in the context of global climate change. The 2005 Energy Action Plan II continues the goals of the original 2003 Energy Action Plan, describes a coordinated implementation plan for state energy policies, and identifies specific action areas to ensure that California's energy resources are adequate, affordable, technologically advanced, and environmentally sound. In accordance with this plan, the first-priority actions to address California's increasing energy demands are energy efficiency and demand response (i.e., reduction of customer energy usage during peak periods to address system reliability and support the best use of energy infrastructure). Additional priorities include the use of renewable sources of power and distributed generation (i.e., the use of relatively small power plants near or at centers of high demand). To the extent that these actions are unable to satisfy the increasing energy demand and transmission capacity needs, clean and efficient fossil-fired generation is supported. The California 2008 Energy Action Plan Update examines policy changes in the areas of energy efficiency, demand response, renewable energy, electricity reliability and infrastructure, electricity market structure, natural gas supply and infrastructure, research and development, and climate change.

State of California Integrated Energy Policy (SB 1389)

State of California Integrated Energy Policy (SB 1389) In 2002, the Legislature passed Senate Bill 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels, for the California Energy Policy Report. The plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for Zero Emission Vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicles miles traveled and accommodate pedestrian and bicycle access.

The CEC adopted the 2013 Integrated Energy Policy Report on February 20, 2014. The 2013 Integrated Energy Policy Report provides the results of the CEC's assessment of a variety of issues, including:

- Ensuring that the state has sufficient, reliable, and sage energy infrastructure to meet current and future energy demands;

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<sup>10</sup> California Energy Commission. 2008 Energy Action Plan. February 2008. Accessed August 2019 at: <https://ww2.energy.ca.gov/2008publications/CEC-100-2008-001/CEC-100-2008-001.PDF>

- Monitoring publicly-owned utilities' progress towards achieving 10-year energy efficiency targets; defining and including zero-net-energy goals in state building standards;
- Overcoming challenges to increased use of geothermal heat pump/ground loop technologies and procurement of biomethane;
- Using demand response to meet California's energy needs and integrate renewable technologies;
- Removing barriers to bioenergy development; planning for California's electricity infrastructure needs given potential retirement of power plants and the closure of the San Onofre Nuclear Generating Station;
- Estimating new generation costs for utility-scale renewable and fossil-fueled generation;
- Planning for new or upgraded transmission infrastructure;
- Monitoring utilities' progress in implementing past recommendations related to nuclear power plants;
- Tracking natural gas market trends;
- Implementing the Alternative and Renewable Fuel and Vehicle Technology Program; and,
- Addressing the vulnerability of California's energy supply and demand infrastructure to the effects of climate change; and planning for potential electricity system needs in 2030.

#### California Senate Bill 1037 and Assembly Bill 2021

In 2003, the CPUC and CEC adopted an Energy Action Plan that prioritized resources for meeting California's future energy needs, with energy efficiency identified as the highest priority. Since then, this policy goal has been codified as SB 1037 and AB 2021 into statute through legislation that requires electric utilities to meet their resource needs first with energy efficiency.<sup>11</sup> This policy also set new targets for statewide annual energy demand reductions of 32,000 GWh and 800 million therms from business-as-usual<sup>12</sup>—enough to power more than 5 million homes or replace the need to build about ten new large power plants (500 MW each). These targets represent a higher goal than existing efficiency targets established by CPUC for investor-owned utilities due to the inclusion of innovative strategies. Achieving the State's energy efficiency targets will require coordinated efforts from the State, the federal government, energy companies, and customers. The California Air Resources Board (ARB) will work with CEC and CPUC to facilitate these partnerships. California's energy efficiency programs for buildings and appliances have generated more than \$50 billion in savings over the past three decades.

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<sup>11</sup> SB 1037 (Kehoe, Chapter 366, Statutes of 2005) and AB 2021 (Levine, Chapter 734, Statutes of 2006) directed electricity corporations subject to CPUC's authority and publicly-owned electricity utilities to first meet their unmet resource needs through all available energy efficiency and demand response resources that are cost-effective, reliable, and feasible.

<sup>12</sup> The savings targeted here are additional to savings currently assumed to be incorporated in CEC's 2007 demand forecasts. However, CEC has initiated a public process to better determine the quantity of energy savings from standards, utility programs, and market effects that are embedded in the baseline demand forecast.

### California Global Warming Solutions Act of 2006 (Assembly Bill 32)

California Global Warming Solutions Act of 2006 (Assembly Bill 32) Assembly Bill 32 (Health and Safety Code Sections 38500–38599; AB 32), also known as the California Global Warming Solutions Act of 2006, commits the state to achieving year 2000 GHG emission levels by 2010 and year 1990 levels by 2020. To achieve these goals, AB 32 tasked the California Public Utilities Commission and CEC with providing information, analysis, and recommendations to the California Air Resources Board regarding ways to reduce GHG emissions in the electricity and natural gas utility sectors.

### California Energy Code (Title 24, Part 6, Building Energy Efficiency Standards)

California Code of Regulations Title 24, Part 6 comprises the California Energy Code, which was adopted to ensure that building construction, system design and installation achieve energy efficiency. The California Energy Code was first established in 1978 by the CEC in response to a legislative mandate to reduce California's energy consumption, and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings. The standards are updated periodically to increase the baseline energy efficiency requirements. The 2013 Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings and include requirements to enable both demand reductions during critical peak periods and future solar electric and thermal system installations. Although it was not originally intended to reduce greenhouse gas (GHG) emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

### California Green Building Standards Code (Title 24, Part II, CALGreen)

The California Building Standards Commission adopted the California Green Buildings Standards Code (CALGreen in Part 11 of the Title 24 Building Standards Code) for all new construction statewide on July 17, 2008. Originally a volunteer measure, the code became mandatory in 2010 and the most recent update (2013) went into effect on January 1, 2014. CALGreen sets targets for energy efficiency, water consumption, dual plumbing systems for potable and recyclable water, diversion of construction waste from landfills, and use of environmentally sensitive materials in construction and design, including eco-friendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels. The 2013 CALGreen Code includes mandatory measures for non-residential development related to site development; water use; weather resistance and moisture management; construction waste reduction, disposal, and recycling; building maintenance and operation; pollutant control; indoor air quality; environmental comfort; and outdoor air quality. Mandatory measures for residential development pertain to green building; planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; environmental quality; and installer and special inspector qualifications.

### Clean Energy and Pollution Reduction Act (SB 350)

The Clean Energy and Pollution Reduction Act (SB 350) was passed by California Governor Brown on October 7, 2015, and establishes new clean energy, clean air, and greenhouse gas reduction goals for the year 2030 and beyond. SB 350 establishes a greenhouse gas reduction target of 40 percent below 1990 levels for the State of California, further enhancing the ability for the state to meet the goal of reducing greenhouse gas emissions by 80 percent below 1990 levels by the year 2050.

### Renewable Portfolio Standard (SB 1078 and SB 107)

Established in 2002 under SB 1078, the state's Renewables Portfolio Standard (RPS) was amended under SB 107 to require accelerated energy reduction goals by requiring that by the year 2010, 20 percent of electricity sales in the state be served by renewable energy resources. In years following its adoption, Executive Order S-14-08 was signed, requiring electricity retail sellers to provide 33 percent of their service loads with renewable energy by the year 2020. In 2011, SB X1-2 was signed, aligning the RPS target with the 33 percent requirement by the year 2020. This new RPS applied to all state electricity retailers, including publicly owned utilities, investor-owned utilities, electrical service providers, and community choice aggregators. All entities included under the RPS were required to adopt the RPS 20 percent by year 2020 reduction goal by the end of 2013, adopt a reduction goal of 25 percent by the end of 2016, and meet the 33 percent reduction goal by the end of 2020. In addition, the Air Resources Board, under Executive Order S-21-09, was required to adopt regulations consistent with these 33 percent renewable energy targets.

## ***Local Policy & Regulations***

### Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed below.

**ERM-4.1 Energy Conservation and Efficiency Measures** - The County shall encourage the use of solar energy, solar hot water panels, and other energy conservation and efficiency features in new construction and renovation of existing structures in accordance with State law.

**ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation** - The County shall promote the planting and maintenance of shade trees along streets and within parking areas of new urban development to reduce radiation heating;

**ERM-4.3 Local and State Programs** - The County shall participate, to the extent feasible, in local and State programs that strive to reduce the consumption of natural or man-made energy sources.

**ERM-4.4 Promote Energy Conservation Awareness** - The County should coordinate with local utility providers to provide public education on energy conservation programs

**AQ-3.5 Alternative Energy Design** - The County shall encourage all new development, including rehabilitation, renovation, and redevelopment, to incorporate energy conservation and green building practices to maximum extent feasible.

#### Three Rivers Community Plan Update<sup>13</sup>

The Three Rivers Community Plan Update contains policies that apply to projects within the community of Three Rivers that support the County's GHG reduction efforts as the proposed Project would by reducing Vehicle Miles Travelled (VMT):

**Policy 4.1.11 Climate Action Plan (CAP)** - Requires a 6% reduction of GHG emissions for development projects consisting of 50 or more dwelling units or equivalent travel demand for non-residential uses; and

**Policy 6.2.2 Link Commercial Development to Transportation Corridors** - Requires commercial development to locate in areas with adequate access to major transportation corridors.

### **PROJECT SPECIFIC ENERGY USAGE**

#### Electricity and Natural Gas

Implementation of the proposed Project would result in the commitment of additional electricity through operation of the Project. Instead of natural gas service, the Project will rely on compressed natural gas delivered to the site on an as needed basis.

#### Construction Fuel Consumption

As construction-related activities will be one-time, short-duration and temporary in nature, gasoline and diesel fuel have not been estimated. Typical construction equipment usage will not occur for this Project as there will be minimal land shaping as the site is flat (as such, grading will be kept to a minimum)

#### Operational Vehicle Fuel Consumption

In order to estimate fuel consumption, it is necessary to estimate vehicle type(s), daily distance(s) travelled (in vehicle miles travelled (VMT)), and average fuel economy by vehicle type(s). According to the Tulare County Association of Governments (TCAG), all of Tulare County averaged 10,650,825 million VMT/day.<sup>14</sup> Based on this estimate, the estimated 25,800 VMT reduced by the Project to the figure provided by TCAG would result in a **reduction** (emphasis added) of approximately 0.0024% of all daily VMT in Tulare County.

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<sup>13</sup> Three Rivers Community Plan 2018 Update.

<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/130Part%20III%20Community%20Plans%20of%207/007Three%20Rivers/COMMUNITY%20PLAN%20GPA%2014-004%20THREE%20RIVERS.pdf>.

<sup>14</sup> Tulare County Association of Government. E-mail received from Roberto Brady, Principal Regional Planner. August 6, 2019.

As noted in the Traffic Impact Study (TIS, included in Appendix “E” of this Draft EIR) prepared by qualified expert consultant VRPA, “Tourism is the largest and most important industry in the Three Rivers area, as the town is situated near Sequoia National Forest, which receives over 1.2 million annual visitors, and Kings Canyon National Park, which receives nearly 700,000 annual visitors. The industries and businesses surrounding Three Rivers are almost all related to visitors passing through, en route to the Sequoia National Forest and Kings Canyon National Park. The Three Rivers Community and surrounding area features a multitude of boutique lodging facilities, restaurants, and small retail shops to support the area's small population and transient travelers.

The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable accommodations or stay in properties located outside the market area. Seeking accommodations outside of the desired market area increases VMT since travelers would be forced to travel longer distances to secure accommodations. The development of the Project would reduce the unaccommodated demand, thus reducing VMT in the market area.”<sup>15</sup>

Project operation is anticipated to result in **savings** (emphasis added) of an estimated 860 vehicles<sup>16</sup> travelling 12,400 miles one-way (or 25,800 miles two-way) during the highest travel days (Saturdays) based on a distance of 30-miles to the next nearest lodgings (in Visalia). Saturday only VMT would be reduced by 161,200 (one-way) and 322,400 (two-ways) during the peak travel months (June-August). Using vehicle fleet mix data provided by the applicant and average fuel economy information provided by the Bureau of Transportation Statistics (i.e., 23.96 mpg), if the proposed Project-related VMT could result in the consumption of approximately 517.5 gallons of gasoline fuel travelling one-way (or 1,035 gallons of gasoline fuel travelling two-ways) each Saturday during peak travel months. However, rather than usage, this estimate reflects **savings** (emphasis added) as VMT would be reduced as a result of the proposed Project.

## CEQA REQUIREMENTS AND ENERGY CONSERVATION STANDARDS

In addition to the recommended thresholds for environmental analysis provided in Appendix G of the CEQA Guidelines, Appendix F requires that an EIR disclose and discuss the potential impacts of a project on energy resources and conservation. An EIR’s discussion of impacts on energy resources should provide analysis and discussion of the project’s potential to result in the wasteful, inefficient, or irretrievable commitment of energy resources, with particular attention towards electrical, natural gas, and transportation fuel supplies. While no specific thresholds are provided by the CEQA Guidelines, Appendix F offers several recommendations for inclusion in an analysis of impacts on energy resources to determine whether a project would:

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<sup>15</sup> *Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020*” (TIS) report. Pages 25-26. Prepared by VRPA Technologies, Inc., (included in Appendix “E” of this Draft EIR).

<sup>16</sup> Ibid. Table 3-1 Page 14.

- a. Use large amounts of fuel or energy in an unnecessary, wasteful, or inefficient manner;
- b. Constrain local or regional energy supplies, affect peak and base periods of electrical or natural gas demand, require or result in the construction of new electrical generation and/or transmission facilities, or necessitate the expansion of existing facilities, the construction of which could cause significant environmental effects; or
- c. Conflict with existing energy standards, including standards for energy conservation.

By comparison, a similar Hampton Inn & Suites (in Delano, CA) used approximately 978 kWh during 2019-2020. As the proposed Project will not have a ballroom and is at a higher elevation (thereby, reducing the need for cooling air conditioning versus), it is anticipated that the proposed Project would consume between 850+ to 100kWh of electricity.<sup>17</sup>

Operation of the proposed Project would result in the demand for approximately 100 MWh/year of electricity. Based on 2018 energy demands and capacity of service providers (in this case, Southern California Edison (SCE) and Southern California Gas (SoCal Gas)) for the Project area, estimated operational demand for electricity and natural gas as part of the Project would represent approximately 0.000022 percent of Tulare County's and 0.0000012 percent of SCE's total 2018 electricity demands.

As shown earlier in **Table 4-1**, based on comparisons of the Project's energy demands with Tulare County's and SCE and SoCal Gas Service Areas demand and service capacity in total, the proposed Project is not expected to result in the use of a large amount of fuel or energy in an unnecessary, wasteful, or inefficient manner, nor would it affect regional supplies or peak/base periods of demand as the estimated energy demand is typical for a Project of this size, and would result in a negligible increase in regional energy demands. As such, the proposed Project would not necessitate the expansion of existing facilities or construction of new energy generation or transmission facilities beyond the onsite facilities proposed as part of the Project to serve the new development.

## IMPACT EVALUATION

### Would the project:

- a) **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

#### Project Impact Analysis:

#### ***Less Than Significant Impact***

During construction-related activities, the proposed Project would involve the use and consumption of non-renewable building materials such as concrete, metals, and plastics. Nonrenewable resources and energy would also be consumed in the manufacturing and

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<sup>17</sup> Information provided by Mr. Christopher Ott, Hospitality Asset Management to Hector Guerra, Chief Environmental Planner, Tulare County RMA, via e-mail October 13, 2020.

transportation of building materials, as well as grading and construction for the project. Operation of the proposed Project will consume energy in the form of electricity and propane for multiple purposes including building heating and cooling, lighting, appliances, and electronics. Energy in the form of gasoline and diesel fuel will be used for private vehicles and delivery vehicles that will travel to (and from) the proposed Project site. Use of nonrenewable materials and energy sources represents an irretrievable commitment of resources.

The proposed Project includes features that would reduce the commitment of nonrenewable resources, including: energy-efficiency and water conservation features and mitigation measures (see measures GHG-1 and GHG-2) in project design.

As noted earlier, a similar Hampton Inn & Suites (in Delano, CA) used approximately 978 kWh during 2019-2020. As the proposed Project will not have a ballroom and is at a higher elevation (thereby, reducing the need for cooling air conditioning versus), it is anticipated that the proposed Project would consume between 850+ to 100kWh of electricity.

Furthermore, the proposed Project will not result in new traffic as it is intended to provide additional services for visitors to the Project area, thereby capture existing vehicle trips. “The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure [lodging] accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable [lodging] accommodations or stay in properties located outside the market area. Seeking [lodging] accommodations outside of the desired market area increases VMT since travelers would be forced to travel longer distances to secure [lodging] accommodations. The development of the Project would reduce the unaccommodated demand, thus reducing VMT in the market area.”<sup>18</sup> According to the Feasibility Study, there are an estimate 680 hotel rooms (that is, on average daily room count) of similar lodging accommodations located an average of 30 miles from the proposed Project site. The majority of alternative lodging is located in Visalia, while Exeter and Sequoia National Park each have one lodging accommodation site. As such, multiple day visitors/tourist to the Three Rivers area would have to drive an average of 60 miles (round-trip) versus no miles with the proposed Project. This alternative would likely result in increased air pollutants, increased greenhouse gas emissions, and increased energy consumption (in the form of gasoline and/or diesel fuels) as a result of greater vehicle distances travelled (i.e., vehicle miles travelled or VMT) by visitors/tourists to stay at locations with lodging accommodations outside of Three Rivers.

Therefore, the proposed Project will have a ***Less Than Significant Impact*** resulting on the energy resource.

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<sup>18</sup> “Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020” (TIS) report. Pages 25-26. Prepared by VRPA Technologies, Inc., (included in Appendix “E” of this Draft EIR).



Cumulative Impact Analysis: *Less Than Significant Impact*

The geographic area of this cumulative analysis is Tulare County, the 8-County area of the San Joaquin Valley, and the Southern California Edison company service area. The proposed Project would incrementally contribute to impacts on energy resource demand and conservation when considering the cumulative impact of concurrently planned projects. However, like the proposed Project, discretionary actions requiring agency approval are required to comply with local, regional, state, and federal policies designed to reduce wasteful energy consumption, and improve overall energy conservation and sustainability. Therefore, it is not anticipated that the Project's contribution to cumulative impacts generated with projects provided in Chapter 4 Summary of Cumulative Impacts, would result in a significantly considerable wasteful use of energy resources, such that the Project, and other cumulative projects, would have a cumulative effect on energy conservation. Cumulative impacts as of a result of the Project would be *Less Than Significant*.

Mitigation Measure(s): *None Required.*

Conclusion: *Less Than Significant Impact*

**b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

Project Impact Analysis: *Less Than Significant Impact*

The proposed Project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The proposed Project is consistent with the Tulare County General Plan, the Three Rivers Community Plan and the Tulare County Climate Action Plan. These three plans contain policies intended to assist the County in achieving its goals for energy consumption and conservation goals. Therefore, the proposed Project will have no impact regarding this resource.

Cumulative Impact Analysis: *Less Than Significant Impact*

There are no other hotel (or motel) or other development proposals within the vicinity of the proposed Project or within the community of Three Rivers. The proposed Projects is consistent with the Tulare County General Plan, Three Rivers Community Plan, and the Tulare County CAP. The proposed Project would contribute to adverse impacts on energy resource demand and conservation when considering the cumulative impact of concurrently planned projects; however, like the proposed Project, new development projects are required to comply with local, regional, state, and federal policies designed to reduce wasteful energy consumption, and improve overall energy conservation and sustainability. For instance, all projects involving the development of new buildings must be designed to conform to CALGreen and the 2019 California Energy Code. Furthermore, the proposed Project would reduce the overall VMT thereby having a net positive benefit resulting from reduction in transportation fuel consumption within the County. Therefore, the proposed Project will have a *Less Than Significant Impact* on energy resources.

Mitigation Measure(s):

*None Required*

Conclusion:

*Less Than Significant Impact*

The proposed Project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the proposed Project will have a ***Less Than Significant Impact*** regarding this resource.

## DEFINITIONS AND ACRONYMS

### Definitions

**British Thermal Unit:** British Thermal Unit (BTU) is the amount of energy that is required to raise the temperature of one pound of water by one degree Fahrenheit. As points of reference, the approximate amount of energy contained in a gallon of gasoline, a cubic foot of natural gas, and a kilowatt hour (kWhr) of electricity are 123,000 BTUs, 1,000 BTUs, and 3,400 BTUs, respectively. Natural gas usage is expressed in therms. A therm is equal to 100,000 BTU.

### Acronyms

AB	Assembly Bill (State of California Assembly)
CARB or ARB	California Air Resources Board
BTU	British Thermal Unit
CALGreen	California Green Buildings Standards Code
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CPUC	California Public Utilities Commission
DEIR	Draft Environmental Impact Report
EIR	Environmental Impact Report
GHG	Greenhouse Gas
GWh	Gigawatt Hour
kWh	Kilowatt Hour
MPG	Miles Per Gallon
MWh	Megawatt Hour
N/A	Not Applicable
OPR	Office of Planning and Research
SB	Senate Bill (State of California Senate)
SCE	Southern California Edison Company
TIS	Traffic Impact Study
U.S. DOT	United States Department of Transportation
VMT	Vehicle Miles Travelled
VRPA	Valley Research and Planning Associates
w/i	within

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# Geology and Soils

## Chapter 3.7

### SUMMARY OF FINDINGS

The proposed Three Rivers-Hampton Inn & Suite (Project) will result in *Less Than Significant Impacts* related to Geology and Soils. The impact analyses and determinations in this chapter are based upon information obtained from the References listed at the end of this chapter. A detailed review of potential impacts is provided in the analysis below.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Geology and Soils. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2(a), “[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

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<sup>1</sup> CEQA Guidelines, Section 15126.2(a)

The “Environmental Setting” section provides a description of the Geology and Soils in the County. The “Regulatory Setting” section provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR) incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

### Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist Item:

- Project located on a fault line
- Project exposure to strong seismic ground shaking
- Project creates hazard to people or property
- Project subject to landslides
- Project located on a liquefaction zone
- Project located on expansive soil
- Project located on soils inadequate for supporting use of septic tanks

## **ENVIRONMENTAL SETTING**

“The Kaweah River is one of the most valuable natural assets in Three Rivers, and is an essential element of the community’s unique character and quality natural environment. The floodways and floodplains along the river enhance the quality of life in Three Rivers, and promote biological and habitat diversity in the community...Maintaining the Kaweah River in its natural course describes the dynamic interaction between river flow, river form, people, plants, fish and wildlife to maintain the river in the natural, healthy form.”<sup>2</sup>

### Geology & Seismic Hazards

“Tulare County is divided into two major physiographic and geologic provinces: the Sierra Nevada Mountains and the Central Valley. The Sierra Nevada Physiographic Province, in the eastern portion of the county, is underlain by metamorphic and igneous rock. It consists mainly of homogeneous granitic rocks, with several islands of older metamorphic rock. The central and western parts of the county are part of the Central Valley Province, underlain by marine and non-

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<sup>2</sup> Tulare County. Three Rivers Community Plan 2018 Update. Page 141. Accessed March 2021 at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>

marine sedimentary rocks. It is basically a flat, alluvial plain, with soil consisting of material deposited by the uplifting of the mountains.”<sup>3</sup>

“The foothill area of the county is essentially a transition zone, containing old alluvial soils that have been dissected by the west-flowing rivers and streams that carry runoff from the Sierra Nevada Mountains. This gently rolling topography is punctured in many areas by outcropping soft bedrock. The native mountain soils are generally quite dense and compact.”<sup>4</sup>

### Seismicity

“Seismicity varies greatly between the two major geologic provinces represented in Tulare County. The Central Valley is an area of relatively low tectonic activity bordered by mountain ranges on either side. The Sierra Nevada Mountains, partially located within Tulare County, are the result of movement of tectonic plates which resulted in the creation of the mountain range. The Coast Range on the west side of the Central Valley is also a result of these forces, and the continued uplifting of Pacific and North American tectonic plates continues to elevate these ranges. The remaining seismic hazards in Tulare County generally result from movement along faults associated with the creation of these ranges.”<sup>5</sup>

“Earthquakes are typically measured in terms of magnitude and intensity. The most commonly known measurement is the Richter Scale, a logarithmic scale which measures the strength of a quake. The Modified Mercalli Intensity Scale measures the intensity of an earthquake as a function of the following factors:

- Magnitude and location of the epicenter;
- Geologic characteristics;
- Groundwater characteristics;
- Duration and characteristic of the ground motion;
- Structural characteristics of a building.”<sup>6</sup>

### Faults

“Faults are the indications of past seismic activity. It is assumed that those that have been active most recently are the most likely to be active in the future. Recent seismic activity is measured in geologic timescale. Geologically recent is defined as having occurred within the last two million years (the Quaternary Period). All faults believed to have been active during Quaternary time are considered "potentially active.””<sup>7</sup>

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<sup>3</sup> Tulare County, 2010. Page 8-4. General Plan 2030 Update Background Report Accessed 2020 at: <http://generalplan.co.tulare.ca.us/documents.html>

<sup>4</sup> Ibid. 8-4 to 8-5.

<sup>5</sup> Op. Cit. 8-5.

<sup>6</sup> Op. Cit.

<sup>7</sup> Op. Cit.



“Although a number of faults have been located along the western edge of the Sierra Nevada Mountains, none are known to be active.”<sup>8</sup> “There are three faults within the region that have been, and will be, principal sources of potential seismic activity within Tulare County. These faults are described below:

- **San Andreas Fault.** The San Andreas Fault is located approximately 40 miles west of the Tulare County boundary. This fault has a long history of activity, and is thus the primary focus in determining seismic activity within the county. Seismic activity along the fault varies along its span from the Gulf of California to Cape Mendocino. Just west to Tulare County lies the “Central California Active Area,” where many earthquakes have originated.
- **Owens Valley Fault Group.** The Owens Valley Fault Group is a complex system containing both active and potentially active faults, located on the eastern base of the Sierra Nevada Mountains. The Group is located within Tulare and Inyo Counties and has historically been the source of seismic activity within Tulare County.
- **Clovis Fault.** The Clovis Fault is considered to be active within the Quaternary Period (within the past two million years), although there is no historic evidence of its activity, and is therefore classified as “potentially active.” This fault lies approximately six miles south of the Madera County boundary in Fresno County. Activity along this fault could potentially generate more seismic activity in Tulare County than the San Andreas or Owens Valley fault systems. In particular, a strong earthquake on the Fault could affect northern Tulare County. However, because of the lack of historic activity along the Clovis Fault, inadequate evidence exists for assessing maximum earthquake impacts.”<sup>9</sup>

### Groundshaking

“Groundshaking is the primary seismic hazard in Tulare County because of the county’s seismic setting and its record of historical activity. Thus, emphasis focuses on the analysis of expected levels of groundshaking, which is directly related to the magnitude of a quake and the distance from a quake’s epicenter. Magnitude is a measure of the amount of energy released in an earthquake, with higher magnitudes causing increased groundshaking over longer periods of time, thereby affecting a larger area. Groundshaking intensity, which is often a more useful measure of earthquake effects than magnitude, is a qualitative measure of the effects felt by population.”<sup>10</sup>

“The San Joaquin Valley portion of Tulare County is located on alluvial deposits, which tend to experience greater groundshaking intensities than areas located on hard rock. Therefore, structures located in this area will tend to suffer greater damage from groundshaking than those located in the foothill and mountain areas. However, existing alluvium valleys and weathered or decomposed zones are scattered throughout the mountainous portions of the county which could also experience stronger intensities than the surrounding solid rock areas. The geologic characteristics of an area can therefore be a greater hazard than its distance to the epicenter of the quake.”<sup>11</sup>

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<sup>8</sup> Op. Cit.

<sup>9</sup> Op. Cit. 8-6 to 8-7.

<sup>10</sup> Op. Cit. 8-7.

<sup>11</sup> Op. Cit.

In 1973, five counties within the Southern San Joaquin Valley undertook the preparation of the Five County Seismic Safety Element to assess seismic hazards. "The Five County Seismic Safety Element projects that with the maximum probable earthquake of a magnitude 8 to 8.5 centered along the San Andreas Fault, "relatively low levels of shaking should be expected in the eastern and central parts of the San Joaquin Valley." The eastern portion of the county is composed of four "Sierran Zones," the boundaries of which are determined by the predicted effects of the maximum probable earthquake on the Owens Valley Fault. Since the mountains are underlain primarily by granitic rock, these zones tend to experience very low levels of groundshaking. However, most of the people residing in these zones do not live on the hard rock. Instead, residences tend to be built in alluvial valleys or the weathered and decomposed zones in the meadows or foothills. These areas will experience stronger groundshaking intensities. Characteristics within the microzones may vary greatly; thus, groundshaking potential in the Sierran zones is more accurately analyzed on a site-by-site basis."<sup>12</sup>

"Older buildings constructed before current building codes were in effect, and even newer buildings constructed before earthquake resistance provisions were included in the current building codes, are most likely to suffer damage in an earthquake. Most of Tulare County's buildings are no more than one or two stories in height and are of wood frame construction, which is considered the most structurally resistant to earthquake damage. Older masonry buildings (without earthquake-resistance reinforcement) are the most susceptible to structural failure, which causes the greatest loss of life. The State of California has identified unreinforced masonry buildings (URMs) as a safety issue during earthquakes. In high risk areas (Bay Area) inventories and programs to mitigate this issue are required. Because Tulare County is not a high risk area, state law only recommends that programs to retrofit URMs are adopted by jurisdictions."<sup>13</sup>

### Liquefaction

"Liquefaction is a process whereby soil is temporarily transformed to a fluid form during intense and prolonged groundshaking. Areas most prone to liquefaction are those that are water saturated (e.g., where the water table is less than 30 feet below the surface) and consist of relatively uniform sands that are low to medium density. In addition to necessary soil conditions, the ground acceleration and duration of the earthquake must be of sufficient energy to induce liquefaction. Scientific studies have shown that the ground acceleration must approach 0.3g before liquefaction occurs in a sandy soil with relative densities typical of the San Joaquin alluvial deposits."<sup>14</sup>

"Liquefaction during major earthquakes has caused severe damage to structures on level ground as a result of settling, tilting, or floating. Such damage occurred in San Francisco on bay-filled areas during the 1989 Loma Prieta earthquake, even though the epicenter was several miles away. If liquefaction occurs in or under a sloping soil mass, the entire mass may flow toward a lower elevation, such as that which occurred along the coastline near Seward, Alaska during the 1964

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<sup>12</sup> Op. Cit. 8-6 to 8-8.

<sup>13</sup> Op. Cit. 8-8.

<sup>14</sup> Op. Cit. 8-8 to 8-9.

earthquake. Also of particular concern in terms of developed and newly developing areas are fill areas that have been poorly compacted.”<sup>15</sup>

“No specific countywide assessments to identify liquefaction hazards have been performed in Tulare County. Areas where groundwater is less than 30 feet below the surface occur primarily in the San Joaquin Valley portion of the County. However, soil types in the area are not conducive to liquefaction because they are either too coarse or too high in clay content. Areas subject to 0.3g acceleration or greater are located in a small section of the Sierra Nevada Mountains along the Tulare-Inyo County boundary. However, the depth to groundwater in such areas is greater than in the valley, which would minimize liquefaction potential as well. Detailed geotechnical engineering investigations would be necessary to more accurately evaluate liquefaction potential in specific areas and to identify and map the areal extent of locations subject to liquefaction.”<sup>16</sup>

### Settlement

“Settlement can occur in poorly consolidated soils during groundshaking. During settlement, the soil materials are physically rearranged by the shaking and result in reduced stabling alignment of the individual minerals. Settlement of sufficient magnitude to cause significant structural damage is normally associated with rapidly deposited alluvial soils, or improperly founded or poorly compacted fill. These areas are known to undergo extensive settling with the addition of irrigation water, but evidence due to groundshaking is not available. Fluctuating groundwater levels also may have changed the local soil characteristics. Sufficient subsurface data is lacking to conclude that settlement would occur during a large earthquake; however, the data is sufficient to indicate that the potential exists in Tulare County.”<sup>17</sup>

### Soil Characteristics

“According to the Central Soils Map of Tulare County, Three Rivers (see Figure 19 of the Three Rivers Community Plan 2018 Update) is comprised of three soil classes: Class VI, Class VII, and Class VIII, all of which are not suitable for cultivation, but are suitable for pasture, rangelands, grazing and wildlife.”<sup>18</sup> As noted in the *Biological Resources Assessment for the Hampton Inn and Suite Three River Project*, “According to the Web Soil Survey (NRCS 2020a), there are two soil units mapped within the Study Area: (1-5) Blasingame sandy loam, 9 to 15 percent slopes and (164) Tujunga sand (Figure 3 [in the Assessment]. Natural Resources Conservation Soil Types). Neither of these soil units are considered hydric (NRCS 2020b)”<sup>19</sup>

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<sup>15</sup> Op. Cit. 8-9.

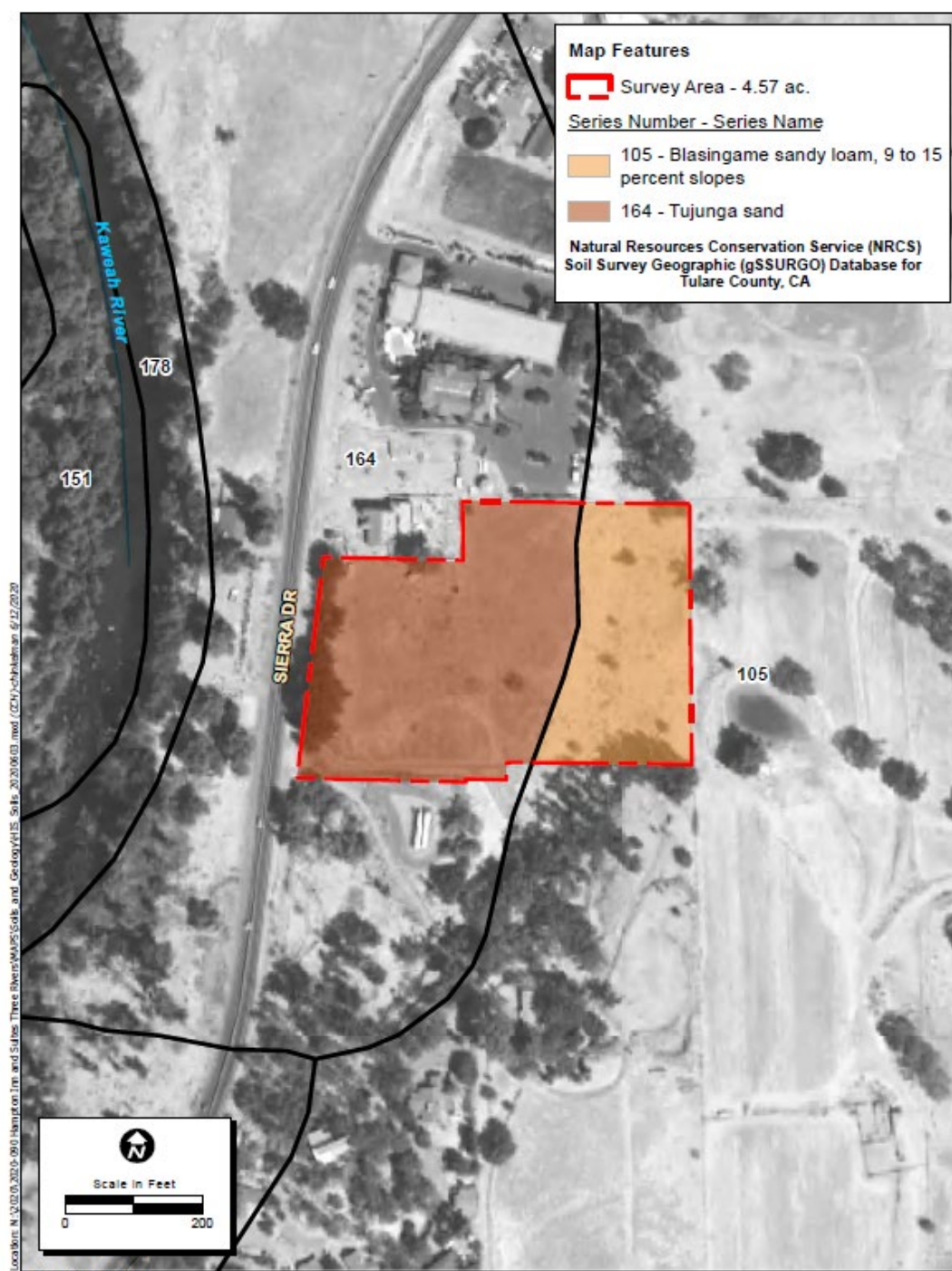
<sup>16</sup> Op. Cit.

<sup>17</sup> Op. Cit.

<sup>18</sup> Op. Cit. 121.

<sup>19</sup> “*Biological Resources Assessment for the Hampton Inn and Suite Three River Project*”. Page 15. August 2020. Prepared by ECORP Consulting Inc. and included in Appendix “B” of this DEIR.

**Figure 3.7-1 Three Rivers Soils Map**



**Figure 3. Natural Resources Conservation Service Soil Types**

2020-090 Hampton Inn and Suites in Three Rivers

### Landslides

“Landslides are a primary geologic hazard and are influenced by four factors:

- Strength of rock and resistance to failure, which is a function of rock type (or geologic formation);
- Geologic structure or orientation of a surface along which slippage could occur;
- Water (can add weight to a potentially unstable mass or influence strength of a potential failure surface); and,
- Topography (amount of slope in combination with gravitation forces).”<sup>20</sup>

“Tulare County has three geologic environments: the valley, foothills, and mountains. The range in topography between these three areas presents a range of landslide hazards. As of June 2009, the California Geological Survey had not developed landslide hazard identification maps for Tulare County. However, it is reasonable to assume that certain areas in Tulare County are more prone to landslides than others. Such areas can be found in foothill and mountain areas where fractured and steep slopes are present (as in the Sierra Nevada Mountains), where less consolidated or weathered soils overlie bedrock, or where inadequate ground cover accelerates erosion. Erosion and slumping of soils can also occur along bluffs along the Kaweah, Kings, and Tule Rivers.”<sup>21</sup>

### Wastewater Treatment

Community Service Districts (CSDs) are formed to provide a permanent form of governance that can provide locally adequate levels of public facilities and services to residents and property owners within their jurisdictional boundaries.<sup>22</sup>

According to the Tulare County LAFCO, “[t]he Three Rivers CSD is located approximately 11.7 miles east of the City of Woodlake. The District’s jurisdictional boundaries encompass a 5,937 acre area that is spread out along Highway 198. The District was formed in 1973 (LAFCO Resolution 73-036, LAFCO Case 459). The District’s Active Powers include:

1. Preparation of project reports for sewer systems
2. Trash pick up
3. Monitoring of potable water sources
4. Monitoring of individual septic systems.”<sup>23</sup>

“The services provided by the District are limited to monitoring the water quality of sources throughout district boundaries. The ultimate gauge of efficiency for this service is whether

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<sup>20</sup> Tulare County General Plan Background Report. Page 8-10. Accessed November 2020 at: <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>.

<sup>21</sup> Op. Cit.

<sup>22</sup> Tulare County LAFCO. 2011. Group 4 Municipal Service Reviews. Page 1-1. Accessed November 2020 at: <http://lafco.co.tulare.ca.us/lafco/index.cfm/msr/group-4-msrs/>.

<sup>23</sup> Ibid. 9-1.

widespread degradation of water quality occurs within district boundaries. LAFCO found no record of water quality degradation in the Three Rivers area. It is determined that there are adequate controls in place for accountability and efficiency of service provision, given the limited scope of district services.”<sup>24</sup>

“Currently, there is not a collective community sewage disposal or sewage treatment plant serving Three Rivers; therefore, residential densities will be lower than if a community system were present. The primary method of sewage treatment is by means of individual sewage disposal systems consisting of septic tanks and leach fields. Due to peculiar geology and hydrology, the entire area is not well suited for the installation of conventional septic systems. Management Disposal District was formed on April 25, 1979 by the Community Services District. The purpose of the CSD is to improve water quality by repairing failing septic systems and requiring property owners within the boundaries of the Community Services District to properly maintain their systems”<sup>25</sup>

“During the site evaluation for each new or replacement system, a percolation test and highest anticipated depth to groundwater must be conducted. Based on the determined percolation rate, the minimum depth of groundwater below the bottom of the leaching trench, and the native soil depth immediately below the leaching trench, shall not be less than described in Table 32- Tier 1 Minimum Depths to Groundwater and Minimum Soil Depth from the Bottom of the Dispersal System below [in the Three Rivers Community Plan]. Table 32- Tier 1 Minimum Depths to Groundwater and Minimum Soil Depth from the Bottom of the Dispersal System below [in the Three Rivers Community Plan].”<sup>26</sup> An engineered septic systems in the Three Rivers UDB must be approved by the necessary authorities (e.g., Tulare County Environmental Health Services and/or Regional Water Quality Control Board).<sup>27</sup>

As contained in the Three Rivers Community Plan 2018 Update, “New onsite wastewater treatment systems in the Three River Community will be subject to Tier 1- Low Risk New or Replacement [Onsite Wastewater Treatment Systems] OWTS requirements. The Three Rivers Community is not located near any bodies of water deemed "impaired" by the SWRCB, therefore Tier 3 regulations will not apply.

New and Replacement OWTS sites require a qualified professional to perform site evaluations for soil depth, highest anticipated groundwater levels within the dispersal field, percolation tests, and proper permits through the respective permitting agencies. A licensed General Engineering Contractor (Class A), General Building Contractor (Class B), Sanitation System Contractor (Specialty Class C-42), or Plumbing Contractor (Specialty Class C-36) shall install all new and replacement systems in accordance with California Business and Professions Code Sections 7056, 7057, and 7058 and Article 3, Division 8, Title 16 of the California Code of Regulations.”

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<sup>24</sup> Op. Cit. 9-5.

<sup>25</sup> Tulare County. Three Rivers Community Plan 2018 Update. Pages 139-140.

<sup>26</sup> Ibid. 148.

<sup>27</sup> Op Cit. 364.

Tier 1 Low Risk New or Replacement OWTS also requires the following:

- 5 feet minimum setback from parcel property lines and structures;
- 100 feet minimum setback from water wells and monitoring wells;
- 100 feet minimum setback from any unstable land mass or areas subject to earth slides;
- 100 feet minimum setback from springs and flowing surface water bodies;
- 200 feet minimum setback from vernal pools, wetlands, and the high water mark of lakes and reservoirs;
- 150 feet minimum setback from public water wells where the depth of effluent dispersal system does not exceed 10 feet;
- Percolation test results shall not exhibit a flow rate greater than one minute per inch (1 MPI) or slower than one hundred twenty minutes per inch (120 MPI) in the effluent disposal area
- Natural ground slope in all areas used for effluent disposal shall not exceed 25 percent;
- Expected influent flow not to exceed 3,500 gallons per day;
- Minimum twelve inches (12") soil cover on all gravity dispersal systems;
- Minimum six inches (6") soil cover on all pressure distribution systems;
- 100% replacement area available for future use;
- Dispersal systems shall not exceed 10 feet as measured from the ground surface to the bottom of the trench.”<sup>28</sup>

### Paleontological Resources

Paleontological resources comprise of fossils – the remains or traces of once living organisms preserved in sedimentary deposits – together with the geologic context in which they occur. Sedimentary deposits include unconsolidated or semi consolidated “soils” or sedimentary rocks. Most fossil remains are the preserved hard parts of plants or animals, and include bones and/or teeth of once living vertebrate animals, shells or body impressions of invertebrate animals, and impressions or carbonized or mineralized parts of plants (e.g. “petrified wood”). Trace fossils include preserved footprints, trackways, and burrows of prehistoric animals and root marks created by plants.

Fossils are scientifically important as they provide the only available direct evidence of the anatomy, geographic distribution, and paleoecology of organisms of the past. Scientific studies based on fossils and comparisons between them continue to refine details of the basic history of life. In conjunction with physical geologic investigations, the use of fossils as indicators of geologic time and ancient environments also contributes to understanding of the physical history of the earth, the distribution of mineral resources, dynamics of earth processes, and past climatic changes.

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<sup>28</sup> Op. Cit.147-148.

## **REGULATORY SETTING**

### ***Federal Agencies & Regulations***

None that apply to the proposed Project.

### ***State Agencies & Regulations***

#### California Building Code

“The California Building Code is another name for the body of regulations known as the California Code of Regulations (C.C.R.), Title 24, Part 2, which is a portion of the California Building Standards Code. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable.”<sup>29</sup>

#### Alquist-Priolo Earthquake Fault Zoning Act

“The Alquist- Priolo Earthquake Fault Zoning Act (formerly the Alquist-Priolo Special Studies Zone Act), signed into law December 1972, requires the delineation of zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development on or near active fault traces to reduce the hazards associated with fault rupture and to prohibit the location of most structures for human occupancy across these traces.”<sup>30</sup>

#### California Department of Transportation (Caltrans)

“Caltrans has developed roadway design standards including those for seismic safety. Consideration of earthquake hazards in roadway design is detailed in the Highway Design Manual published by Caltrans (2006). Modifications to local highways and roads would be required to adhere to Caltrans engineering standards to minimize settlement.”<sup>31</sup>

### ***Local Policy & Regulations***

#### Tulare County General Plan Policies

General Plan policies that relate to the proposed Project include:

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<sup>29</sup> Tulare County. Tulare County General Plan 2030 Update. Background Report. Page 8-3. Accessed November 2020 at: <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>.

<sup>30</sup> Ibid.

<sup>31</sup> Op. Cit. 8-4.



**HS-1.2 Development Constraints** - The County shall permit development only in areas where the potential danger to the health and safety of people and property can be mitigated to an acceptable level.

**HS-1.3 Hazardous Lands** - The County shall designate areas with a potential for significant hazardous conditions for open space, agriculture, and other appropriate low intensity uses.

**HS-1.5 Hazard Awareness and Public Education** - The County shall continue to promote awareness and education among residents regarding possible natural hazards, including soil conditions, earthquakes, flooding, fire hazards, and emergency procedures.

**HS-1.11 Site Investigations** - The County shall conduct site investigations in areas planned for new development to determine susceptibility to landslides, subsidence/settlement, contamination, and/or flooding.

**HS-2.1 Continued Evaluation of Earthquake Risks** - The County shall continue to evaluate areas to determine levels of earthquake risk.

**HS-2.4 Structure Siting** - The County shall permit development on soils sensitive to seismic activity permitted only after adequate site analysis, including appropriate siting, design of structure, and foundation integrity.

**HS-2.7 Subsidence** - The County shall confirm that development is not located in any known areas of active subsidence. If urban development may be located in such an area, a special safety study will be prepared and needed safety measures implemented. The County shall also request that developments provide evidence that its long-term use of ground water resources, where applicable, will not result in notable subsidence attributed to the new extraction of groundwater resources for use by the development.

**HS-2.8 Alquist-Priolo Act Compliance** - The County shall not permit any structure for human occupancy to be placed within designated Earthquake Fault Zones (pursuant to and as determined by the Alquist-Priolo Earthquake Fault Zoning Act; Public Resource code, Chapter 7.5) unless the specific provision of the Act and Title 14 of the California Code of Regulations have been satisfied.

**WR-2.3 Best Management Practices** - The County shall continue to require the use of feasible BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities, agricultural operations requiring a County Permit and urban runoff in coordination with the Water Quality Control Board; and

**WR-2.4 Construction Site Sediment Control** - The County shall continue to enforce provisions to control erosion and sediment from construction sites.

### Three Rivers Community Plan

In addition to the above-noted General Plan Policies, the Three Rivers Community Plan includes policy 5.3.4 wherein a development project provide adequate wastewater collection and treatment

capacity for existing and planned development in Three Rivers that is within the boundaries of the UDB. New development is subject to Onsite Wastewater Treatments Systems (OWTS) Ordinance Code of Tulare County as follows: sections 7-01-1320 through 7-01-1740 regarding minimum lot size, set back, and testing requirements for onsite wastewater treatment systems under the local agency management program (LAMP).

#### Five County Seismic Safety Element (FCSSE)

The FCSSE report represents a cooperative effort between the governmental entities within Fresno, Kings, Madera, Mariposa and Tulare Counties to develop an adoptable Seismic Safety Element as required by State law. Part I, the Technical Report, is designed to be used when necessary to provide background for the Summary document. Part II, the Summary Report, establishes the framework and rationale for evaluation of seismic risks and hazards in the region. Part II of the Seismic Safety Element, the Policy Report, has been prepared as a “model” report designed to address seismic hazards as delineated in the Technical Report. The intent has been to develop a planning tool for use by county and city governments in implementing their seismic safety elements. The planning process utilized to develop the Element was developed through the efforts of Technical and Policy Committees, composed of both staff and elected representatives from Cities, Counties, and Special Districts or Areawide Planning Organizations in cooperation with the consulting firms of Envicom Corporation and Quinton-Redgate.<sup>32</sup>

## Impact Evaluation

### Would the project:

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**

#### Project Impact Analysis:

#### *Less Than Significant Impact*

According to the Tulare County General Plan, the planning area lies in the S-1 seismic study area, characterized by a relatively thin section of sedimentary rock overlying a granitic basement.

The S-1 seismic zone, which is characterized by hard to moderately hard granite or metamorphic rock. The distance to either of the faults expected to be a should of shaking is sufficiently great that shaking should be minimal and the requirements of the Uniform Building Code Zone II should be adequate for normal activities.<sup>33</sup>

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<sup>32</sup> *Five County Seismic Safety Element. Fresno, Kings, Madera, Mariposa, & Tulare Counties.* 1974. Pages 4-7. Prepared by Envicom Corporation. Available at Tulare County RMA Planning Branch upon request.

<sup>33</sup> *Five County Seismic Safety Element - Fresno, Kings, Madera, Mariposa & Tulare Counties. Summary of Seismic Hazards & Safety Recommendations.* 1974. Page 16 Prepared by Envicom Corporation. Available upon request at the Tulare County RMA office.

The distance to area faults i.e. the Clovis Group, Pond-Poso, and San Andreas, expected sources of significant shaking, is sufficiently great that shaking effects should be minimal.

**i) *Fault Rupture:*** No substantial faults are known to occupy Tulare County according to the Alquist-Priolo Earthquake Fault Zoning Maps and the State of California Department of Conservation. The nearest known faults likely to affect the Project site are the San Andreas Fault (approximately 40 miles to the Tulare County's western border). As noted above, the Five County Seismic Safety Element (FCSSE), the proposed Project site is located in the S-1 zone, which is characterized by hard to moderately hard granite or metamorphic a rock. The distance to either of the faults is sufficiently great that shaking should be minimal and the requirements of the Uniform Building Code Zone II should be adequate for normal activities.

Therefore, as noted earlier, no Alquist-Priolo Earthquake Fault Zones or known active faults are in or near the Project area. As such, the risk of rupture of a known earthquake fault will be less than significant.

**ii) *Ground Shaking:*** The Project area is located in a seismic zone which is sufficiently far from known faults and consists primarily of a stable geological formation. Any impacts regarding strong seismic ground shaking have been discussed in Impact VI-a-i. As such, the impact due to ground shaking would be less than significant.

**iii) *Ground Failure and Liquefaction:*** The proposed Project site is located in the Five County Seismic Safety Element's S-1 zone, and therefore has a low risk of liquefaction. No subsidence-prone soils or oil or gas production is involved with the proposed Project. Thus any impacts will be less than significant.

**iv) *Landslides:*** The proposed Project is located in the Five County Seismic Safety Element's S-1 zone and therefore will have a minimal risk of landslides. As the proposed Project is located on an S-1 zone it likely consists of hard rock, alluvium on a valley floor, with thick sections of weathered bedrock<sup>34</sup>, is situated on relatively flat topography, and there are no geologic landforms on or near the site that could result in a landslide event. Therefore, there is no risk of landslides within or near the Project area.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, and/or Tulare County 2030 General Plan EIR.

The existing Project area is not located within a known Earthquake Fault Zone and the potential for ground rupture is low. As earthquakes are possible throughout the State of California, the Project will be required to comply with the Tulare County General Plan and Zone II of the

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<sup>34</sup> Ibid. 3.

Uniform Building Code. In addition, the existing Project area is not located within an area mapped or known to have a potential for soil liquefaction or landslides. Therefore, a ***Less Than Significant Cumulative Impact*** related to this Checklist Item will occur.

Mitigation Measures:

***None Required.***

Conclusion:

***Less Than Significant Impact***

As noted earlier, the proposed Project will not have a significant impact to this Checklist Item. Therefore, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

**b) Result in substantial soil erosion or the loss of topsoil?**

Project Impact Analysis:

***Less Than Significant Impact***

Site construction-related activities will include trenching, earthmoving, pouring concrete, grading, and construction-related activities typical of a hotel structure. These activities could expose soils to erosion processes. The extent of erosion will vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. The site has very little slope (i.e., a slight decline in grade from east to west) and will have a flat topography after grading. As stated earlier, the relatively flat nature of the site reduces the need for extensive grading which would be generally limited to access roads, parking, and the hotel structure itself. Any soils removed from these areas would likely be redistributed around and retained elsewhere on the proposed Project site. Beyond grading, soil disturbance would occur in association with trenching for emplacement of plumbing, electrical, and storm water drainage conduits.

To prevent water and wind erosion during the construction period, a Storm Water Pollution Prevention Plan (SWPPP) will be developed for the proposed Project as required for all projects which disturb more than one acre. As part of the SWPPP, the applicant will be required to provide erosion control measures to protect the topsoil. Any stockpiled soils will be watered and/or covered to prevent loss due to wind erosion as part of the SWPPP during construction. In addition, depending upon activity, the Project would be subject to Air District Rules Rule 8021 (construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities) for construction and earthmoving activities; 8031 (Bulk Materials) which limits fugitive dust emissions from the outdoor handling, storage, and transport of bulk materials (such as topsoil); 8041 (Carryout and Trackout) which requires prevention and/or cleanup of soil that is tracked out by vehicle tires exiting the site or carried out by vehicles exiting the site; 8051 (Open Areas) requiring stabilization of areas cleared of vegetation in anticipation of construction-related activities; and 8071 (Unpaved Vehicle/Equipment Traffic Areas) to limit fugitive dust emissions from unpaved vehicle and equipment traffic areas within the Project's construction-related areas. As a result of these efforts, loss of topsoil and substantial soil erosion during the construction period are not anticipated.

As such, the proposed Project would not result in substantial soil erosion or loss of thereby the impact by the proposed Project would result in a less than significant impact.

To prevent water and wind erosion during the construction-related activities, the proposed Project will have a Storm Water Pollution Prevention Plan (SWPPP) as it is required for all projects which disturb more than one acre in size. As part of the SWPPP, applicants would be required to provide erosion control measures to protect the topsoil. Any stockpiled soils would be watered and/or covered to prevent loss due to wind erosion as part of the SWPPP during construction. As a result of these efforts, loss of topsoil and substantial soil erosion during the construction period are not anticipated. Therefore, a ***Less Than Significant Project-specific Impact*** related to this Checklist Item will occur.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, Tulare County 2030 General Plan Update Background Report, Tulare County 2030 General Plan Update RDEIR, and/or Three Rivers Community Plan 2018 Update and the accompanying environmental impact report.

The proposed Project would be required to comply with the California Building Code, various General Plan policies, and County building ordinances and code, and will be subject to site plan reviews to ensure that appropriate siting and development standards are met. Therefore, ***Less Than Significant Cumulative Impacts*** related to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***Less Than Significant Impact***

Implementation of the proposed Project will not result in substantial soil erosion or loss of topsoil. Therefore, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

- c) **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

Project Impact Analysis: ***No Impact***

Substantial grade change will not occur in the topography to the point where the proposed Project will expose people or structures to potential substantial adverse effects on, or offsite, such as landslides, lateral spreading, liquefaction or collapse. As noted earlier, the proposed Project is located in the Five County Seismic Safety Element's S-1 zone, as such, the proposed Project site has a low to no risk of subsidence or liquefaction. Therefore, the proposed Project would result in ***No Impact***.

Cumulative Impact Analysis:

***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update RDEIR.

There would be significant cumulative impacts if significant Project-specific impacts would occur. As previously noted, there are no Project-specific impacts. As such, ***No Cumulative Impacts*** related to this Checklist Item will occur.

Mitigation Measure(s):

***None Required.***

Conclusion:

***No Impact***

As noted earlier, ***No Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

**d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

Project Impact Analysis:

***No Impact***

According to the USDA, NRCS, and the Soil Survey of Tulare County, the proposed Project site contains The Project site itself consists of Blasingame sandy loam and Tujunga soils. The Blasingame series soils consists of moderately deep, well drained, medium to very rapid runoff, moderately slow permeability soils that formed in material weathered from basic igneous rocks. Blasingame soils are on foothills and uplands at elevations of 400 to 5,000 feet and have slopes of 2 to 75 percent. The mean annual precipitation is about 18 inches.<sup>35</sup> Therefore, the native soils identified on the site do not contain the characteristics of an expansive soil. The Tujunga series consists of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. Tujunga soils are on alluvial fans and floodplains, including urban areas, above 1,500 feet in elevation. Slopes range from 0 to 12 percent. The mean annual precipitation is about 17.75 inches.<sup>36</sup> As such, based upon the soil types where the proposed Project would be located, the Project would result in ***No Impact*** and would not create substantial direct or indirect risks to life or property.

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<sup>35</sup> USDA. Official Series Description - Blasingame Series. Accessed October 2020 at:  
[https://soilseries.sc.egov.usda.gov/OSD\\_Docs/B/BLASINGAME.html](https://soilseries.sc.egov.usda.gov/OSD_Docs/B/BLASINGAME.html)

<sup>36</sup> Ibid. Official Series Description - Tujunga Series. Accessed October 2020 at:  
[https://soilseries.sc.egov.usda.gov/OSD\\_Docs/T/TUJUNGA.html#:~:text=The%20Tujunga%20series%20consists%20of%20very%20deep%20C%20somewhat,mean%20annual%20temperature%20is%20about%2018%20degrees%20C.](https://soilseries.sc.egov.usda.gov/OSD_Docs/T/TUJUNGA.html#:~:text=The%20Tujunga%20series%20consists%20of%20very%20deep%20C%20somewhat,mean%20annual%20temperature%20is%20about%2018%20degrees%20C.)

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update RDEIR.

There would be significant cumulative impacts if significant Project-specific impacts would occur. As previously noted, there are no significant Project-specific impacts. As such, ***No Cumulative Impact*** related to this Checklist item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

The proposed Project will result in no impact. As noted earlier, ***No Significant Project-specific and Cumulative Impacts*** related to this Checklist item will occur.

- e) **Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

Project Impact Analysis: ***Less Than Significant Impact***

The proposed Project would include the installation or use of septic tanks or other alternative waste water disposal systems. The applicant will be required to comply with Tulare County General Plan policies, Three Rivers Community Plan policies, Regional Water Quality Control Board requirements, and must also receive approval by the Tulare County Health and Human Services Agency. As such, the proposed Project would result in a less than significant impact. Therefore, ***Less Than Significant Project-Specific Impacts*** to this Checklist Item will occur.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update RDEIR.

As noted earlier, the proposed Project will be subject to site plan review, and approval by the State Water Quality Control Board and the County of Tulare Environmental Health Department prior to the issuance of building permits. Therefore, ***Less Than Significant Cumulative Impacts*** related to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion:

***Less Than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

**f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Project Impact Analysis:

***Less Than Significant Impact with Mitigation***

There are no known paleontological resources within the proposed Project area, nor are there any known geologic features in the proposed Project area. Project construction will not be anticipated to disturb any paleontological resources not previously disturbed; however, **Mitigation Measure CUL-1 subsets (a) through (c)**, as specified in Item 5 Cultural Resources (as applicable), will ensure that any impact will be ***Less Than Significant Impact with Mitigation***.

Cumulative Impact Analysis:

***Less Than Significant Impact with Mitigation***

As noted earlier, the CRIC study concluded that there are no surface resources within the proposed Project site. Mitigation Measures **CUL-1 subsets (a) through (c)** are included in the event surface or subsurface cultural resources are encountered. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

Mitigation Measure(s): See **CUL-1 subsets (a) through (c)**, as specified in Item 5 Cultural Resources (as applicable).

Conclusion:

***Less Than Significant Impact with Mitigation***



## DEFINITIONS/ACRONYMS

### Definitions

**Alluvium** – “Loose gravel, sand, silt, or clay deposited by current or past streams.”<sup>37</sup>

**Alquist-Priolo Fault Zone** – “The Alquist-Priolo Earthquake Fault Zoning Act, passed in 1972, requires the State Geologist to identify zones of special study around active faults.”<sup>38</sup>

**Fault** - “A fault is a fracture in the Earth’s crust that is accompanied by displacement between the two sides of the fault. An active fault is defined as a fracture that has shifted in the last 10,000 to 12,000 years (Holocene Period). A potentially active fault is one that has been active in the past 1.6 million years (Quaternary Period). A sufficiently active fault is one that shows evidence of Holocene displacement on one or more of its segments or branches (Hart, 1997).”<sup>39</sup>

**Earthquake Hazard** – “Anything associated with an earthquake that may affect the normal activities of people. This includes surface faulting, ground shaking, landslide, liquefaction, tectonic deformation, tsunamis, and seiches.”<sup>40</sup>

**Geophysics (geophysical)** – “Geophysics is the branch of earth science which employs physical measurements and mathematical models to explore and analyze the structure and dynamics of the solid Earth and similar bodies and their fluid envelopes.”<sup>41</sup>

**Holocene** – “The Holocene denotes the past 10,000 years. It includes most of the time since the end of the most recent ice age. If slip has occurred on a fault during the Holocene, the fault is commonly considered active.”<sup>42</sup>

**Liquefaction** - “Liquefaction in soils and sediments occurs during earthquake events, when soil material is transformed from a solid state to a liquid state, generated by an increase in pressure between pore space and soil particles. Earthquake-induced liquefaction typically occurs in low-lying areas with soils or sediments composed of unconsolidated, saturated, clay-free sands and silts, but it can also occur in dry, granular soils or saturated soils with partial clay content.”<sup>43</sup>

**Magnitude** - “Earthquake magnitude is measured by the Richter scale, indicated as a series of Arabic numbers with no theoretical maximum magnitude. The greater the energy released from the fault rupture, the higher the magnitude of the earthquake. Magnitude increases logarithmically

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<sup>37</sup> USGS. 2017. Earthquake Glossary. Accessed November 2020 at: <https://earthquake.usgs.gov/learn/glossary/?term=alluvium>.

<sup>38</sup> Tulare County. 2012. General Plan Background Report. Page 8-2. Accessed November 2020 at: <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>.

<sup>39</sup> Ibid.

<sup>40</sup> USGS. 2017. Earthquake Glossary. Accessed November 2020 at: <https://earthquake.usgs.gov/learn/glossary/?term=earthquake%20hazard>, accessed November 2020.

<sup>41</sup> Ibid. Accessed November 2020 at: <https://earthquake.usgs.gov/learn/glossary/?term=geophysics>, accessed November 2020.

<sup>42</sup> Op. Cit. Accessed November 2020 at: <https://earthquake.usgs.gov/learn/glossary/?term=Holocene>.

<sup>43</sup> Tulare County. 2012. General Plan Background Report. Page 8-2. Accessed November 2020 at: <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>.

in the Richter scale; thus, an earthquake of magnitude 7.0 is thirty times stronger than one of magnitude 6.0. Earthquake energy is most intense at the point of fault slippage, the epicenter, which occurs because the energy radiates from that point in a circular wave pattern. Like a pebble thrown in a pond, the increasing distance from an earthquake's epicenter translates to reduced groundshaking.”<sup>44</sup>

**Quaternary** – “The Quaternary is the geologic time period comprising about the last 1.65 million years.”<sup>45</sup>

**Richter Scale** – “The Richter magnitude scale was developed in 1935 by Charles F. Richter of the California Institute of Technology as a mathematical device to compare the size of earthquakes. The magnitude of an earthquake is determined from the logarithm of the amplitude of waves recorded by seismographs. Adjustments are included for the variation in the distance between the various seismographs and the epicenter of the earthquakes. On the Richter Scale, magnitude is expressed in whole numbers and decimal fractions. For example, a magnitude 5.3 might be computed for a moderate earthquake, and a strong earthquake might be rated as magnitude 6.3. Because of the logarithmic basis of the scale, each whole number increase in magnitude represents a tenfold increase in measured amplitude; as an estimate of energy, each whole number step in the magnitude scale corresponds to the release of about 31 times more energy than the amount associated with the preceding whole number value.”<sup>46</sup>

**Seiche** – “The sloshing of a closed body of water from earthquake shaking. Swimming pools often have seiches during earthquakes.”<sup>47</sup>

**Seismicity** – “Seismicity refers to the geographic and historical distribution of earthquakes.”<sup>48</sup>

**Seismology** – “The study of earthquakes and the structure of the earth, by both naturally and artificially generated seismic waves.”<sup>49</sup>

#### Acronyms

Caltrans	California Department of Transportation
DEIR	Draft Environmental Impact Report
EIR	Environmental Impact Report
NRCS	Natural Resources Conservation Service
RDEIR	Recirculated Draft Environmental Impact Report
SR	State Route
SWPP	Storm Water Pollution Prevention Plan
UDB	Urban Development Boundary

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<sup>44</sup> Ibid.

<sup>45</sup> USGS, 2017. Earthquake Glossary. Accessed November 2020 at: <https://earthquake.usgs.gov/learn/glossary/?term=Quaternary>.

<sup>46</sup> Ibid. Accessed November 2020 at: <https://earthquake.usgs.gov/learn/glossary/?term=Richter%20scale>.

<sup>47</sup> Op. Cit. Accessed November 2020 at: <https://earthquake.usgs.gov/learn/glossary/?term=seiche>.

<sup>48</sup> Op. Cit. Accessed November 2020 at: <https://earthquake.usgs.gov/learn/glossary/?term=seismicity>.

<sup>49</sup> Op. Cit. Accessed November 2020 at: <https://earthquake.usgs.gov/learn/glossary/?term=seismology>.

URM            Unreinforced Masonry Building  
USDA          United States Department of Agriculture

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<https://earthquake.usgs.gov/learn/glossary/?term=seismology>

# Greenhouse Gas Emissions

## Chapter 3.8

### SUMMARY OF FINDINGS

The proposed Three Rivers-Hampton Inn & Suites (Project) will result in ***Less Than Significant Impact With Mitigation*** related to Greenhouse Gas (GHG) Emissions. A detailed review of potential impacts is provided in the “*Air Quality & Greenhouse Gas Assessment, Three Rivers Hampton Inn and Suites Project*” report (AQ/GHG Report) prepared by consultant ECORP Consulting, Inc. (ECORP), which is included in Appendix “A” of this document, and is used as the basis for determining this Project will result in ***Less Than Significant Impact With Mitigation***.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

Section 15064.4 Determining the Significance of Impacts from Greenhouse Gas Emissions states:

- “(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
- (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
  - (2) Rely on a qualitative analysis or performance based standards.
- (b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:
- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
  - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
  - (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant

public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.”<sup>1</sup>

### Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist Item questions. A significant impact would occur if the project would:

- “(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- (b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.”<sup>2</sup>

As noted in the AQ/GHG Report, “The Appendix G thresholds for GHG’s do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency’s discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines § 15064.4(a) states that lead agencies “shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate” GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project’s GHG emissions or rely on a “qualitative analysis or other performance-based standards.” (14 California Code of Regulations [CCR] 15064.4(b)). A lead agency may use a “model or methodology” to estimate GHG emissions and has the discretion to select the model or methodology it considers “most appropriate to enable decision makers to intelligently take into account the project’s incremental contribution to climate change.” (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

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<sup>1</sup> 2019 CEQA Guidelines, Section 15064.4.

<sup>2</sup> Ibid. Appendix G: Environmental Checklist Form.

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that “[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence” (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA’s requirements for cumulative impact analysis (see CEQA Guidelines § 15130(f)). As a note, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines § 15064(h)(3), a project’s incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions.” Put another way, CEQA Guidelines § 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The significance of the Project’s GHG emissions is evaluated consistent with CEQA Guidelines § 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The Tulare County CAP aims to reduce GHG emissions from development projects in Tulare County. The CAP builds on state and regional policies aimed at reducing GHG emissions consistent with the SB 32 2030 GHG reduction target. The CAP relies on policies of the Tulare County General Plan to guide development projects. In addition, the Project provides specific guidelines for determining if new development projects are consistent with the CAP. The CAP includes a progress report with metrics and benchmarks for tracking progress toward meeting the GHG reduction targets. The County’s progress is on track for all metrics.

The CAP is utilized to evaluate the significance of the Project GHG emissions.”<sup>3</sup>

The San Joaquin Valley Unified Air Pollution Control District (Air District) has established a menu of performance standards, some of which depend on the existence of an adopted climate action plan or the establishment of Best Performance Standards (BPS). Specifically, the Air District’s guidance document *Guidance for Valley Land-use Agencies in Addressing GHG*

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<sup>3</sup> “Air Quality & Greenhouse Gas Assessment Three Rivers Hampton Inn and Suites Project.” July 2020. Pages 35-37. Prepared by ECORP Consulting Inc. and included in Appendix “A” of this Draft EIR.

*Emission Impacts for New Project under CEQA* provides the following criteria for evaluating GHG significance:

- “Projects determined to be exempt from the requirements of CEQA would be determined to have a less than significant individual and cumulative impact for GHG emissions and would not require further environmental review, including analysis of project specific GHG emissions. Projects exempt under CEQA would be evaluated consistent with established rules and regulations governing project approval and would not be required to implement BPS.
- Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the lead agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the lead agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement BPS.
- Projects implementing Best Performance Standards would not require quantification of project specific GHG emissions. Consistent with CEQA Guideline, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.
- Projects not implementing Best Performance Standards would require quantification of project specific GHG emissions and demonstration that project specific GHG emissions would be reduced or mitigated by at least 29%, compared to Business-as-Usual (BAU\*), including GHG emission reductions achieved since the 2002-2004 baseline period. Projects achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.
- Notwithstanding any of the above provisions, projects requiring preparation of an Environmental Impact Report for any other reason would require quantification of project specific GHG emissions. Projects implementing BPS or achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.”<sup>4</sup>

## Environmental Setting

“Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern is that increases in GHGs are causing global climate change. Global climate change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation and temperature. The gases believed to be most responsible for global warming are water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs),

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<sup>4</sup> San Joaquin Valley Unified Air Pollution Control District (Air District). *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Project under CEQA*. Pages 4 and 5. Accessed on March 2021 at: <https://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf>



perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).”<sup>5</sup> Nitrogen trifluoride was not listed initially in AB 32 but was subsequently added to the list via legislation.<sup>6</sup>

“For over the past 200 years, the burning of fossil fuels such as coal and oil, deforestation, and other sources have caused the concentrations of heat-trapping "greenhouse gases" to increase significantly in our atmosphere. These gases absorb some of the energy being radiated from the surface of the earth and trap it in the atmosphere, essentially acting like a blanket that makes the earth's surface warmer than it would be otherwise.

Greenhouse gases are necessary to life as we know it, because without them the planet's surface would be about 60°F cooler than present. But, as the concentrations of these gases continue to increase in the atmosphere, the Earth's temperature is climbing above past levels. According to NOAA and NASA data, the Earth's average surface temperature has increased by about 1.2 to 1.4°F since 1900. The ten warmest years on record (since 1850) have all occurred in the past 13 years (EPA 2009). Most of the warming in recent decades is very likely the result of human activities. Other aspects of the climate are also changing such as rainfall patterns, snow and ice cover, and sea level.”<sup>7</sup>

“In 2007, Tulare County generated approximately 5.2 million tonnes of CO<sub>2</sub>e [carbon dioxide equivalents]. The largest portion of these emissions (63 percent) is attributed to dairies/feedlots, while the second largest portion (16 percent) is from mobile sources.”<sup>8</sup> **Table 3.8-1** identifies Tulare County’s emissions by sector in 2007.

<b>Table 3.8-1 Emissions by Sector in 2007</b>		
<b>Sector</b>	<b>CO<sub>2</sub>e (tonnes/year)</b>	<b>% of Total</b>
Electricity	542,690	11%
Natural Gas	321,020	6%
Mobile Sources	822,230	16%
Dairy/Feedlots	3,294,870	63%
Solid Waste	227,250	4%
<b>Total</b>	<b>5,208,060</b>	<b>100%</b>
<b>Per Capita</b>	<b>36.1</b>	
<i>Source: Tulare County General Plan 2030 Update Recirculated Draft EIR, page 3.4-22, Table 3.4-2</i>		

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<sup>5</sup> General Plan Background Report. Pages 6-19 to 6-20.

<sup>6</sup> California Air Resources Board. Assembly Bill 32 Overview. Accessed November 2019 at: <http://www.arb.ca.gov/cc/ab32/ab32.htm>.

<sup>7</sup> United States Environmental Protection Agency, National Greenhouse Gas Emissions Data. Technical Support Document for the Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act. U.S. Environmental Protection Agency. Page 1-2. Accessed November 2019 at: <https://www.epa.gov/ghgemissions/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a-clean>.

<sup>8</sup> General Plan 2030 Update Background Report. Page 6-36.

“In 2030, Tulare County is forecast to generate approximately 6.1 million tons of CO<sub>2</sub>e. The largest portion of these emissions (59 percent) is attributed to dairies/feedlots, while the second largest portion (20 percent) is from mobile sources... Per capita emissions in 2030 are projected to be approximately 27 tons of CO<sub>2</sub>e per resident.”<sup>9</sup> **Table 3.8-2** identifies Tulare County’s emissions by sector in 2030.

<b>Table 3.8-2 Emissions by Sector in 2030<sup>10</sup></b>		
<b>Sector</b>	<b>CO<sub>2</sub>e (tonnes/year)</b>	<b>% of Total</b>
Electricity	660,560	11%
Natural Gas	384,410	6%
Mobile Sources	1,212,370	20%
Dairy/Feedlots	3,601,390	59%
Solid Waste	246,750	4%
<b>Total</b>	<b>6,105,480</b>	<b>100%</b>
<b>Per Capita</b>	<b>27.4</b>	
<i>Source: Tulare County General Plan 2030 Update Recirculated Draft EIR, page 3.4-22, Table 3.4-3.</i>		

The Tulare County General Plan 2030 Update Recirculated DEIR states the following, “Enhancement of the greenhouse effect can occur when concentrations of GHGs exceed the natural concentrations in the atmosphere. Of these gases, CO<sub>2</sub> and methane are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are largely by-products of fossil fuel combustion, whereas methane primarily results from off-gassing associated with agricultural practices and landfills. Sulfur hexafluoride is a GHG commonly used in the utility industry as an insulating gas in transformers and other electronic equipment. Sulfur hexafluoride, while comprising a small fraction of the total GHGs emitted annually world-wide, is a much more potent GHG with 23,900 times the global warming potential as CO<sub>2</sub>. There is widespread international scientific agreement that human-caused increases in GHGs has and will continue to contribute to global warming, although there is much uncertainty concerning the magnitude and rate of the warming.

Some of the potential resulting effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CARB, 2006). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather

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<sup>9</sup> Ibid.

<sup>10</sup> Op. Cit.

and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood, and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.”<sup>11</sup>

According to AB 32, which is discussed further below, “The [California State] Legislature finds and declares all of the following: (a) Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems. (b) Global warming will have detrimental effects on some of California’s largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry. It will also increase the strain on electricity supplies necessary to meet the demand for summer air-conditioning in the hottest parts of the state.”<sup>12</sup>

## **REGULATORY SETTING**

Applicable Federal, State, and local regulations specific to greenhouse gas resources are described below. The following environmental regulatory settings were summarized, in part, from information contained in the Tulare County 2030 General Plan Update Background Report, Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), the California Air Resources Board (ARB) website, and the United States Environmental Protection Agency (US EPA) website.

### ***Federal Agencies & Regulations***

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization’s Intergovernmental Panel on Climate

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<sup>11</sup> General Plan 2030 Update Background Report. Page 6-31.

<sup>12</sup> California Air Resources Board. Accessed March 2021 at: <http://www.arb.ca.gov/cc/ab32/ab32.htm>.

Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years.

The United States Environmental Protection Agency (USEPA) Mandatory Reporting Rule (40 CFR Part 98), which became effective December 29, 2009, requires that all facilities that emit more than 25,000 metric tons CO<sub>2</sub>-equivalent per year beginning in 2010, report their emissions on an annual basis. On May 13, 2010, the USEPA issued a final rule that established an approach to addressing GHG emissions from stationary sources under the CAA permitting programs. The final rule set thresholds for GHG emissions that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In addition, the Supreme Court decision in *Massachusetts v. EPA* (Supreme Court Case 05-1120) found that the USEPA has the authority to list GHGs as pollutants and to regulate emissions of GHGs under the CAA. On April 17, 2009, the USEPA found that CO<sub>2</sub>, CH<sub>4</sub>, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride may contribute to air pollution and may endanger public health and welfare. This finding may result in the USEPA regulating GHG emissions; however, to date the USEPA has not proposed regulations based on this finding.

#### United States Environmental Protection Agency (US EPA)

“The primary sources of greenhouse gas emissions in the United States are:

- **Electricity production** (31% of 2013 greenhouse gas emissions) - Electricity production generates the largest share of greenhouse gas emissions. Approximately 67% of our electricity comes from burning fossil fuels, mostly coal and natural gas.<sup>[2]</sup>
- **Transportation** (27% of 2013 greenhouse gas emissions) - Greenhouse gas emissions from transportation primarily come from burning fossil fuel for our cars, trucks, ships, trains, and planes. Over 90% of the fuel used for transportation is petroleum based, which includes gasoline and diesel.<sup>[3]</sup>
- **Industry** (21% of 2013 greenhouse gas emissions) - Greenhouse gas emissions from industry primarily come from burning fossil fuels for energy as well as greenhouse gas emissions from certain chemical reactions necessary to produce goods from raw materials.
- **Commercial and Residential** (12% of 2013 greenhouse gas emissions) - Greenhouse gas emissions from businesses and homes arise primarily from fossil fuels burned for heat, the use of certain products that contain greenhouse gases, and the handling of waste.
- **Agriculture** (9% of 2013 greenhouse gas emissions) - Greenhouse gas emissions from agriculture come from livestock such as cows, agricultural soils, and rice production.
- **Land Use and Forestry** (offset of 13% of 2013 greenhouse gas emissions) - Land areas can act as a sink (absorbing CO<sub>2</sub> from the atmosphere) or a source of greenhouse gas

emissions. In the United States, since 1990, managed forests and other lands have absorbed more CO<sub>2</sub> from the atmosphere than they emit.”<sup>13</sup>

#### U.S. EPA Greenhouse Gas Endangerment Findings

“On December 7, 2009, Administrator Lisa Jackson signed a final action, under Section 202(a) of the Clean Air Act, finding that six key well-mixed greenhouse gases constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to the climate change problem.”<sup>14</sup>

“On December 7, 2009, the Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases — carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>) — in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.”<sup>15</sup>

However, as indicated by the US EPA website accessed on July 2, 2017, “Thank you for your interest in this topic. We are currently updating our website to reflect EPA's priorities under the leadership of President Trump and Administrator Pruitt. If you're looking for an archived version of this page, you can find it on the January 19 snapshot.”<sup>16</sup>

#### ***State Agencies & Regulations***

##### California Clean Air Act

“The California CAA of 1988 establishes an air quality management process that generally parallels the federal process. The California CAA, however, focuses on attainment of the State ambient air quality standards,...which, for certain pollutants and averaging periods, are more stringent than the comparable federal standards. Responsibility for meeting California’s standards is addressed by the CARB and local air pollution control districts (such as the eight county SJVAPCD, which administers air quality regulations for Tulare County). Compliance strategies are presented in district-level air quality attainment plans.”<sup>17</sup>

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<sup>13</sup> United States Environmental Protection Agency (U.S. EPA). Sources of Greenhouse Gas Emissions. Accessed March 2021 at: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.

<sup>14</sup> U.S. EPA. (EPA) Accessed March 2021 at: <http://www.epa.gov/climatechange/EPAactivities/regulatory-initiatives.html>.

<sup>15</sup> U.S. EPA. Accessed March 2021 at: <http://www.epa.gov/climatechange/endangerment/index.html>.

<sup>16</sup> U.S. EPA. Accessed March 2021 at: <https://www.epa.gov/sites/production/files/signpost/cc.html>.

<sup>17</sup> Tulare County General Plan 2030 Update RDEIR. Pages 3.3-2 to 3.3-3.

“Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California’s air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

While dated, this EO remains relevant because a more recent California Appellate Court decision, *Cleveland National Forest Foundation v. San Diego Association of Governments* (November 24, 2014) 231 Cal.App.4th 1056, examined whether it should be viewed as having the equivalent force of a legislative mandate for specific emissions reductions. While the California Supreme Court ruled that the San Diego Association of Governments did not abuse its discretion by declining to adopt the 2050 goal as a measure of significance in light of the fact that the EO does not specify any plan or implementation measures to achieve its goal, the decision also recognized that the goal of a 40 percent reduction in 1990 GHG levels by 2030 is “widely acknowledged” as a “necessary interim target to ensure that California meets its longer-range goal of reducing GHG emissions 80 percent below 1990 levels by the year 2050.

Assembly Bill 32 Climate Change Scoping Plan and Updates

In 2006, the California legislature passed Assembly Bill (AB) 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. CARB has identified a GHG reduction target of 15 percent from current levels for local governments and notes that successful implementation relies on local governments’ land use planning and urban growth decisions.

Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which was re-approved by CARB on August 24, 2011, that outlines measures to meet the 2020 GHG reduction goals. To meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from today’s levels. The Scoping Plan recommends measures for further study and possible state implementation, such as new fuel regulations. It estimates that a reduction of 174 million metric tons of CO<sub>2</sub>e (about 191 million U.S. tons) from the transportation, energy, agriculture, and forestry sectors and other sources could be achieved should the State implement all of the measures in the Scoping Plan.

The Scoping Plan is required by AB 32 to be updated at least every five years. The first update to the AB 32 Scoping Plan was approved on May 22, 2014 by CARB. The 2017 Scoping Plan Update was adopted on December 14, 2017. The Scoping Plan Update addresses the 2030 target established by SB 32 as discussed below and establishes a proposed framework of action for California to meet a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels.

The key programs that the Scoping Plan Update builds on include: increasing the use of renewable energy in the state, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of methane emissions from agricultural and other wastes.

#### Executive Order B-30-15

On April 20, 2015 Governor Edmund (Jerry) Brown, Jr., signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's EO aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2°C, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

#### Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

#### Senate Bill X1-2 of 2011, Senate Bill 350 of 2015, and Senate Bill 100 of 2018

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California.

In October 2015, SB 350 was signed by Governor Brown, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable resources by 2030. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

### 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings

The Building and Efficiency Standards (Energy Standards) were first adopted and put into effect in 1978 and have been updated periodically in the intervening years. These standards are a unique California asset that have placed the State on the forefront of energy efficiency, sustainability, energy independence and climate change issues. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The 2019 standards are a major step toward meeting Zero Net Energy. According to the California Energy Commission, single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards and nonresidential buildings will use about 30 percent less energy (due mainly to lighting upgrades) (CEC 2018). The most significant efficiency improvement to the residential Standards include the introduction of photovoltaic into the perspective package, improvements for attics, walls, water heating and lighting. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. These new standards apply only to certain nonresidential building types, as specified in the requirements.”<sup>18</sup>

### ***Regional Policy & Regulations***

#### California Air Resources Board (ARB or CARB)

“The Air Resources Board (ARB or Board) has established State ambient air quality standards (State standards) to identify outdoor pollutant levels considered safe for the public. After State standards are established, State law requires ARB to designate each area as attainment, nonattainment, or unclassified for each State standard. The area designations, which are based on the most recent available data, indicate the healthfulness of air quality throughout the State.”<sup>19</sup> On July 22, 2004, the California Air Resources Board adopted the 2004 Revisions to the California State Implementation Plan for Carbon Monoxide<sup>20</sup>.

#### California Air Pollution Control Officers Association (CAPCOA)

“In January 2008, the California Air Pollution Control Officers Association (CAPCOA) issued a “white paper” on evaluating GHG emissions under CEQA (CAPCOA, 2008). The CAPCOA white paper strategies are not guidelines and have not been adopted by any regulatory agency; rather, the paper is offered as a resource to assist lead agencies in considering climate change in environmental documents.”<sup>21</sup>

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<sup>18</sup> “*Air Quality & Greenhouse Gas Assessment Three Rivers Hampton Inn and Suites Project*.” July 2020. Pages 31-34. Prepared by ECORP Consulting Inc. and included in Appendix “A” of this Draft EIR.

<sup>19</sup> California Air Resources Board. Air Quality Standards and Area Designations. Accessed March 2021 at: <http://www.arb.ca.gov/desig/desig.htm>.

<sup>20</sup> California Air Resources Board. 2004 Revisions to the California State Implementation Plan for Carbon Monoxide. Accessed March 2021 at: <http://www.arb.ca.gov/planning/sip/co/co.htm>.

<sup>21</sup> Tulare County General Plan 2030 Update RDEIR. Page 3.4-12.



The California Association of Air Pollution Control Officers (CAPCOA) represents all thirty-five local air quality agencies throughout California. CAPCOA, which has been in existence since 1975, is dedicated to protecting the public health and providing clean air for all our residents and visitors to breathe, and initiated the Greenhouse Gas Reduction Exchange.<sup>22</sup>

“The Greenhouse Gas Reduction Exchange (GHG Rx) is a registry and information exchange for greenhouse gas emissions reduction credits designed specifically to benefit the state of California. The GHG Rx is a trusted source of locally generated credits from projects within California, and facilitates communication between those who create the credits, potential buyers, and funding organizations.”<sup>23</sup> Four public workshops were held throughout the state including in the SJVAPCD. The mission is to provide a trusted source of high quality California-based greenhouse gas credits to keep investments, jobs, and benefits in-state, through an Exchange with integrity, transparency, low transaction costs and exceptional customer service.<sup>24</sup>

#### San Joaquin Valley Unified Air Pollution Control District (Air District)

“The San Joaquin Valley Air Pollution Control District is a public health agency whose mission is to improve the health and quality of life for all Valley residents through efficient, effective and entrepreneurial air quality-management strategies.”<sup>25</sup> “The San Joaquin Valley Air Pollution Control District is made up of eight counties in California’s Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and the San Joaquin Valley Air Basin portion of Kern.”<sup>26</sup>

“On December 17, 2009, the District’s Governing Board adopted the District Policy: *Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. The District’s Governing Board also approved the guidance document: *Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA*. In support of the policy and guidance document, District staff prepared a staff report: *Addressing Greenhouse Gas Emissions Under the California Environmental Quality Act*. These documents adopted in December of 2009 continue to be the relevant policies to address GHG emissions under CEQA. As these documents may be modified under a separate process, the latest versions should be referenced to determine the District’s current guidance at the time of analyzing a particular project.”<sup>27</sup>

“It is widely recognized that no single project could generate enough GHG emissions to noticeably change the global climate temperature. However, the combination of GHG emissions from past, present and future projects could contribute substantially to global climate change. Thus, project

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<sup>22</sup> California Air Pollution Control Officers Association. Accessed March 2021 at: <http://www.capcoa.org/>.

<sup>23</sup> Ibid.

<sup>24</sup> California Air Pollution Control Officers Association. Accessed March 2021 at: <http://www.ghgrx.org/>.

<sup>25</sup> San Joaquin Valley Air Pollution Control District. About the District. Accessed March 2021 at: [http://www.valleyair.org/General\\_info/aboutdist.htm#Mission](http://www.valleyair.org/General_info/aboutdist.htm#Mission).

<sup>26</sup> Ibid.

<sup>27</sup> Air District. GAMAQI. Section 8.9. Page 110.

specific GHG emissions should be evaluated in terms of whether or not they would result in a cumulatively significant impact on global climate change. GHG emissions, and their associated contribution to climate change, are inherently a cumulative impact issue. Therefore, project-level impacts of GHG emissions are treated as one-in-the-same as cumulative impacts.

In summary, the staff report evaluates different approaches for assessing significance of GHG emission impacts. As presented in the report, District staff reviewed the relevant scientific information and concluded that the existing science is inadequate to support quantification of the extent to which project specific GHG emissions would impact global climate features such as average air temperature, average rainfall, or average annual snow pack. In other words, the District was not able to determine a specific quantitative level of GHG emissions increase, above which a project would have a significant impact on the environment, and below which would have an insignificant impact. This is readily understood, when one considers that global climate change is the result of the sum total of GHG emissions, both manmade and natural that occurred in the past; that is occurring now; and will occur in the future.

In the absence of scientific evidence supporting establishment of a numerical threshold, the District policy applies performance based standards to assess project-specific GHG emission impacts on global climate change. The determination is founded on the principal that projects whose emissions have been reduced or mitigated consistent with the California Global Warming Solutions Act of 2006, commonly referred to as “AB 32”, should be considered to have a less than significant impact on global climate change. For a detailed discussion of the District’s establishment of thresholds of significance for GHG emissions, and the District’s application of said thresholds, the reader is referred to the above referenced staff report, District Policy, and District Guidance documents.”<sup>28</sup>

“As presented in Figure 6 (Process of Determining Significance of Greenhouse Gas Emissions) [of the GAMAQI], the policy provides for a tiered approach in assessing significance of project specific GHG emission increases.

- Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the Lead Agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the Lead Agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement Best Performance Standards (BPS).
- Projects implementing BPS would not require quantification of project specific GHG emissions. Consistent with CEQA Guideline, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

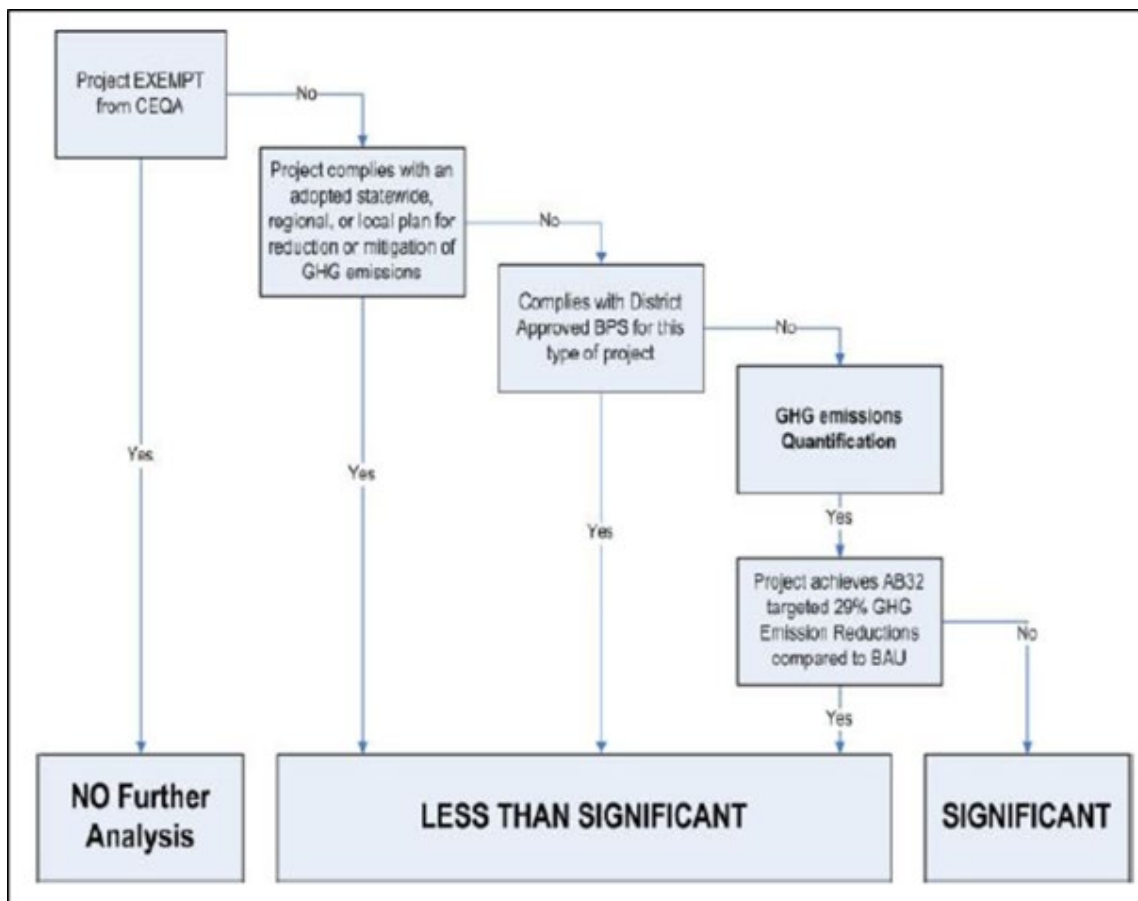
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<sup>28</sup> Ibid. Section 8.9. 111-112.

- Projects not implementing BPS would require quantification of project specific GHG emissions and demonstration that project specific GHG emissions would be reduced or mitigated by at least 29%, compared to Business as Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. Projects achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.

The District guidance for development projects also relies on the use of BPS. For development projects, BPS includes project design elements, land use decisions, and technologies that reduce GHG emissions. Projects implementing any combination of BPS, and/or demonstrating a total 29 percent reduction in GHG emissions from business-as-usual (BAU), would be determined to have a less than cumulatively significant impact on global climate change.”<sup>29</sup> **Figure 3.8-1** provides a visual summary of the Air District's process for determining significance of project-related GHG emissions.

**Figure 3.8-1**  
**Process of Determining Significance of Greenhouse Gas Emissions**



<sup>29</sup> Op. Cit. Section 8.9.1.

The Air District’s *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Project under CEQA* states, “Projects implementing Best Performance Standards in accordance with this guidance would be determined to have a less than significant individual and cumulative impact on global climate change and would not require project specific quantification of GHG emissions. Projects exempt from the requirements of CEQA, and projects complying with an approved GHG emission reduction plan or mitigation program would also be determined to have a less than significant individual or cumulative impact. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources and have a certified final CEQA document. Projects not implementing BPS would require quantification of project specific GHG emissions. To be determined to have a less than significant individual and cumulative impact on global climate changes, such projects must be determined to have reduced or mitigated GHG emissions by 29%, consistent with GHG emission reduction targets established in ARB’s AB 32 Scoping Plan. Furthermore, quantification of GHG emissions would be expected for all projects for which the lead agency has determined that an Environmental Impact Report is required, regardless of whether the project incorporates Best Performance Standards.”<sup>30</sup>

“If total GHG emissions reductions measures add up to 29% or more, are enforceable, and are required as a part of the development’s approval process, the project achieves the Best Performance Standard (BPS) for the respective type of development project. Thus, the GHG emissions from the development project would be determined to have a less than individually and cumulatively significant impact on global climate change for CEQA purposes.”<sup>31</sup>

“By definition, BPS for development projects is achieving a project-by-project 29% reduction in GHG emissions, compared to BAU. Thus, it is reasonable to conclude that Lead Agencies implementing the proposed *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* threshold will achieve an overall reduction in GHG emissions consistent with AB 32 emission reduction targets...”<sup>32</sup>

### ***Local Policy & Regulations***

#### **Tulare County Climate Action Plan (CAP)**

“Tulare County adopted the Tulare County Climate Action Plan (CAP) in 2012. Since then, the CAP was updated in 2018 to establish GHG reduction targets which support the SB 32 2030 target signed by Governor Brown in 2016.

The 2018 CAP Update incorporates new baseline and future year inventories to reflect the latest information and updates the County’s strategy to address the SB 32 2030 target. The 2030 target requires the State to reduce emissions by 40 percent below 1990 levels from the 2017 Scoping

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<sup>30</sup> Air District. *Guidance for Valley Land-use Agencies*. Page 4.

<sup>31</sup> Ibid. 7-8.

<sup>32</sup> Op. Cit. 8.

Plan and County data. The CAP identifies the County's fair share of reductions required to maintain consistency with the State target.

The CAP provides a CEQA consistency checklist for project review of projects below a certain size limit. Proposed development projects that are consistent with the emission reduction and adaptation measures included in the CAP and the programs that are developed as a result of the CAP, would be considered to have a less than significant cumulative impact on climate change and emissions consistent with CEQA Guidelines Section 15064(h)(3) (as amended to comply with SB 97).”<sup>33</sup>

“The Tulare County Climate Action Plan (CAP) serves as a guiding document for County of Tulare (“County”) actions to reduce greenhouse gas emissions and adapt to the potential effects of climate change. The CAP is an implementation measure of the 2030 General Plan Update. The General Plan provides the supporting framework for development in the County to produce fewer greenhouse gas emissions during Plan buildout. The CAP builds on the General Plan’s framework with more specific actions that will be applied to achieve emission reduction targets consistent with California legislation.”<sup>34</sup>

The CAP follows a four-step process recommended by the Institute for Local Government, including identification of a baseline year (2007) and emissions inventory; projected future year inventories (2020 and 2030); and provision of policies, regulations, and programs that achieve reductions by the target years. ...The policies, regulations, and programs considered in the CAP include those by federal, state, and local governments.<sup>35</sup> The following provides a summary of CAP actions:

- “Identifies sources of greenhouse gas emissions caused by activities within the unincorporated areas of Tulare County and estimates how these emissions may change over time.
- Establishes a reduction target of reducing Tulare County’s greenhouse gas emissions to demonstrate consistent with AB 32 (2006) and CARB Scoping Plan targets. [This requires a reduction of 6 percent on average from new development in excess of those achieved from adopted regulations.]
- Provides energy use, transportation, land use, water conservation, and solid waste strategies to bring Tulare County’s greenhouse gas emissions levels to the reduction target.
- Mitigates the impacts of Tulare County activities on climate change (by reducing greenhouse gas emissions consistent with the direction of the State of California via AB 32, Governor’s Order S-03-05, and the 2009 amendments to the CEQA Guidelines to comply with SB 97 (2008). The CEQA Guidelines encourage the adoption of policies or programs as a means

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<sup>33</sup> “Air Quality & Greenhouse Gas Assessment Three Rivers Hampton Inn and Suites Project.” July 2020. Page 35. Prepared by ECORP Consulting Inc. and included in Appendix “A” of this Draft EIR.

<sup>34</sup> Tulare County Climate Action Plan. Page 1. Accessed March 2021 at:  
<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/220Climate%20Action%20Plan/CLIMATE%20ACTION%20PLAN%202018%20UPDATE.pdf>

<sup>35</sup> Ibid. 3.

of addressing comprehensively the cumulative impacts of projects. (See CEQA Guidelines, Sections 15064(h)(3), 15130(c).)

- Allows the greenhouse gas emissions inventory and CAP to be updated every five years and to respond to changes in science, effectiveness of emission reduction measures and federal, state, regional, or local policies to further strengthen the County's response to the challenges of climate change.
- Provides substantial evidence that the emission reductions estimated in the CAP are feasible.
- Serves as the threshold of significance within the County of Tulare for climate change impacts, by which all applicable developments within the County will be reviewed.
- Proposed development projects that are consistent with the emission reduction and adaptation measures included in the CAP and the programs that are developed as a result of the CAP, would be considered to have a less than significant cumulative impact on climate change and emissions consistent with CEQA Guidelines 15064(h)(3) as amended to comply with SB 97.”<sup>36</sup>

#### Tulare County General Plan Policies

“The Tulare County General Plan contains numerous policies aimed at reducing GHG emissions. The 2018 CAP Update incorporates new baseline and future year inventories to reflect the latest information and updates the County's strategy to address the SB 32 2030 target. The 2030 target requires the State to reduce emissions by 40 percent below 1990 levels from the 2017 Scoping Plan and County data. The CAP identifies the County's fair share of reductions required to maintain consistency with the state target.

The CAP references the General Plan policies as tools for reducing GHG emissions. These policies are divided into the categories of Transportation Strategies, Building Energy Efficiency, Water Conservation Energy Savings, Solid Waste Reduction and Recycling, and Agricultural Programs and Incentives. The policies are aimed at County action and do not specifically mandate action at the project level.”<sup>37</sup>

The Tulare County 2030 General Plan Update contains a number of policies that apply to projects within the County of Tulare. A summary of the General Plan policies that are most pertinent to the proposed Project are identified below.

The Tulare County General Plan 2030 Update: Part I, Chapter 9 – Air Quality contains a number of policies that apply to projects within Tulare County that support GHG reduction efforts and which have potential relevance to the Project's CEQA review:

**AQ-1.3 Cumulative Air Quality Impacts** - The County shall require development to be located, designed, and constructed in a manner that would minimize cumulative air quality impacts.

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<sup>36</sup> Ibid. 5.

<sup>37</sup> Ibid.

**AQ-1.5 California Environmental Quality Act (CEQA) Compliance** - The County shall ensure that air quality impacts identified during the CEQA review process are consistently and reasonably mitigated when feasible.

**AQ-1.7 Support Statewide Climate Change Solutions** - The County shall monitor and support the efforts of Cal/EPA, CARB, and the SJVAPCD, under AB 32 (Health and Safety Code §38501 et seq.), to develop a recommended list of emission reduction strategies. As appropriate, the County will evaluate each new project under the updated General Plan to determine its consistency with the emission reduction strategies.

**AQ-1.8 Greenhouse Gas Emissions Reduction Plan/Climate Action Plan** - The County will develop a Greenhouse Gas Emissions Reduction Plan (Plan) that identifies greenhouse gas emissions within the County as well as ways to reduce those emissions. The Plan will incorporate the requirements adopted by the California Air Resources Board specific to this issue. In addition, the County will work with the Tulare County Association of Governments and other applicable agencies to include the following key items in the regional planning efforts.

1. Inventory all known, or reasonably discoverable, sources of greenhouse gases in the County,
2. Inventory the greenhouse gas emissions in the most current year available, and those projected for year 2020, and
3. Set a target for the reduction of emissions attributable to the County's discretionary land use decisions and its own internal government operations.

**AQ-1.9 Support Off-Site Measures to Reduce Greenhouse Gas Emissions** - The County will support and encourage the use of off-site measures or the purchase of carbon offsets to reduce greenhouse gas emissions.

**AQ-1.10 Alternative Fuel Vehicle Infrastructure** - County shall support the development of necessary facilities and infrastructure needed to encourage the use of low or zero-emission vehicles (e.g. electric vehicle charging facilities and conveniently located alternative fueling stations, including CNG filling stations.)

**AQ-3.5 Alternative Energy Design** - The County shall encourage all new development, including rehabilitation, renovation, and redevelopment, to incorporate energy conservation and green building practices to maximum extent feasible. Such practices include, but are not limited to: building orientation and shading, landscaping, and the use of active and passive solar heating and water systems.

**LU-1.1 Smart Growth and Healthy Communities** - The County shall promote the principles of smart growth and healthy communities in UDBs and HDBs, including:

1. Creating a strong sense of place,

2. Mixing land uses, and
3. Preserving open space

The Tulare County General Plan 2030 Update: Part I, Chapter 8 – Environmental Resources Management contains a number of policies that apply to projects within Tulare County that encourage energy conservation and thereby support the County’s GHG reduction efforts and which have potential relevance to the Project’s CEQA review:

**ERM-4.1 Energy Conservation and Efficiency Measures** - The County shall encourage the use of solar and other energy conservation and efficiency features in new construction in accordance with State law;

**ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation** - The County shall promote the planting and maintenance of shade trees along streets and within parking areas of new urban development to reduce radiation heating;

**ERM-4.8 Energy Efficiency Standards** - The County shall encourage new development to incorporate energy efficiency and conservation measures that exceed State Title 24 standards.

The Tulare County General Plan 2030 Update: Part II, Chapter 3 – Foothill Growth Management Plan contains a number of policies that apply to projects within foothill communities in Tulare County that direct development to selected areas and thereby support GHG reduction efforts and which have potential relevance to the Project’s CEQA review:

**FGMP-8.16 Proximity to Transportation** - The County shall encourage the concentration of development along major travel routes to allow for future public transportation services and minimize travel distances to frequently used facilities.

**FGMP-8.17 Reduce Vehicle Emissions** - the County shall discourage the scattering of development throughout the foothills to reduce vehicular emissions by decreasing home to destination distances.

#### Three Rivers Community Plan Update<sup>38</sup>

The Three Rivers Community Plan Update contains policies that apply to projects within the community of Three Rivers that support the County’s GHG reduction efforts:

***Policy 4.1.11 Climate Action Plan (CAP)*** which requires a 6% reduction of GHG emissions for development projects consisting of 50 or more dwelling units or equivalent travel demand for non-residential uses.

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<sup>38</sup> Three Rivers Community Plan 2018 Update.

<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/130Part%20III%20Community%20Plans%20of%207/007Three%20Rivers/COMMUNITY%20PLAN%20GPA%2014-004%20THREE%20RIVERS.pdf>.



***Policy 6.2.2 (Link Commercial Development to Transportation Corridors)*** which requires commercial development to locate in areas with adequate access to major transportation corridors.

#### Tulare County Climate Action Plan

“The Tulare County Climate Action Plan (CAP) serves as a guiding document for County of Tulare (“County”) actions to reduce greenhouse gas emissions and adapt to the potential effects of climate change. The CAP is an implementation measure of the 2030 General Plan Update. The General Plan provides the supporting framework for development in the County to produce fewer greenhouse gas emissions during Plan buildout. The CAP builds on the General Plan’s framework with more specific actions that will be applied to achieve emission reduction targets consistent with California legislation.”<sup>39</sup>

The CAP follows a four-step process recommended by the Institute for Local Government, including identification of a baseline year (2007) and emissions inventory; projected future year inventories (2020 and 2030); and provision of policies, regulations, and programs that achieve reductions by the target years. ...The policies, regulations, and programs considered in the CAP include those by federal, state, and local governments.<sup>40</sup> The following provides a summary of CAP actions:

- “Identifies sources of greenhouse gas emissions caused by activities within the unincorporated areas of Tulare County and estimates how these emissions may change over time.
- Establishes a reduction target of reducing Tulare County’s greenhouse gas emissions to demonstrate consistent with AB 32 (2006) and CARB Scoping Plan targets. [This requires a reduction of 6 percent on average from new development in excess of those achieved from adopted regulations.]
- Provides energy use, transportation, land use, water conservation, and solid waste strategies to bring Tulare County’s greenhouse gas emissions levels to the reduction target.
- Mitigates the impacts of Tulare County activities on climate change (by reducing greenhouse gas emissions consistent with the direction of the State of California via AB 32, Governor’s Order S-03-05, and the 2009 amendments to the CEQA Guidelines to comply with SB 97 (2008). The CEQA Guidelines encourage the adoption of policies or programs as a means of addressing comprehensively the cumulative impacts of projects. (See CEQA Guidelines, Sections 15064(h)(3), 15130(c).)
- Allows the greenhouse gas emissions inventory and CAP to be updated every five years and to respond to changes in science, effectiveness of emission reduction measures and federal, state, regional, or local policies to further strengthen the County’s response to the challenges of climate change.

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<sup>39</sup> Tulare County Climate Action Plan. Page 1. Accessed March 2021 at:  
<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/220Climate%20Action%20Plan/CLIMATE%20ACTION%20PLAN%202018%20UPDATE.pdf>

<sup>40</sup> Ibid. 3.

- Provides substantial evidence that the emission reductions estimated in the CAP are feasible.
- Serves as the threshold of significance within the County of Tulare for climate change impacts, by which all applicable developments within the County will be reviewed.
- Proposed development projects that are consistent with the emission reduction and adaptation measures included in the CAP and the programs that are developed as a result of the CAP, would be considered to have a less than significant cumulative impact on climate change and emissions consistent with CEQA Guidelines 15064(h)(3) as amended to comply with SB 97.”<sup>41</sup>

## METHODOLOGY

As noted in the AQ/GHG Report, “Project GHG emissions were quantified using CalEEMod, version 2016.3.2. Project construction generated GHG emissions were primarily calculated using CalEEMod model defaults for Tulare County and the Project site plans. Operational GHG emissions were calculated based on the Project site plans, the estimated weekend traffic trip generation rates from VRPA Technologies, Inc. (2020), and the CalEEMod default traffic trips for Tulare County for weekday traffic trips. The Project is anticipated to generate 860 additional one-way vehicle trips per day on Saturdays, 625 additional one-way vehicle trips per day on Sundays, and 858 additional one-way vehicle trips per day on weekdays. The traffic fleet mix defaults contained in the CalEEMod model are based on the average fleet mix of Tulare County.”<sup>42</sup>

## IMPACT EVALUATION

### Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Section 15064.4(a) of the CEQA Guidelines amendments for greenhouse gas emissions states that a lead agency should make a good-faith effort to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

- Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
- Rely on a qualitative analysis or performance based standards.

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<sup>41</sup> Op. Cit. 5.

<sup>42</sup> “Air Quality & Greenhouse Gas Assessment Three Rivers Hampton Inn and Suites Project.” July 2020. Page 35. Prepared by ECORP Consulting Inc. and included in Appendix “A” of this Draft EIR.

Section 15064.4(b) of the CEQA Guidelines amendments for greenhouse gas emissions states that a lead agency should take into account the following three considerations in assessing the significance of impacts from greenhouse gas emissions.

- The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

As noted earlier, the Air District has established a menu of performance standards, some of which depend on the existence of an adopted climate action plan (CAP) or the establishment of Best Performance Standards (BPS), to determine the significance of a project's GHG emissions. The Air District has determined that projects consistent with an adopted CAP would be considered to have a less than significant impact. The County has an adopted CAP, which will be used in this analysis to determine significance for this impact.

The Air District's GHG Guidance for Land Use Agencies states that projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions would be determined to have a less than significant individual and cumulative impact for GHG emissions. The proposed Project is consistent with the Tulare County General Plan and as discussed below, the proposed Project is consistent with Tulare County CAP.

The Air District's GHG Guidance for Land Use Agencies states that projects exempt from the requirements of CEQA and projects complying with an approved GHG emission reduction plan or mitigation program would also be determined to have a less than significant individual or cumulative impact. The GHG Guidance also states that GHG emission quantification is required for any project requiring the preparation of an Environmental Impact Report (EIR). The proposed Project is an allowed use by right under the Tulare County General Plan and the emissions associated with the proposed development has been adequately addressed in the EIR prepared for the Three Rivers Community Plan Update. As such, the proposed Project is not subject to further CEQA requirements; however, the County has determined that an EIR will be prepared. Therefore, the GHG emissions resulting from the proposed Project have been quantified for disclosure purposes consistent with Air District guidance.

“Project GHG emissions were quantified for disclosure purposes. The Tulare County CAP does not require quantification of emissions for projects less intense than a 500-unit subdivision or 100,000 square feet of retail or equivalent intensity for other uses. The Proposed Project would include approximately 72,000 square feet of commercial hotel space, and this is less intense than the threshold requiring GHG emissions quantification. However, [pursuant to Air District guidance] the anticipated GHG emissions for the Project are quantified for disclosure purposes. The GHG emissions represent Project emissions prior to implementation of mitigation measures GHG-1 and GHG-2 (explained below), as the specific energy use offset from these measures cannot be determined until the scale and specifications of the renewable energy generation and electric vehicle (EV) charging are known.”<sup>43</sup>

### Construction

“Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 3.2 [in the GHG Report, **Table 3.8-3** in this Draft EIR] illustrates the specific construction generated GHG emissions that would result from construction of the Project.”<sup>44</sup>

“As shown in Table 3.2 [in the AQ/GHG Report, **Table 3.8-3** in this Draft EIR], Project construction would result in the generation of approximately 546 metric tons of CO<sub>2</sub>e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. The amortized construction emissions are added to the annual average operational emissions.”<sup>45</sup>

<b>Table 3.8-3</b>	
<b>Construction-Related Greenhouse Gas Emissions</b>	
<b>Emissions Source</b>	<b>CO<sub>2</sub>e (Metric Tons/Year)</b>
Year One Construction (2021)	420
Year Two Construction (2022)	126
<b>Total Emissions</b>	<b>546</b>
<i>Source: AQ/GHG Report, Table 3-2, Page 38 (see Attachment “A”) of this Initial Study.</i>	

### Operations

“Operation of the Project would result in GHG emissions predominantly associated with motor vehicle use. Long-term operational GHG emissions attributable to the Project are identified in Table 3-3 [in the AQ/GHG Report, **Table 3.8-4** in this Draft EIR].”<sup>46</sup>

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<sup>43</sup> Ibid.

<sup>44</sup> Op. Cit. 38.

<sup>45</sup> Op. Cit.

<sup>46</sup> Op. Cit.

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<b>Table 3.8-4 Operational-Related GHG Emissions</b>	
<b>Emissions Source</b>	<b>CO<sub>2</sub>e (Metric Tons/Year)</b>
Construction Emissions (amortized over the 30-year life of the Project)	18
Area Source Emissions	0
Energy Source Emissions	295
Mobile Source Emissions	842
Solid Waste Emissions	31
Water Emissions	6
<b>Total Emissions</b>	<b>1,175</b>
<i>Source: AQ/GHG Report, Table 3-3, Page 38 (see Attachment "A") of this document</i>	

“As shown in Table 3.3 [in the AQ/GHG Report, **Table 3.8-4** in this Draft EIR], Project operations would result in the generation of approximately 1,175 metric tons of CO<sub>2</sub>e annually.”<sup>47</sup>

Demand for overnight visitor/tourist lodging accommodations would continue due to the proximity of recreational opportunities near and within the Three Rivers area in general and within Tulare County in particular. Environmental impacts could occur as a result of an alternate location and/or an increase in lodging accommodations from another lodging provider in order to meet demand. As noted in the TIS (included in Appendix “E” of the Draft EIR) prepared by consultant VRPA, “The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure [lodging] accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable [lodging] accommodations or stay in properties located outside the market area. Seeking [lodging] accommodations outside of the desired market area increases VMT since travelers would be forced to travel longer distances to secure [lodging] accommodations. The development of the Project would reduce the unaccommodated demand, thus reducing VMT in the market area.”<sup>48</sup> According to the Feasibility Study, there are an estimate 680 hotel rooms (that is, on average daily room count) of similar lodging accommodations located an average of 30 miles from the proposed Project site. The majority of alternative lodging is located in Visalia, while Exeter and SNP each have one lodging accommodation site. As such, multiple day visitors/tourist to the Three Rivers area would have to drive an average of 60 miles (round-trip) versus no miles with the proposed Project. This alternative would likely result in increased air pollutants, increased greenhouse gas emissions, and increased energy consumption (in the form of gasoline and/or diesel fuels) as a result of greater vehicle distances travelled (i.e., vehicle miles travelled or VMT) by visitors/tourists to stay at locations with lodging accommodations outside of Three Rivers. As such, upon completion/operation of the proposed Project, cumulative GHG emissions would be reduced as VMT is reduced thereby resulting in a GHG emissions reduction benefit.

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<sup>47</sup> Op. Cit.

<sup>48</sup> “Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020” (TIS) report. Pages 25-26. Prepared by VRPA Technologies, Inc., (included in Appendix “E” of this Draft EIR).

The proposed Project is an allowed use by right under the Tulare County General Plan and the emissions associated with the proposed development has been adequately addressed in the EIR. Furthermore, as discussed in Item b) the proposed Project is consistent with the Tulare County CAP. Therefore, the proposed Project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment. As such, the proposed Project would result in a less than significant impact to this resource.

Therefore, the proposed Project would result in a ***Less Than Significant Project-specific Impact*** related to this Checklist Item.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin.

Project-related GHG emissions would be considered to have a significant cumulative impact if project-specific impacts are determined to be significant. As previously noted, the proposed Project is required to comply with the Tulare County General Plan, Three Rivers Community Plan, and Tulare County CAP and is therefore, consistent with the reduction targets for years 2020 and 2030. Further, the nature of the proposed Project is to accommodate transient tourist/visitors in the area of Three Rivers. Upon completion/operation of the proposed Project, cumulative GHG emissions would be reduced as VMT is reduced thereby resulting in a GHG emissions reduction benefit. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. Based on the analysis herein, Tulare County RMA agrees that the analysis and conclusions contained within and supported in the AQ/GHG Report prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would result in ***Less Than Significant Cumulative Impacts*** related to this Checklist Item would occur.

Mitigation Measures: ***None Required***

Conclusion: ***Less Than Significant Impact***

The proposed Project is consistent with the Tulare County General Plan, Three Rivers Community Plan, the Tulare County CAP, and is allowed as a by-right use in the C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone) zone. Further, as noted earlier, the nature of the proposed Project is to accommodate transient tourist/visitors in the area of Three Rivers. Upon completion/operation of the proposed Project, cumulative GHG emissions would be reduced as VMT is reduced thereby resulting in a GHG emissions reduction benefit. As such, the Project would not generate greenhouse gas emissions, either directly or indirectly, that would have a significant impact on the environment. Therefore, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

**b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

**Impact Analysis:**

***Less Than Significant Impact With Mitigation***

The Air District's GHG Guidance for Land Use Agencies states that projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions would be determined to have a less than significant individual and cumulative impact for GHG emissions. The proposed Project is consistent with the Tulare County General Plan and as discussed below, the proposed Project is consistent with Tulare County CAP.

"The Tulare County CAP (2018) is a strategic planning document that identifies sources of GHG emissions within the County, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic policies and actions to reduce emissions from the development project subject to CEQA. The GHG-reduction strategies in the Plan build key opportunities prioritized by County staff and members of the public.

To be consistent with the CAP, development projects less intense than a 500-unit subdivision or 100,000 square feet of retail or equivalent intensity for other uses can use the CAP consistency checklist. The checklist contains design features and measures that are used to determine consistency. The overarching CAP consistency requirements for all projects are outlined in Table 3-4 [in the AQ/GHG Report, **Table 3.8-5** of this Draft EIR]."<sup>49</sup>

<b>Table 3.8-5</b>	
<b>CEQA Project Requirements for Consistency with CAP</b>	
<b>Item</b>	<b>Project Compliance?</b>
Project helps to meet the density goals from the Tulare Blueprint	Yes
Consistency with General Plan policies	Yes
Consistency with Rural Valley Land Plans or Foothill Growth Management Plan development criteria	Yes
Consistency with Urban Growth Boundary expansion criteria	Yes
Consistency for development within Rural Community Urban Development Boundaries (UDB) and Hamlet Development Boundaries HDB, and Legacy Development Boundaries (LDB)	Yes
<i>Source: AQ/GHG Report, Table 3-4, Page 39 (see Attachment "A") of this document</i>	

"The Project would comply with all applicable General Plan policies intended to reduce GHG emissions. The Project site in the community of Three Rivers and is covered by the Foothill Growth Management Plan of the 2030 General Plan (County of Tulare 2012). The Project would not conflict with the applicable policies of the Foothill Growth Management Plan. Furthermore, the Project would comply with the Land Use and Urban Policies of the 2030 General Plan. Finally, for the Project to be approved for development by the County of Tulare

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<sup>49</sup> Op. Cit. 38-39.

they would require the Project to meet the development requirements as they pertain to Rural Community Urban Development Boundaries and/or Hamlet Development Boundaries. The Project site is located within the Three Rivers Urban Development Boundary depicted within the 2030 General Plan. In addition, the Project is consistent with the 2009 Tulare County Regional Blueprint goals and objectives.

Furthermore, both the existing and the projected GHG inventories in the CAP were derived based on the land use designations and associated densities defined in the County's General Plan. The Proposed Project is consistent with the land use designation and development density presented in the General Plan. As previously stated, the Project site is designated by the 2030 General Plan as Urban Development Boundaries (zoned for commercial use). Since the Project is consistent with the General Plan, it is consistent with the urban development types, intensity, and patterns of land use envisioned for the site vicinity in the General Plan. As a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by the County to develop the CAP.

A more detailed review for compliance with CAP measures is required to ensure that a project is doing its part in reducing emissions. Table 3-5 [in the AQ/GHG Report, **Table 3.8-6** of this Draft EIR] provides a checklist containing all applicable measures that will provide reductions necessary to achieve CAP consistency.”<sup>50</sup>

<b>Table 3.8-6 CAP Consistency Checklist (Applicable to the Project)</b>		
<b>CAP Measure</b>	<b>Compliance</b>	<b>Project Compliant Prior to Mitigation?</b>
Land Use: Project is consistent with the Tulare County General Plan policies listed in the CAP applicable to GHG emissions and sustainability.	Review for compliance during project review process.	Yes
Energy Efficiency: Project complies with current version of Title 24	Provide copy of the Title 24 Report demonstrating compliance with the applicable standards with Building Permit application.	Yes
Renewable Energy: Project includes solar panels or other alternative energy source meeting County Solar Ordinance or new Title 24 standards whichever is more stringent.	Include solar on building plans and provide Title 24 compliance reports with Building Permit applications.	No
EV Charging: Project meets charging installation/charging ready requirements of the CalGreen Code.	Include charging in building plans.	No
CalGreen Building Code Water: Project complies with indoor and outdoor water conservation measures.	Provide copy of report showing code compliance.	Yes
Water Conservation Landscaping:	Project complies with County water conservation ordinance requirements for landscaping.	Yes
<i>Source: GHG Report, Table 3-5, Page 40 (see Attachment "A") of this document</i>		

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<sup>50</sup> Op. Cit. 39.



“As shown in Table 3-4 [in the AQ/GHG Report, **Table 8.3-5** of this Draft EIR], the Project is consistent with the applicable General Plan Policies. In addition, the Project is required by California state law to meet the Title 24 energy efficiency requirements, comply with the CALGreen Building Water Code (California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations), and meet the California Model Water Efficient Landscape Ordinance (MWELO) requirements. Furthermore, the County mandates that applicable codified County standards are met by the Project and will enforce the implementation of these standards as a condition of approval. During the design review process, the County will mandate that the Project not only meets state MWELO standards, but complies with the specific requirements of the County water conservation ordinance requirements for landscaping. The County will also review the trash enclosure design to ensure solid waste pick-up is feasible and will ensure the Project meets the CalRecycle requirements. Further, the County must verify the Project is consistent with the General Plan policies, and the County requires all feasible GHG-reducing strategies of the CAP are incorporated into projects and their permits through development review and application of conditions of approval as applicable.

As shown in Table 3-5 [in the AQ/GHG Report, **Table 3.8-6** of this Draft EIR], the Project Preliminary Concept Design does not specify that the Project design includes EV charging and a renewable energy source. As such, **Mitigation Measures GHG-1** and **GHG-2** are required to for the Project to be consistent with the CAP.”<sup>51</sup>

#### “Mitigation Measures

**GHG-1** The Project must provide an onsite renewable energy system(s). The Project shall include solar panels or other alternative energy source meeting the County Solar Ordinance or new Title 24 standards, whichever is more stringent. The onsite renewable energy system(s) must be installed as part of the construction process and be functional upon commencement of Project operation. The Project Proponent must include solar on building plans and provide Title 24 compliance reports with Building Permit applications to the County.

**GHG-2** The Project shall meet the charging installation/charging ready requirements of the CALGreen Code. The Project Proponent shall include EV charging accommodations as specified in the CALGreen Code in building plans for review and approval by the County, prior to commencement of Project construction.

Following implementation of **Mitigation Measures GHG-1** and **GHG-2**, the Project would be consistent with the Tulare County CAP for the purpose of meeting 2030 GHG emission reduction targets in compliance with SB 32.”<sup>52</sup>

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<sup>51</sup> Op. Cit. 40.

<sup>52</sup> Op. Cit. 40-41.

The proposed Project is consistent with the Tulare County General Plan and the Three Rivers Community Plan. With the implementation of **Mitigation Measures GHG-1** and **GHG-2** the proposed is consistent with the requirements of the Tulare County CAP. Therefore, the proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. As such, the proposed Project would result in a ***Less Than Significant Impact With Mitigation*** to this resource.

Cumulative Impact Analysis:      **Less Than Significant Impact**

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin.

As previously discussed, implementation of the Community Plan Update is consistent with the applicable AB 32 Scoping Plan reductions measures and the Air District's CCAP. Future development projects within the Community Plan Update Planning Area will implement applicable Tulare County General Plan and Tulare County CAP policies. As such, implementation of the Community Plan Update will not conflict with applicable state, regional, and local plans, policies or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Demand for overnight visitor/tourist lodging accommodations would continue due to the proximity of recreational opportunities near and within the Three Rivers area in general and within Tulare County in particular. Environmental impacts could occur as a result of an alternate location and/or an increase in lodging accommodations from another lodging provider in order to meet demand. As noted in the TIS (included in Appendix "E" of the Draft EIR) prepared by consultant VRPA, "The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure [lodging] accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable [lodging] accommodations or stay in properties located outside the market area. Seeking [lodging] accommodations outside of the desired market area increases VMT since travelers would be forced to travel longer distances to secure [lodging] accommodations. The development of the Project would reduce the unaccommodated demand, thus reducing VMT in the market area." According to the Feasibility Study, there are an estimate 680 hotel rooms (that is, on average daily room count) of similar lodging accommodations located an average of 30 miles from the proposed Project site. The majority of alternative lodging is located in Visalia, while Exeter and SNP each have one lodging accommodation site. As such, multiple day visitors/tourist to the Three Rivers area would have to drive an average of 60 miles (round-trip) versus no miles with the proposed Project. This alternative would likely result in increased air pollutants, increased greenhouse gas emissions, and increased energy consumption (in the form of gasoline and/or diesel fuels) as a result of greater vehicle distances travelled (i.e., vehicle miles travelled or VMT) by visitors/tourists to stay at locations with lodging accommodations outside of Three Rivers. As such, upon completion/operation of the proposed Project, cumulative GHG emissions would be reduced as VMT is reduced thereby resulting in a GHG emissions reduction benefit.

Project-related GHG emissions would be considered to have a significant cumulative impact if project-specific impacts are determined to be significant. As previously noted, the proposed Project is required to comply with the Tulare County General Plan, Three Rivers Community Plan, and Tulare County CAP and is therefore, consistent with the reduction targets for years 2020 and 2030. As such, the proposed Project would be consistent with the Tulare County General Plan, Three Rivers Community Plan, the Tulare County CAP, and is allowed as a by-right use in the C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone) zone. Further, as noted earlier, the nature of the proposed Project is to accommodate transient tourist/visitors in the area of Three Rivers. Upon completion/operation of the proposed Project, cumulative GHG emissions would be reduced as VMT is reduced thereby resulting in a GHG emissions reduction benefit. Therefore, the proposed Project would result in Less Than Significant Project-specific Impacts, while ***Less Than Significant Cumulative Impacts With Mitigation*** would occur.

Mitigation Measures:

***None Required.***

Conclusion:

***Less Than Significant Impact***

Implementation of the Community Plan Update will be consistent with the Tulare County General Plan, Tulare County CAP, and the Air District's CCAP. Therefore, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

## DEFINITIONS/ACRONYMS

### Definitions

**Baseline** – The three year average (2002-2004) of GHG emissions for a type of equipment or operation within an identified class and category, expressed as annual GHG emissions per unit.

**Best Performance Standard** – For a specific Class and Category, the most effective, District approved, Achieved-In-Practice means of reducing or limiting GHG emissions from a GHG emissions source, that is also economically feasible per the definition of Achieved-in-Practice. BPS includes equipment type, equipment design, and operational and maintenance practices for the identified service, operation, or emissions unit class and category.

**Business-as-Usual** – The emissions for a type of equipment or operation within an identified class and category Projected for the year 2020, assuming no change in GHG emissions per unit of activity as established for the baseline period.

**Carbon Dioxide (CO<sub>2</sub>)** – Carbon dioxide is an odorless, colorless, natural greenhouse gas.

**Carbon Dioxide Equivalent (CO<sub>2</sub>e)** – Carbon Dioxide Equivalent is the amount of CO<sub>2</sub> emission that would cause the same time-integrated radiative forcing, over a given time horizon, as an emitted amount of a long lived GHG or a mixture of GHGs. The equivalent CO<sub>2</sub> emission is obtained by multiplying the emission of a GHG by its Global Warming Potential (GWP) for the given time horizon. For a mix of GHGs it is obtained by summing the equivalent CO<sub>2</sub> emissions of each gas. Equivalent CO<sub>2</sub> emission is a standard and useful metric for comparing emissions of different GHGs but does not imply the same climate change responses.

**Category** – A District approved subdivision within a “class” as identified by unique operational or technical aspects.

**Chlorofluorocarbons (CFCs)** – Chlorofluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth’s surface).

**Class** – The broadest District approved division of stationary GHG sources based on fundamental type of equipment or industrial classification of the source operation.

**Forcing** – Forcing is a measure of the influence a factor has in altering the balance of incoming and outgoing energy in the Earth-atmosphere system and is an index of the importance of the factor as a potential climate change mechanism.

**Global Warming** – Global warming is an increase in the temperature of the Earth's troposphere. Global warming has occurred in the past as a result of natural influences, but the term is most often

used to refer to the warming predicted by computer models to occur as a result of increased emissions of greenhouse gases.

**Greenhouse Gas (GHG) Emissions**– Greenhouse gas emissions are the release of any gas that absorbs infrared radiation in the atmosphere. Generally when referenced in terms of global climate they are considered to be harmful. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrochlorofluorocarbons (HCFCs), ozone (O<sub>3</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

**Hydrochlorofluorocarbons (HCFCs)** –any of a class of inert compounds of carbon, hydrogen, hydrocarbons, chlorine, and fluorine, used in place of chlorofluorocarbons as being somewhat less destructive to the ozone layer.

**Hydrofluorocarbons (HFCs)** – **Hydrofluorocarbons** are any of a class of partly chlorinated and fluorinated hydrocarbons, used as an alternative to chlorofluorocarbons in foam production, refrigeration, and other processes

**Methane (CH<sub>4</sub>)** – Methane is a flammable greenhouse gas and is the main component of natural gas.

**Nitrogen Trifluoride (NF<sub>3</sub>)** – Nitrogen trifluoride is a colorless, toxic, odorless, nonflammable greenhouse gas. It is used as an etchant in microelectronics.

**Nitrous Oxide (N<sub>2</sub>O)** – Nitrous oxide, also known as laughing gas, is a colorless greenhouse gas.

**Ozone (O<sub>3</sub>)** – Ozone is a colorless, odorless reactive gas comprised of three oxygen atoms. It is found naturally in the earth's stratosphere, where it absorbs the ultraviolet component of incoming solar radiation that could be harmful to life on earth. Ozone is also found near the earth's surface, where pollutants emitted from society's activities react in the presence of sunlight to form ozone.

**Perfluorocarbons (PFCs)** – Perfluorocarbons have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface.

**Sulfur Hexafluoride (SF<sub>6</sub>)** – Sulfur hexafluoride is an inorganic, odorless, colorless, and nontoxic, nonflammable gas.

### Acronyms

AB	Assembly Bill
AIR DISTRICT	San Joaquin Valley Air Pollution Control District
ARB	Air Resources Board (Short for CARB)
BAU	Business As Usual
BPS	Best Performance Standards
CAA	Clean Air Act

Cal EPA	California Environmental Protection Agency
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CARB	California Air Resources Board
CCAP	Climate Change Action Plan
CEQA	California Environmental Quality Act
CH <sub>4</sub>	Methane
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2e</sub>	Carbon Dioxide Equivalent
EO	Executive Order
EPA	Environmental Protection Agency
GHG	Greenhouse Gases
HFCs	Hydrofluorocarbons
MTCO <sub>2e</sub>	metric tons of carbon dioxide equivalent
N <sub>2</sub> O	Nitrous Oxide
NF <sub>3</sub>	Nitrogen trifluoride
OPR	Governor's Office of Planning and Research
PFCs	Perfluorocarbons
SB	Senate Bill
SF <sub>6</sub>	Sulfur Hexafluoride
SJVAPCD	San Joaquin Valley Air Pollution Control District (also Air District)
UDB	Urban Development Boundary

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# Hazards and Hazardous Materials

## Chapter 3.9

### SUMMARY OF FINDINGS

Impacts of the proposed Three Rivers-Hampton Inn & Suite (Project) are determined to be ***Less Than Significant***. A detailed review of potential impacts is provided in the following analysis.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Hazards and Hazardous Materials. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2(a), “[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

The “Environmental Setting” section provides a description of the Hazards and Hazardous Materials in the County. The “Regulatory Setting” section provides a description of applicable

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<sup>1</sup> CEQA Statute and Guidelines, Section 15126.2 (a).

Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Recirculated Draft Environmental Impact Report (RDEIR) incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

### Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist Item questions. The following are potential thresholds for significance.

- Create a significant hazard to the public or environment
- Located within one-quarter mile of an existing or proposed school
- Located on a list of hazardous materials sites
- Located within an airport land use plan
- Located within the vicinity of a private airstrip
- Interfere adopted emergency response plan or emergency evacuation plan
- Wildland Fire Risk

## **ENVIRONMENTAL SETTING**

The proposed Project is a 3-story hotel which will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.) and outdoor swimming pool/cabana building. Consistent with Tulare County parking requirements, the proposed Project includes 108 standard parking stalls (6 of which will be handicap stalls). Utilities include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration). The proposed Project is anticipated to have 12 employees, 70 customers, 1 delivery, and 1 shipment per day, for a total of 168 daily vehicle trips.

The proposed Project site is located in unincorporated community of Three Rivers in Tulare County (County), California, approximately thirty miles east of Visalia, the County Seat. The nearest city is Woodlake located approximately 15 miles west of the Project site. The community is approximately five miles south of the entrance of Sequoia National Park. It lies in a natural valley area created by the convergence of the North, Middle, and South Forks of the Kaweah River near the western edge of the Sierra Nevada Mountains.<sup>2</sup> “The Project area is located in the Sierra foothills on the western slope of the Sierra Nevada range at elevations between 700 and 3,000 feet. Geophysical factors including elevation, slope, hydrogeology and climate... This area is typified

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<sup>2</sup> Tulare County. Three Rivers Community Plan 2018 Update. Draft Environmental Impact Report. Page. 3.8-2.

by undulating terrain that varies from relatively flat riparian valleys immediately adjacent to the North, South, and Middle Forks of the Kaweah River...Elevations along the State Highway 198 corridor range from approximately 772 feet at Lake Kaweah to a high elevation of 2400 feet east of the entrance to the Sequoia National Park.”<sup>3</sup>

“The mild climate in Three Rivers is generally characterized as Mediterranean. The area tends to be clear, sunny, warm, dry and free of fog. The mean temperatures range from a low of 35° F in January to a high of 95° F in July. The average yearly rainfall for the area is approximately 18 inches with 90 percent of the precipitation falling between the months of November and April. The winds in the area are considered light, moving up the canyons in the mornings and down the canyons in the evening.”<sup>4</sup>

The nearest airport, Woodlake Airport (City of Woodlake) is approximately 16 miles west of the proposed Project site. Solid waste collection in the Three Rivers area is provided by Mid Valley Disposal (the current solid waste hauler) which has a license with the County of Tulare. Solid waste generated in Three Rivers is disposed of at Visalia Landfill (which is operated by the Tulare County Solid Waste Department and is located at 22466 Road 80, near Visalia).

#### Hazardous Waste Shipments Originating Within Tulare County

“A hazardous material is defined by the California Code of Regulations (CCR) as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating, illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of (CCR, Title 22, Division 4.5, Chapter 10, Article 2, Section 66260.10).”<sup>5</sup>

Similarly, hazardous wastes are defined as “[m]aterials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. According to Title 22 of the CCR, hazardous materials and hazardous wastes are classified according to four properties: toxic, ignitable, corrosive, and reactive (CCR, Title 22, Chapter 11, Article 3).”<sup>6</sup>

In 2017 (most recent year of data), the California Department of Toxic Substances Control (DTSC) Hazardous Waste Tracking System (HWTS) manifest data reports that approximately 1.494 tons of hazardous waste was transported from all categories of generators in Three Rivers; versus 2,314.42 tons in 2016 (an anomalous year where 2,309.58 tons of the total tonnage were attributed to clean-up of a contaminated soils site).<sup>7</sup>

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<sup>3</sup> Ibid.

<sup>4</sup> Tulare County. Three Rivers Community Plan 2018 Update. Page 73.

<sup>5</sup> Tulare County. Tulare County General Plan 2030 Update. Background Report 2010/ Page 8-26. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/Appendix%20B%20-%20Background%20Report.pdf>.

<sup>6</sup> Ibid.

<sup>7</sup> DTSC, 2017 and 2016. Accessed October 2020 at: [https://hwts.dtsc.ca.gov/hwts\\_Reports/ReportPages/Report07.aspx?year=2017&NbrRecs=All&sort=WASTE\\_STATE\\_CODE&city=THREE](https://hwts.dtsc.ca.gov/hwts_Reports/ReportPages/Report07.aspx?year=2017&NbrRecs=All&sort=WASTE_STATE_CODE&city=THREE)

The nearest elementary (Three Rivers Elementary School) is located in Three Rivers approximately 1.5 miles north of the Project site; while the nearest high school (Woodlake High School) is approximately 17 miles west of the Project site in the City of Woodlake.

## REGULATORY SETTING

### *Federal Agencies & Regulations*

#### Hazardous Materials Transportation Act

“The Hazardous Material Transportation Act (HMTA) was published in 1975. Its primary objective is to provide adequate protection against the risks to life and property inherent in the transportation of hazardous material in commerce by improving the regulatory and enforcement authority of the Secretary of Transportation. A hazardous material, as defined by the Secretary of Transportation is, any “particular quantity or form” of a material that “may pose an unreasonable risk to health and safety or property.”<sup>8</sup>

#### Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

“CERCLA, commonly referred to as Superfund, was enacted on December 11, 1980. The purpose of CERCLA was to provide authorities with the ability to respond to uncontrolled releases of hazardous substances from inactive hazardous waste sites that endanger public health and the environment. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at such sites, and established a trust fund to provide for cleanup when no responsible party could be identified. Additionally, CERCLA provided for the revision and republishing of the National Contingency Plan (NCP) that provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also provides for the National Priorities List, a list of national priorities among releases or threatened releases throughout the United States for the purpose of taking remedial action.”<sup>9</sup>

#### Superfund Amendments and Reauthorization Act (SARA)

“SARA amended CERCLA on October 17, 1986. This amendment increased the size of the Hazardous Response Trust Fund to \$8.5 billion, expanded EPA’s response authority, strengthened enforcement activities at Superfund sites; and broadened the application of the law to include

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[%20RIVERS&county=NULL&cupa=NULL](http://hwts.dtsc.ca.gov/hwts_Reports/ReportPages/Report07.aspx?year=2016&NbrRecs=All&sort=TOTAL_TONS&city=THREE%20RIVERS&county=NULL&cupa=NULL) and [http://hwts.dtsc.ca.gov/hwts\\_Reports/ReportPages/Report07.aspx?year=2016&NbrRecs=All&sort=TOTAL\\_TONS&city=THREE%20RIVERS&county=NULL&cupa=NULL](http://hwts.dtsc.ca.gov/hwts_Reports/ReportPages/Report07.aspx?year=2016&NbrRecs=All&sort=TOTAL_TONS&city=THREE%20RIVERS&county=NULL&cupa=NULL); respectively.

<sup>8</sup> U.S. EPA. Hazardous Materials Transportation Act. Accessed October 2020 at: <https://archive.epa.gov/emergencies/content/lawsregs/web/html/hmtaover.html#overview>.

<sup>9</sup> Tulare County General Plan Background Report. February 2010. Page 8-27. Accessed November 2020 at: <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>.

federal facilities. In addition, new provisions were added to the law that dealt with emergency planning and community right to know. SARA also required EPA to revise the Hazard Ranking System to ensure that the system accurately assesses the relative degree of risk to human health and the environment posed by sites and facilities subject to review for listing on the National Priorities List (NPL).”<sup>10</sup>

### ***State Agencies & Regulations***

Hazardous Substance Account Act (1984), California Health and Safety Code Section 25300 et seq. (HSAA)

“This act, known as the California Superfund, has three purposes: 1) to respond to releases of hazardous substances; 2) to compensate for damages caused by such releases; and 3) to pay the states 10 percent share in CERCLA cleanups. Contaminated sites that fail to score above a certain threshold level in the EPA’s ranking system may be placed on the California Superfund list of hazardous wastes requiring cleanup.”<sup>11</sup>

California Environmental Protection Agency (CalEPA), Department of Toxic Substance Control (DTSC)

“Cal/EPA has regulatory responsibility under Title 22 of the California Code of Regulations (CCR) for administration of the state and federal Superfund programs for the management and cleanup of hazardous materials. The DTSC is responsible for regulating hazardous waste facilities and overseeing the cleanup of hazardous waste sites in California. The Hazardous Waste Management Program (HWMP) regulates hazardous waste through its permitting, enforcement and Unified Program activities. HWMP maintains the EPA authorization to implement the [Resource Conservation and Recovery Act] RCRA program in California, and develops regulations, policies, guidance and technical assistance/ training to assure the safe storage, treatment, transportation and disposal of hazardous wastes. The State Regulatory Programs Division of DTSC oversees the technical implementation of the state’s Unified Program, which is a consolidation of six environmental programs at the local level, and conducts triennial reviews of Unified Program agencies to ensure that their programs are consistent statewide and conform to standards.”<sup>12</sup>

California Occupational Safety and Health Administration (Cal/OSHA)

“Cal/OSHA and the Federal OSHA are the agencies responsible for assuring worker safety in the handling and use of chemicals in the workplace. Pursuant to the Occupational Safety and Health Act of 1970, Federal OSHA has adopted numerous regulations pertaining to worker safety, contained in the Code of Federal Regulations Title 29 (29 CFR). These regulations set standards for safe workplaces and work practices, including standards relating to hazardous material

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<sup>10</sup> Ibid.

<sup>11</sup> Tulare County General Plan Background Report. February 2010. Page 8-29 – 8-29. Accessed November 2020 at: <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf> accessed November 2020.

<sup>12</sup> Ibid. 8-29.

handling. Cal/OSHA assumes primary responsibility for developing and enforcing state workplace safety regulations. Because California has a federally approved OSHA program, it is required to adopt regulations that are at least as stringent as those identified in 29 CFR. Cal/OSHA standards are generally more stringent than federal regulations.”<sup>13</sup>

#### Hazardous Materials Transport Regulations

“California law requires that Hazardous Waste (as defined in California Health and Safety Code Division 20, Chapter 6.5) be transported by a California registered hazardous waste transporter that meets specific registration requirements. The requirements include possession of a valid Hazardous Waste Transporter Registration, proof of public liability insurance, which includes coverage for environmental restoration, and compliance with California Vehicle Code registration regulations required for vehicle and driver licensing.”<sup>14</sup>

#### Cal/EPA Cortese List

“The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List" (after the Legislator who authored the legislation that enacted it). The list, or a site's presence on the list, has bearing on the local permitting process as well as on compliance with the California Environmental Quality Act (CEQA).”<sup>15</sup> The Cortese List identifies the following:

- Hazardous Waste and Substance Sites
- Cease and Desist Order Sites
- Waste Constituents above Hazardous Waste Levels outside the Waste Management Unit Sites
- Leaking Underground Storage Tank (LUST) Cleanup Sites
- Other Cleanup Sites
- Land Disposal Sites
- Military Sites
- Waste Discharge Requirements (WDR) Sites
- Permitted Underground Storage Tank (UST) Facilities Sites
- Monitoring Wells Sites
- DTSC Cleanup Sites
- DTSC Hazardous Waste Permit Sites

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<sup>13</sup> Op. Cit. 8-30 to 8-31.

<sup>14</sup> Op. Cit. 8-31.

<sup>15</sup> CalEPA, Background and History, <https://www.calepa.ca.gov/sitecleanup/corteselist/background/>, accessed November 2020.

### California Building Code

CCR Title 24 Chapter 7 (et al) Fire and Smoke Protection “...applies to building materials, systems and/or assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface Fire Area as defined in Section 702A. The purpose of this chapter is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area to resist the intrusion of flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.”<sup>16</sup>

### *Local Policy & Regulations*

#### Tulare County Environmental Health Division

“The Tulare County Division of Environmental Health is a full-service Division, dedicated to protecting the people and the environment of Tulare County. The Tulare County Division of Environmental Health oversees a variety of programs that relate to the health and safety of people and the environment. The mission of the Division of Environmental Health is to enhance the quality of life in Tulare County through implementation of environmental health programs that protect public health and safety as well as the environment. We accomplish this goal by overseeing and enforcing numerous different programs, from food facility inspections to hazardous waste. All of our inspectors are licensed and/or certified in the field that they practice in and participate in continuing education to maintain licensure.”<sup>17</sup>

#### Tulare County General Plan 2030 Update

The Tulare County General Plan 2030 Update (at Chapter 10 – Health and Safety)<sup>18</sup> contains the following goals and policies that relate to hazards and hazardous materials, and which have potential relevance to the Project’s CEQA review:

**HS-4.1 Hazardous Materials** - The County shall strive to ensure hazardous materials are used, stored, transported, and disposed of in a safe manner, in compliance with local, State, and Federal safety standards, including the Hazardous Waste Management Plan, Emergency Operations Plan, and Area Plan.

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<sup>16</sup> California Code of Regulations. Title 24 Chapter 7 (et al) Fire and Smoke Protection accessed October 2020 at: <https://up.codes/viewer/california/ca-building-code-2016/chapter/7A/sfm-materials-and-construction-methods-for-exterior-wildfire-exposure#:~:text=WILDLAND-URBAN%20INTERFACE%20FIRE%20AREA%20is%20a%20geographical%20area,to%20be%20at%20a%20significant%20risk%20from%20wildfires>

<sup>17</sup> Tulare County Environmental Health. Accessed March 2021 at: <https://tularecountyeh.org/eh/>

<sup>18</sup> Tulare County. Tulare County General Plan 2030 Update. Chapter 10 Health and Safety Element (which can be found on PDF page 251). Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/GENERAL%20PLAN%202012.pdf>.

**HS-4.2 Establishment of Procedures to Transport Hazardous Wastes** - The County shall continue to cooperate with the California Highway Patrol (CHP) to establish procedures for the movement of hazardous wastes and explosives within the County.

**HS-4.4 Contamination Prevention** - The County shall review new development proposals to protect soils, air quality, surface water, and groundwater from hazardous materials contamination.

**HS-6.1 New Building Fire Hazards** - The County shall ensure that all building permits in urban areas, as well as areas with potential for wildland fires, are reviewed by the County Fire Chief. The following minimum requirements should be met to review developments or uses within areas of varying fire hazards:

**HS-6.2 Development in Fire Hazard Zones** - The County shall ensure that development in very high or high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards. This shall include promoting the use of fire resistant materials designed to reduce fire vulnerability within high or very high fire hazard areas through use of Article 86-A of the 2001 California Fire Code, SRA Fire Safe Regulations, and other nationally recognized standards, as may be updated periodically. Special consideration shall be given to the use of fire-resistant-materials and fire-resistant-construction in the underside of eaves, balconies, unenclosed roofs and floors, and other similar horizontal surfaces in areas with steep slopes. Ensure new development proposals contain specific fire protection plans, actions, and codes for fire engineering features for structures in Very High Fire Hazard Safety Zones including automatic sprinklers as required by applicable codes.

**HS-6.4 Encourage Cluster Development** - The County shall encourage cluster developments in areas identified as subject to high or very high fire hazard, to provide for more localized and effective fire protection measures such as consolidations of fuel build-up abatement, firebreak maintenance, firefighting equipment access, and water service provision.

**HS-6.6 Wildland Fire Management Plans** - The County shall require the development of wildland fire management plans for projects adjoining significant areas of open space that may have high fuel loads; and

**HS-6.7 Water Supply System** - The County shall require that water supply systems be adequate to serve the size and configuration of land developments, including satisfying fire flow requirements. Standards as set forth in the subdivision ordinance shall be maintained and improved as necessary.

**HS-6.8 Private Water Supply** - The County shall require separately developed dwellings with individual private water supply to provide an acceptable guaranteed minimum supply of water for fire safety, in addition to the amount required for domestic needs.



## IMPACT EVALUATION

### Would the project:

- a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Project Impact Analysis:

***Less Than Significant Impact***

The proposed 3-story hotel which will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.), 108 standard parking stalls (6 of which will be handicap stalls) and utilities including a septic tank with filter and dripline system and new domestic well. Storm water drainage will be retained on-site (with an option for biofiltration). Proposed Project construction will not likely require the transport and use of small quantities of hazardous materials in the form of gasoline, diesel, and oil. Although there is the potential for small leaks due to refueling of the construction equipment if refueling were to occur on -site, standard construction Best Management Practices (BMPs) included in the SWPPP will reduce the potential for accidental release of construction-related fuels and other hazardous materials. These BMPs will prevent, minimize, or remedy storm water contamination from spills or leaks, control the amount of runoff from the site, and require proper disposal or recycling of hazardous materials.

Proposed Project operations will not require the storage of hazardous materials, such as fuel and lubricants. It is likely the proposed Project will use and store typical housekeeping products such as drain cleaners, spot remover, disinfectants, etc. The storage, transport, and use of these materials will comply with Local, State, and Federal regulatory requirements.

Therefore, the proposed Project will not result in a ***Less Than Significant Impact*** to the public or the environment.

Cumulative Impact Analysis:

***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided by the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR) and/or the Three Rivers Community Plan and EIR. As such, the proposed Project would result in a ***Less Than Significant Cumulative Impacts*** related to this Checklist Item.

Mitigation Measure(s):

***None Required.***

Conclusion:

***Less Than Significant Impact***

As noted earlier, *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

- b) **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

Project Impact Analysis:

***Less Than Significant Impact***

As indicated in Item a), the proposed Project is a 3-story hotel which will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.), 108 standard parking stalls (6 of which will be handicap stalls) and utilities including a septic tank with filter and dripline system and new domestic well. Storm water drainage will be retained on-site (with an option for biofiltration). Proposed Project construction will not likely require the transport and use of small quantities of hazardous materials in the form of gasoline, diesel, and oil. Although there is the potential for small leaks due to refueling of the construction equipment if refueling were to occur on -site, standard construction Best Management Practices (BMPs) included in the SWPPP will reduce the potential for accidental release of construction-related fuels and other hazardous materials. These BMPs will prevent, minimize, or remedy storm water contamination from spills or leaks, control the amount of runoff from the site, and require proper disposal or recycling of hazardous materials.

Proposed Project operations will not require the storage of hazardous materials, such as fuel and lubricants. It is likely the proposed Project will use and store typical housekeeping products such as drain cleaners, spot remover, disinfectants, etc. The storage, transport, and use of these materials will comply with Local, State, and Federal regulatory requirements.

Therefore, the proposed Project will not result in a significant hazard to the public or the environment and *impacts will be less than significant*.

Cumulative Impact Analysis:

***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County 2030 General Plan DEIR, and/or the Three Rivers Community Plan and EIR.

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. As there are *Less Than Significant Program-specific Impacts*, *Less Than Significant Cumulative Impacts* related to this Checklist Item will occur.

Mitigation Measure(s):

***None Required.***

Conclusion:

***Less Than Significant Impact***

***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

- c) **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Project Impact Analysis:

***No Impact***

The nearest school, Three Rivers Elementary School, is approximately 1.5 miles north of the proposed Project site. As described earlier, the Project involves construction of hotel as the main structure, parking, access/egress driveway, etc. and will not emit hazardous emissions, involve hazardous materials, or create a hazard to the school. Therefore, ***No Impact*** related to this Checklist Item will occur.

Cumulative Impact Analysis:

***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County 2030 General Plan DEIR, and/or the Three Rivers Community Plan and EIR.

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. As there are ***Less Than Significant Program-specific Impacts, Less Than Significant Cumulative Impacts*** related to this Checklist Item will occur.

Mitigation Measure(s):

***None Required.***

Conclusion:

***No Impact***

- d) **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Project Impact Analysis:

***No Impact***

According to the State of California Department of Toxic Substances Control (DTSC) – Envirostor Search, no hazardous materials sites exist within an approximate two-mile radius of the proposed Project site.<sup>19</sup> The proposed Project site is not listed as hazardous materials

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<sup>19</sup> California Dept. of Toxic and Substances Control Accessed October 2020 at:  
<https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Tulare+County%2C+CA>.

sites pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control per a review of “Identified Hazardous Waste Sites” (conducted in October 2020 by RMA staff). Therefore, as the proposed Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 it would not create a significant hazard to the public or the environment. Therefore, ***No Significant Project-specific Impacts*** related to this Checklist Item will also occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County 2030 General Plan DEIR, and/or the Three Rivers Community Plan and EIR.

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. As there are Less Than Significant Program-specific Impacts, Less Than Significant Cumulative Impacts related to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

As noted earlier, the proposed Project site is not listed as hazardous materials sites pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control per a review of “Identified Hazardous Waste Sites” (conducted in October 2020 by RMA staff). As such, ***No Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

- e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

Project Impact Analysis: ***No Impact***

The nearest airport, Woodlake Airport, is approximately sixteen miles west of the proposed Project site; the non-operational Three Rivers airport is located approximately two miles north of the proposed Project site. There are no private airports within the Project vicinity. The proposed Project will not conflict with Tulare County Airport Land Use Plan (ALUP) policy and it is not within any airport’s safety zone. The proposed Project will not result in a safety hazard for people working in the area. As such, the Project would result in ***No Impact*** to this resource.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County 2030 General Plan DEIR, and/or the Three Rivers Community Plan and EIR.

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. As there are *Less Than Significant Program-specific Impacts*, ***Less Than Significant Cumulative Impacts*** related to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist Item will occur.

**f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Project Impact Analysis: ***No Impact***

“The 2011 Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for the Tulare Operational Area (County and all cities and special districts) was developed in accordance with the Disaster Mitigation Act of 2000 (DMA 2000) and followed FEMA’s 2008 Local Hazard Mitigation Plan guidance. The LHMP incorporates a process where hazards are identified and profiled, the people and facilities at risk are analyzed, and mitigation actions are developed to reduce or eliminate hazard risk. The implementation of these mitigation actions, which include both short- and long-term strategies, involve planning, policy changes, programs, projects, and other activities.”<sup>20</sup>

“The Tulare County Emergency Operations Plan (EOP) establishes an emergency management organization and assigns functions and tasks consistent with California's Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). The plan provides for the integration and coordination of planning efforts of the County with those of the cities, special districts, and Tule River Tribe comprising the Operational Area, as well as neighboring jurisdictions and the State. The content of this plan is based on guidance provided by the State of California's Governor's Office of Emergency Services, the Federal Emergency Management Agency, and the U.S. Department of Homeland

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<sup>20</sup> Tulare County General Plan 2030 Update, page 10-3, Accessed November 2020 at:  
<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/GENERAL%20PLAN%202012.pdf>.

Security. The intent of the EOP is to facilitate coordinated emergency response and post emergency short-term recovery by providing a framework for response to all significant emergencies, regardless of the nature of the event.”<sup>21</sup>

The proposed Project includes an access/egress driveway to SR 198, it does not have direct access/egress to SR 198. As such, it would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evaluation plan. Therefore, the proposed Project will not interfere with implementation of an emergency response plan or evacuation. As such, the Project would result in ***No Impact*** to this resource.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County 2030 General Plan DEIR, and/or the Three Rivers Community Plan and EIR.

As indicated earlier, the proposed Project includes an access/egress driveway to SR 198, it does not have direct access/egress to SR 198. Further, as there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. As there are ***Less Than Significant Program-specific Impacts, Less Than Significant Cumulative Impacts*** related to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

**g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

Project Impact Analysis: ***Less Than Significant Impact***

The proposed Project is located in an active area of wildland fire occurrence. Expansion of the proposed Project area may result in exposure of people or structures to an increased risk of loss, injury or death due to wildland fire events. The Tulare County 2030 General Plan Update includes Three Rivers within a “very high” fire threat area containing fire hazards based on fuels, terrain, weather, and other relevant factors.<sup>22</sup> As noted in the environmental impact

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<sup>21</sup> Ibid.

<sup>22</sup> Tulare County General Plan 2030 Update.2012. Figure 10-2. Accessed November 2020 at:  
<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>

report prepared for the Three Rivers Community Plan, “The County of Tulare and the State of California maintain policies and regulations that seek to minimize the exposure of foothill communities and mountain service centers to wildfire events. In geographical terms, the Three Rivers UDB largely falls into CalFire’s State Responsibility Area (SRA). CalFire oversight of at-risk locales, such as foothill communities, includes programs and regimens of wildland fire engineering, vegetation management programs, risk analysis, education, enforcement, and land use planning to the end of diminishing and ameliorating the risk posed by wildland fire.”<sup>23</sup> The proposed Project will not contain any housing or buildings where workers will reside or be stationed that will be at risk of fire. As a hotel, the primary occupants will be employees and transient visitors/guests. In the event of fire threat, because of its proximity to SR 198, these persons can readily access SR 198 to evacuate if necessary. Also, complying with Calfire and Tulare County fire code standards (e.g., fire resistant materials, sprinkler system, fireflow, fire hydrants, access (for firefighting or other first responder apparatus), etc.) would ensure that the proposed Project will be constructed to maximize protection from wildfire. As such, the Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires and would result in a ***Less Than Significant Impact*** to this resource.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County 2030 General Plan DEIR, and/or the Three Rivers Community Plan and EIR. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

Mitigation Measure(s): ***None***

Conclusion: ***Less Than Significant Impact***

The proposed Project is located in an active area of wildland fire occurrence. Expansion of the proposed Project area may result in exposure of people or structures to an increased risk of loss, injury or death due to wildland fire events. However, the proposed Project will not contain any housing or buildings where workers will reside or be stationed that will be at risk of fire. As a hotel, the primary occupants will be employees and transient visitors/guests. In the event of fire threat, because of its proximity to SR 198, these persons can readily access SR 198 to evacuate if necessary. Also, complying with Calfire and Tulare County fire code standards (e.g., fire resistant materials, sprinkler system, fireflow, fire hydrants, access (for firefighting or other first responder apparatus), etc.) would ensure that the proposed Project will be constructed to maximize protection from wildfire. Therefore, the Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires and would result in a ***Less Than Significant Impact*** to this resource.

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<sup>23</sup> Three Rivers Community Plan Draft Environmental Impact Report. Page 3.8-19.

## DEFINITIONS/ACRONYMS

### Definitions

**Hazardous Material** - “A hazardous material is defined by the California Code of Regulations (CCR) as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating, illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of (CCR, Title 22, Division 4.5, Chapter 10, Article 2, Section 66260.10).”<sup>24</sup>

**Hazardous Waste Generators** - “A generator is any person who produces a hazardous waste as listed or characterized in part 261 of title 40 of the Code of Federal Regulations (CFR). Recognizing that generators produce waste in different quantities, EPA established three categories of generators in the regulations:

Very Small Quantity Generators (VSQGs)

Small Quantity Generators (SQGs)

Large Quantity Generators (LQGs).

The volume of hazardous waste each generator produces in a calendar month determines which regulations apply to that generator”<sup>25</sup>

**Mountain Service Centers (MSC)** - Areas designated for development in existing communities or in areas adjacent to existing communities located in the Mountain Framework Plan (Tulare County General Plan 2030 Update). The Mountain Framework Plan identifies existing communities in the un-adopted mountainous areas of the County as “Mountain Service Centers”. These areas are designated as mixed use until such time as a sub-area plan is adopted.<sup>26</sup>

**Urban Development Boundary (UDB)** - For unincorporated communities, the UDB is a County adopted line dividing land to be developed from land to be protected for agricultural, natural, open space, or rural uses. It serves as the official planning area for communities over a 20 year period. Land within an unincorporated UDB is assumed appropriate for development and is not subject to the Rural Valley Lands Plan or Foothill Growth Management Plan.<sup>27</sup>

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<sup>24</sup> Tulare County, 2010, page 8-26. General Plan 2030 Update Background Report.

<http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>

<sup>25</sup> U.S. EPA. Categories of Hazardous Waste Generators. Accessed March 2021 at: <https://www.epa.gov/hwgenerators/categories-hazardous-waste-generators>

<sup>26</sup> Tulare County, 2012, Part II page 4-1. Tulare County General Plan 2030 Update.

<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/GENERAL%20PLAN%202012.pdf>

<sup>27</sup> Ibid., Part I page 2-3



Draft Environmental Impact Report  
Three Rivers-Hampton Inn & Suite  
SCH# 2020110016

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Acronyms

ALUC	Airport Land Use Commission
CalEPA	California Environmental Protection Agency
CalFire	California Department of Forestry and Fire Protection
CADOE	California Department of Education
CCR	California Code of Regulations
CDF/CalFire	California Department of Forestry and Fire Protection
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
DOE	United States Department of Energy
DTSC	Department of Toxic Substance Control
EOP	Emergency Operations Plan
FBI	Federal Bureau of Investigation
HMTA	Hazardous Materials Transportation Act of 1975
HWMP	Hazardous Waste Management Program
HWTS	Hazardous Waste Tracking System
LUST	Leaking Underground Tank
NCP	National Contingency Plan
NPS	National Park Service
SEKI	Sequoia Kings Canyon National Park
SARA	Superfund Amendments and Reauthorization Act
SRA	State Responsibility Area
USFS	United States Forest Service
USGS	United States Geological Survey
USDOT	United States Department of Transportation

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# Hydrology and Water Quality

## Chapter 3.10

### SUMMARY OF FINDINGS

The proposed Three Rivers Hampton Inn & Suites (Project) will result in ***Less Than Significant Impacts*** to the Hydrology and Water Quality resource. The “*Hampton Inn & Suites Report of Waste Discharge Technical Report Wastewater Treatment System for the Proposed Hampton Inn & Suites 40758 Sierra Drive, Three Rivers, California.*” (Waste Discharge Technical Report) prepared by qualified experts Ald General Engineering, Inc. and the “*Abbreviated Water Supply Evaluation to Support the Three Rivers Community Plan EIR Memorandum*” (contained in the Three Rivers Community Plan 2018 Draft EIR. Appendix “G”.) prepared by qualified experts Tully & Young, Inc., which are included in Attachment “D” of this Draft Environmental Impact report (Draft EIR or DEIR). The Waste Discharge Technical Report and Water Supply Evaluation Memorandum are used as the basis for determining that, based on the evidence/documentation and the expertise of qualified consultants, the proposed Project will result in a less than significant impact.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Hydrology and Water Quality. As required in Section 15126 of the California Environmental Quality Act, all phases of the proposed Community Plan Update will be considered was part of the potential environmental impact.<sup>1</sup>

As noted in 15126.2(a), “[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area, as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant

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<sup>1</sup> California Environmental Quality Act. Statute and Guidelines Section 15126.

environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>2</sup>

The “Environmental Setting” section provides a description of the Hydrology and Water Quality in the County. The “Regulatory Setting” section provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County General Plan 2030 Update, the Tulare County General Plan 2030 Update Background Report, and/or the Tulare County General Plan 2030 Recirculated Draft Environmental Impact Report (RDEIR) incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

### Thresholds of Significance

The thresholds of significance for this section are established by the CEQA checklist item questions. The following are potential thresholds for significance.

- Project will violate water quality standards or waste discharge requirements.
- Project will substantially deplete groundwater supplies.
- Project will substantially alter existing drainage patterns of the site or area.
- Project will create or contribute runoff water in excess of area drainage abilities.
- Project will substantially degrade water quality.
- Project will place housing within a 100-year flood hazard area.
- Project will expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; and/or be subject to inundation by seiche, tsunami, or mudflow.

## **ENVIRONMENTAL SETTING**

The Three Rivers study area is located in the Southern Sierra Nevada Mountains within the Southern Sierra Integrated Regional Water Management Plan (SSIRWMP) area (see **Figure 3.10-1**). A 2014 SSIRWMP Final Report summarizes the regional hydrological picture by stating:

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<sup>2</sup> Ibid.

“The Southern Sierra Region covers approximately 6,195 square miles (3,964,800 acres) and includes the foothills and mountain regions of the Kern, Poso, White, Tule, Kaweah, Kings and San Joaquin River watersheds. These watersheds cover the Sierra Nevada portion of Fresno and Tulare counties and a portion of Madera County. The Region is considered appropriate as a RWMG since it has a strong hydrologic basis with borders based on watershed boundaries and the Sierra Nevada crest. The area covered by the Southern Sierra RWMG is coterminous with the area covered by [the] IRWMP.”<sup>3</sup> However, as noted in the SSIRWMP, “Most of the local water users rely on hard rock (typically granitic) wells that have limited ability to hold and transmit groundwater, and typically have low yields. The water budget is not well understood in most of the region.”<sup>4</sup>

“Nine watersheds have been identified within the Kaweah River watershed, and these are designated as local watersheds... Land ownership in the local watersheds is 54 percent government owned and 46 percent privately owned. There are 2,118 private parcels within the study area, with 80 percent [of the parcels] being less than 10 acres. Most of the smaller parcels are located next to the Kaweah River and its tributaries.”<sup>5</sup>

“Two types of aquifers are present: a small, shallow alluvial aquifer along the river bottom and a fractured bedrock aquifer. The rock fracture aquifer consists of an intersecting network of planar breaks in the rock, which in some cases extend for miles and cross watershed boundaries. In the Three Rivers area, the fractures cut across differing geologic units of granitic and metamorphic rock, resulting in a sporadic adverse effect on water quality. Water wells provide nearly all of the drinking water, with surface water and springs providing the remainder. Well yields varied from a low of less than 2 gallons per minute (8 percent of the wells) to more than 100 gallons per minute; 50 percent of the wells had yields greater than 15 gallons per minute. One-third of the wells are less than 100 feet deep. Shallow, low-yielding wells have a greater potential for failure in a drought.”<sup>6</sup>

“Groundwater in wells is a blend of high-quality surface water and variable-quality groundwater flowing through rock fractures. Water quality varies from high-quality water with a very low mineral content to a few wells containing notably elevated dissolved minerals, such as sulfur or hydrogen sulfide. Groundwater with high levels of these dissolved minerals is related to the underlying bedrock type of the well, typically metamorphic rock.”<sup>7</sup>

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<sup>3</sup> Tulare County. Three Rivers Community Plan 2018 Update. Draft Environmental Impact Report (Draft EIR) Southern Sierra Integrated Regional Water Management Plan. 2014. Page ES-2. Prepared by Provost and Pritchard. Included in Appendix “G” of the Three Rivers Community Plan 2018 Update Draft EIR.

<sup>4</sup> Ibid.

<sup>5</sup> California Department of Water Resources. Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California. 2016. Page 1. Included in Appendix “G” of the Draft EIR.

<sup>6</sup> Ibid.

<sup>7</sup> Op. Cit.

## Watershed (Surface Water)

As summarized in the Draft EIR for the Three Rivers Community Plan 2018 Update for surface water, “The study area is located within the watershed of the Upper Kaweah River which consists of 359,000 acres or 561 square miles of land. The Kaweah River watershed study area consists of two parts: the upper Kaweah River watershed, and the smaller local watersheds of the Kaweah River which surround Three Rivers (Figure 4 [in the Three Rivers Community Plan 2018 Update Draft EIR]). For the upper Kaweah River watershed, information collected for this report consisted of available data regarding water systems which provide public drinking water supplies for various parts of Sequoia National Park. The data included: number of water systems and their locations, sources of water to the various systems, types of water sources, and water quality and water chemistry data. For the smaller, local watersheds, the information collected included water system and water quality information; climate data, climate change, river hydrology, geologic setting, population and demographics, land use, land ownership, parcel size, and information contained on well logs. The smaller, local watersheds consist of those which provide drinking water supplies to the Three Rivers community, referred to as the nine local watersheds of the Three Rivers area. Together, the nine watersheds comprise the area within which most residential areas occur in the Kaweah River watershed and which provide most of the drinking water supplies for residences, motels and trailer parks, businesses, and public entities such as schools. The watersheds range in size from 6,000 to nearly 13,000 acres and in elevation from 700 feet to 9,250 feet mean sea level (msl).”<sup>8</sup>

Included in the Draft EIR are Table 3.9-1<sup>9</sup> which identifies the nine local watersheds of the Kaweah River tributaries, and Figure 3.9-1<sup>10</sup> [in the Three Rivers Community Plan 2018 Update Draft EIR, also **Figure 3.10-1** in this Draft EIR] showing the respective watersheds’ locations. As shown in **Figure 3.10-1**, the proposed Project site is within the Lake Kaweah watershed which receives waters from North, Middle, and East Forks of the Kaweah River; the North Fork Kaweah River is within the North Fork Kaweah River, Lower North Fork Kaweah River watersheds; the Middle Fork Kaweah River is within the Marble Fork Kaweah River, North Side Lake Kaweah, and Lake Kaweah watersheds and; East Fork Kaweah River is within the East Fork Kaweah River and Lower East Fork Kaweah River watersheds. As such, the proposed Project’s potential water usage would be supplied by 7 of the 9 watersheds shown in **Figure 3.10-1** and all but the South Fork Kaweah River tributary to the Kaweah River. Combined, these tributaries consist of 67,789 acres [or approximately 82%] of the estimated 82,636 acres within nine local watershed of the Three Rivers planning area.<sup>11</sup>

## Surface Water Quality

As summarized in the Draft EIR for the Three Rivers Community Plan 2018 Update for surface water quality, “Streams flowing through the upper Kaweah River watershed drain the western

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<sup>8</sup> Tulare County. Three Rivers Community Plan 2018 Update Draft EIR. Page 3.9-4.

<sup>9</sup> Ibid.

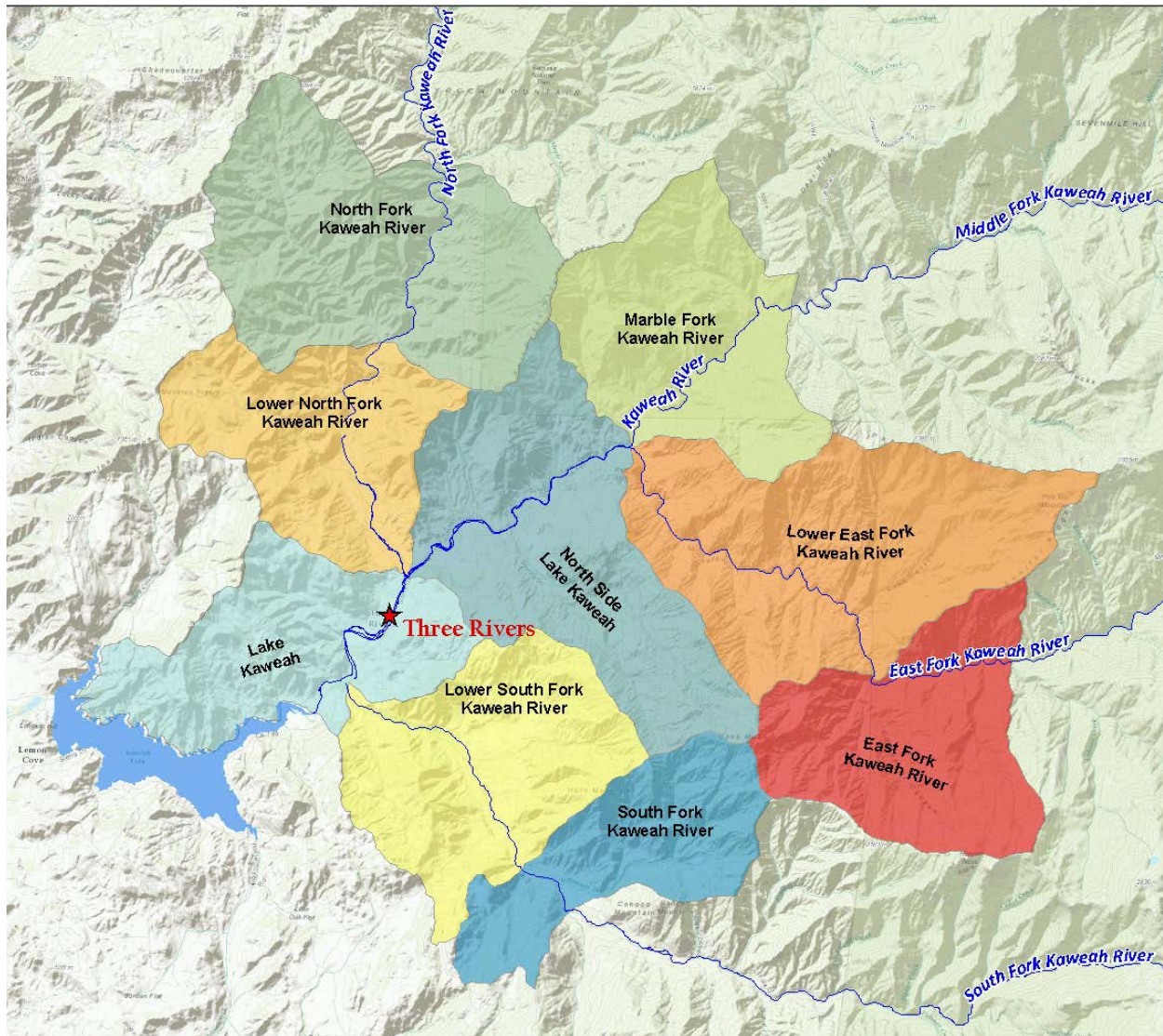
<sup>10</sup> Op. Cit. 3.9-5.

<sup>11</sup> Op. Cit. 3.9-4. Table 3.9-4 Nine Local Watersheds. The 67,789 acres results from subtracting the 14,847 acres of the South Fork tributary from the total 82,636 acres shown in Table 3.9-4 of the Draft EIR.



slopes of the Sierra Nevada. The dominance of granitic rock and the undeveloped and protected portions of the watershed in the Sequoia National Park results in good quality surface water. Information collected regarding surface water quality of the Kaweah River comes from water sampling from public drinking water supplies. The SWRCB, Drinking Water Program has required the periodic sampling and analytical testing of water from public drinking water supplies. This has included: groundwater from wells, groundwater from springs, groundwater under the influence of surface water from radial wells with radials extending underneath the river, and surface water from intakes on the river.”<sup>12</sup>

**Figure 3.10-1 Nine Local Watersheds**



Source: DWR. (2016). Figures. Figure 2. Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California. State of California Department of Water Resources.

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<sup>12</sup> Op. Cit. 3.9-5. – 3.9-6.



### Surface Water Supply

“There are 23 public drinking water systems in the watersheds of the Three Rivers area. Five of these systems utilize surface water. The State Water Resources Control Board (SWRCB) required sampling of the public water supplies includes analytical tests from 1974 through 2014, the last date for which data was searched. The number and type of tests that were performed varied significantly from system to system and from year to year. The possible analyses included Title 22 organics, general mineral, general physical, nitrate, and, radiological constituents such as uranium, radium, and gross alpha. Test results are provided in Appendix A of the 2016 DWR Preliminary Report on Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California. A review of the results show that no sample tests exceeded primary drinking water standards. A single sample exceeded the secondary drinking water standard for manganese. The standard is 50 mg/L and test results showed 81 mg/L. Manganese may cause staining in clothing and other materials. As might be expected, the Kaweah River through Three Rivers provides high quality surface.”<sup>13</sup>

### **Watershed (Groundwater)**

As summarized in the Draft EIR for the Three Rivers Community Plan 2018 Update for groundwater, “Precipitation from Pacific storms or from summer orographic storms in the watershed either evaporates, occurs as runoff to the Kaweah River as described above, or infiltrates the ground surface into an underlying network of rock fractures. Groundwater occurs both in the fractured bedrock and in unconsolidated river bottom sediments of the Kaweah River. Groundwater flow is generally to the southwest, from areas of recharge in the mountains and along the Kaweah River to areas of discharge.”<sup>14</sup>

### Alluvial Aquifer

“Riverbed sediments and shallow decomposed granite have formed an alluvial aquifer in a narrow band along the Kaweah River. It has an observable width of a few tens of feet to a few hundred feet. It also has a variable thickness. It is thinnest where the river is steep and cascading down resistant bedrock. It is thickest where the stream gradient gentles and widens along straight stretches between river bends. There are one or more radial (wagon wheel) wells located adjacent to the river with shallow radials that extend under the river bed, capturing poorly filtered water.”<sup>15</sup>

### Bedrock Aquifer

“Crystalline bedrock is nearly impermeable; movement of water through the rocks is completely dependent on the presence of fractures in the rock. Groundwater percolates downward through soil and weathered rock into the fractured bedrock. The thin soil mantle which overlies the bedrock is

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<sup>13</sup> Op. Cit. 3.9-6.

<sup>14</sup> Op. Cit. 3.9-6.

<sup>15</sup> Op. Cit.

large or extensive, and by itself, the soil layer does not yield significant quantities of water to wells. But the layer does aid in recharge by providing temporary storage of precipitation. Moisture in seasonally saturated soil migrates into rock fractures and then into the bedrock aquifer.”<sup>16</sup>

### Groundwater Quality

“The primary source of water for both individual systems and for private water systems classified as public drinking water supplies is groundwater from water wells drilled in fractured bedrock. For public drinking water systems, water from wells comprise 81% of the sources, springs comprise 3% of the sources, and surface water sources comprise 16% of the total. Stated another way, the sampled sources for the 23 water systems consist of 30 active and inactive wells, one spring, and six surface water intakes from the Kaweah River or treatment units for the surface water intakes.”<sup>17</sup>

Test results of these 23 private water systems are provided in Appendix A of the 2016 DWR Preliminary Report on Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California. A review of the results show that two of the water systems had primary drinking water standard exceedances for arsenic and three water systems had exceedances for uranium and gross alpha. These exceedances may be due to the wells drawing water from fractured granitic bedrock. It is not uncommon for wells completed in granite to experience problems from these constituents. In addition, two water systems had periodic exceedances for nitrate. There were very few secondary drinking water standards exceedances. Three water systems had samples with exceedances for manganese, two with color standard exceedances, and a single water system with exceedances for iron.”<sup>18</sup>

### Groundwater Quality Information from Well Logs

“The well log review of the 486 well logs identified in the Three Rivers area showed that for ten of the well logs the well driller noted an issue with water quality. The comments made note of either high salt, “water very salty”, hydrogen sulfide, sulfur water, or “considerable hydrogen sulfide and salt”. The ten wells represent 2% of the well logs. The actual number of wells impacted by salt or sulfur is unknown but probably higher than that represented by notations on well logs.

The wells are present at locations along the main branch of the Kaweah River. There does not appear to be a pattern as to their occurrence. Plotting salt and/or sulfur well locations on the geologic map suggests that some of the wells may be correlated with an underlying bedrock of limestone or metamorphic rock. Other wells do not appear to have a correlation with rock type. In other regions of the Sierra Nevada, salt, sulfur, and high temperature wells have been identified adjacent to ancient and inactive faults. The faults appear to act as conduits and source of origin of the poor quality water. It is not known if the wells are located on or adjacent to such a feature, but there are no known mapped faults present.”<sup>19</sup>

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<sup>16</sup> Op. Cit. 3.9-6 – 3.9-7.

<sup>17</sup> Op. Cit. 24.

<sup>18</sup> Op. Cit. 3.9-7.

<sup>19</sup> Op. Cit. 3.9-7 – 3.9-8.

### Water Supply Evaluation, Three Rivers Community Plan EIR

The “*Abbreviated Water Supply Evaluation to support the Three Rivers Community Plan EIR Memorandum*” (Water Supply Memorandum or Memorandum), prepared by qualified experts consultant Tully & Young, Inc., is a memorandum to support the CEQA analysis regarding the availability and sufficiency of water supplies to meet the forecast water demands allowed by the Three Rivers Community Plan. The Memorandum contains an analysis that estimate future water demands, water demands of existing users, factors affecting future water use, water conservation objectives, indoor infrastructure requirements, California Model Water Efficient Landscape Ordinance and County Ordinances, and importantly, a future water use forecast.<sup>20</sup> Further, the Memorandum also discusses water supply and reliability, groundwater and surface water supply characteristics, water supply availability, sufficiency of water supplies, and also provided Consultants determination of potential impacts as a result of the ultimate growth contemplated by the Three Rivers Community Plan.<sup>21</sup>

In summary, the Memorandum concludes that there is sufficient water supply to meet the approximately 940 acre-feet annually of future water demand at full build-out of the Three Rivers Community Plan, including residential, commercial, and industrial demand based on the estimated 50,000 acre-feet of annual average groundwater recharge in the watershed. As indicated in the Memorandum, “As presented in Section 2 [of the Memorandum], the future demand is anticipated to be approximately 940 acre-feet annually, which represents less than two percent of the over 50,000 acre-feet of average groundwater recharge in the watershed. On a watershed basis, there is and will continue to be sufficient water supplies recharging the fractured rock and alluvial aquifers to meet the forecast future demands. For purposes of this memo, all new water demands will be met by groundwater resources rather than surface rights.”<sup>22</sup> The Memorandum also cautions, “However, the placement of individual wells could have an adverse impact on other local wells if not properly spaced or otherwise constructed to protect existing well operations. The County’s General Plan includes specific policies to provide adequate protections so as to cause this potential impact to be less than significant, if any. Specific policies are discussed under Section 4.2. The County also maintains a well permitting process, allowing an assessment of the unique circumstances for each potential new well to assure setbacks from other wells and from septic systems are appropriate. The combination of the policies and permitting/approval procedures will assure that new wells will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.”<sup>23</sup>

Further, the Memorandum concludes that the Three Rivers Community Plan (that is, the ultimate full build-out as contemplated in the Plan), would result in less that significant impacts to water

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<sup>20</sup> Tulare County. Three Rivers Community Plan 2018 Draft EIR. December 2017. “*Abbreviated Water Supply Evaluation to support the Three Rivers Community Plan EIR Memorandum*” Pages 4-10. Prepared by Tully & Young, Inc. (included in Appendix “G” of the Three Rivers Community Plan 2018 Update Draft EIR) and included in Appendix “D” of this Draft EIR.

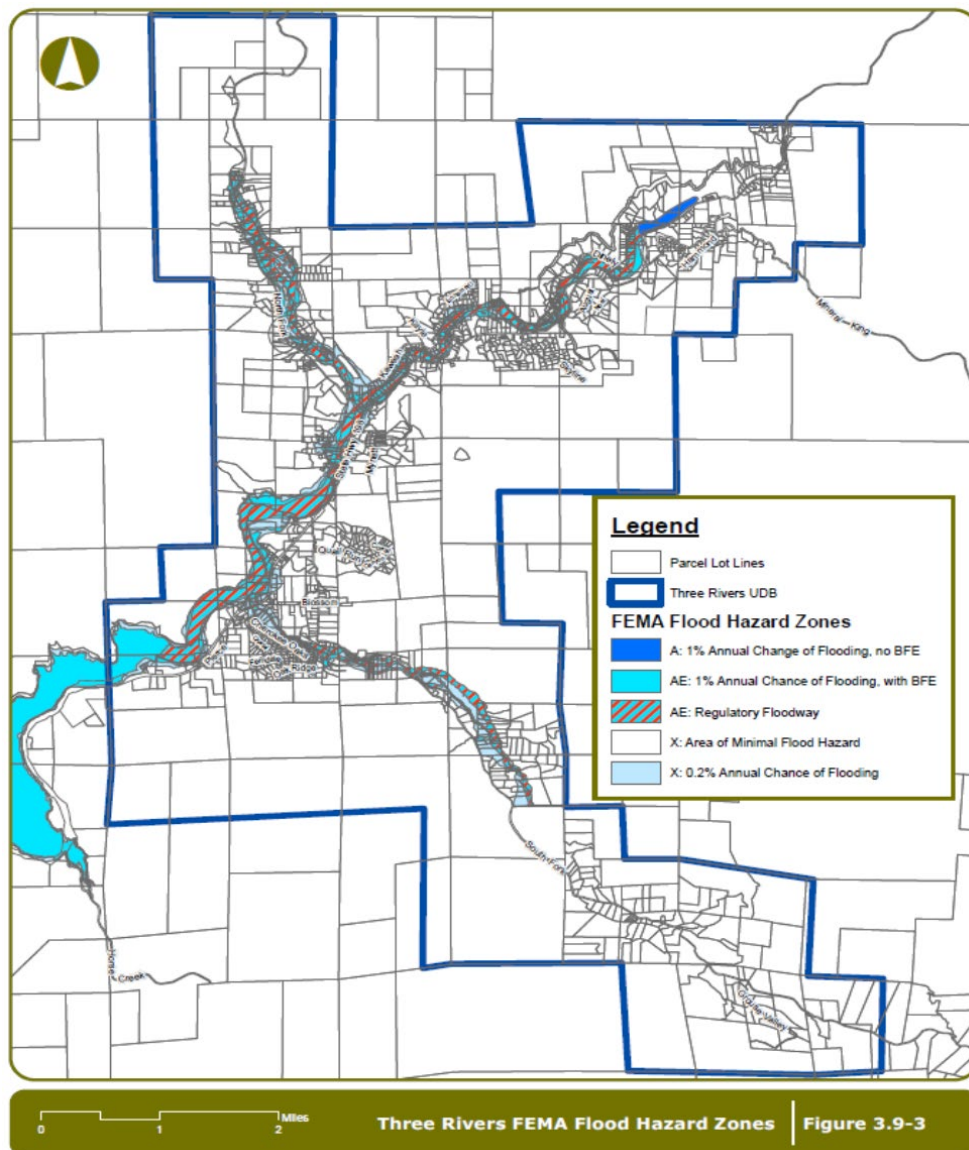
<sup>21</sup> Ibid. 10-17.

<sup>22</sup> Op. Cit. 12.

<sup>23</sup> Op. Cit. 12.

resources<sup>24</sup> and contains a listing of selected General Plan policies that will provide the assurances necessary to render the impacts to local water resources as less than significant.<sup>25</sup> It is noted that the listing provide in the Memorandum does not necessarily apply to a commercial project (for example, a residential development, connection to community water system, connection to a wastewater system, etc.). As discussed below, this Draft EIR provides a listing of General Plan policies that may apply to the proposed Project that differs from the listing provided in the Memorandum.

**Figure 3.10-2**  
**Three Rivers FEMA Flood Map No. 06107C0709E<sup>26</sup>**



<sup>24</sup> Op. Cit. 12-13.

<sup>25</sup> Op. Cit. 14-17.

<sup>26</sup> FEMA, 2017. <http://map1.msc.fema.gov/idms/IntraView.cgi?KEY=24829360&IFIT=1>

### Storm Drainage

A community storm drainage system is designed to drain excess rain and groundwater away from roads, sidewalks, and other built areas to some point where it is discharged into a channel, ponding basin, or piped system. However, there is no community storm drainage in Three Rivers; as such, the proposed Project will include on-site storm water retention and detention capabilities/facilities.

## **REGULATORY SETTING**

### ***Federal Agencies & Regulations***

#### Clean Water Act/NPDES

The Clean Water Act (CWA) is intended to restore and maintain the chemical, physical, and biological integrity of the nation's waters (33 CFR 1251). The regulations implementing the CWA protect waters of the U.S. including streams and wetlands (33 CFR 328.3). The CWA requires states to set standards to protect, maintain, and restore water quality by regulating point source and some non-point source discharges. Under Section 402 of the CWA, the National Pollutant Discharge Elimination System (NPDES) permit process was established to regulate these discharges.

The National Flood Insurance Act (1968) makes available federally subsidized flood insurance to owners of flood-prone properties. To facilitate identifying areas with flood potential, Federal Emergency Management Agency (FEMA) has developed Flood Insurance Rate Maps (FIRM) that can be used for planning purposes.

#### Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) is the main federal law that ensures the quality of Americans' drinking water. Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards...SDWA was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and ground water wells. Federal drinking water standards apply to all public water systems. The EPA defines public water systems as those having at least 15 service connections or serving at least 25 people for at least 60 days a year.<sup>27</sup>

#### Environmental Protection Agency

The mission of EPA is to protect human health and the environment.

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<sup>27</sup> EPA, 2017. Background on Drinking Water Standards in the Safe Drinking Water Act (SDWA). Accessed November 2020 at: <https://www.epa.gov/dwstandardsregulations/background-drinking-water-standards-safe-drinking-water-act-sdwa>

EPA's purpose is to ensure that:

- all Americans are protected from significant risks to human health and the environment where they live, learn and work;
- national efforts to reduce environmental risk are based on the best available scientific information;
- federal laws protecting human health and the environment are enforced fairly and effectively;
- environmental protection is an integral consideration in U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry, and international trade, and these factors are similarly considered in establishing environmental policy;
- all parts of society -- communities, individuals, businesses, and state, local and tribal governments -- have access to accurate information sufficient to effectively participate in managing human health and environmental risks;
- environmental protection contributes to making our communities and ecosystems diverse, sustainable and economically productive; and
- The United States plays a leadership role in working with other nations to protect the global environment.”<sup>28</sup>

### Army Corps of Engineers

“The Department of the Army Regulatory Program is one of the oldest in the Federal Government. Initially it served a fairly simple, straightforward purpose: to protect and maintain the navigable capacity of the nation's waters. Time, changing public needs, evolving policy, case law, and new statutory mandates have changed the complexion of the program, adding to its breadth, complexity, and authority.

The Regulatory Program is committed to protecting the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands.”<sup>29</sup>

### National Flood Insurance Program

“In 1968, Congress created the National Flood Insurance Program (NFIP) to help provide a means for property owners to financially protect themselves. The NFIP offers flood insurance to homeowners, renters, and business owners if their community participates in the NFIP.

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<sup>28</sup> U.S.EPA. 2021.. Our Mission and What We Do. Accessed January 2021 at: <https://www.epa.gov/aboutepa/our-mission-and-what-we-do>

<sup>29</sup> U.S. Army Corps of Engineer. 2021. Accessed January 2021 at:  
<http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx>.

Participating communities agree to adopt and enforce ordinances that meet or exceed FEMA requirements to reduce the risk of flooding.”<sup>30</sup>

### ***State Agencies & Regulations***

#### **State Water Resources Control Board**

The State Water Resources Control Board (SWRCB), located in Sacramento, CA, is the agency with jurisdiction over water quality issues in the State of California. The SWRCB is governed by the Porter-Cologne Water Quality Act (Division 7 of the California Water Code) which establishes the legal framework for water quality control activities by the SWRCB. The intent of the Porter-Cologne Act is to regulate factors which may affect the quality of waters of the State to attain the highest quality which is reasonable, considering a full range of demands and values. Much of the implementation of the SWRCB's responsibilities is delegated to its nine Regional Boards. The proposed Project site is located within the Central Valley Region.

#### **Regional Water Quality Board**

The Central Valley Regional Water Quality Control Board (RWQCB) administers the NPDES storm water-permitting program in the Central Valley region. Construction activities on one acre or more are subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit). The General Construction Permit requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The plan will include specifications for Best Management Practices (BMPs) that will be implemented during proposed Project construction to control degradation of surface water by preventing the potential erosion of sediments or discharge of pollutants from the construction area. The General Construction Permit program was established by the RWQCB for the specific purpose of reducing impacts to surface waters that may occur due to construction activities. BMPs have been established by the RWQCB in the California Storm Water Best Management Practice Handbook (2003), and are recognized as effectively reducing degradation of surface waters to an acceptable level. Additionally, the SWPPP will describe measures to prevent or control runoff degradation after construction is complete, and identify a plan to inspect and maintain these facilities or project elements.

#### **The Porter-Cologne Water Quality Control Act**

“Under the Porter-Cologne Water Quality Control Act (Porter-Cologne), the State Water Resources Control Board (State Board) has the ultimate authority over State water rights and water quality policy. However, Porter-Cologne also establishes nine Regional Water Quality Control Boards (Regional Boards) to oversee water quality on a day-to-day basis at the local/regional level.”<sup>31</sup>

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<sup>30</sup> FEMA. 2017. Flood Insurance Reform. Accessed January 2021 at: <https://www.fema.gov/flood-insurance-reform>

<sup>31</sup> California Natural Resources Agency. 2021. Porter-Cologne Water Quality Control Act. Accessed January 2021 at: [https://www.waterboards.ca.gov/about\\_us/water\\_boards\\_structure/history\\_water\\_policy.html](https://www.waterboards.ca.gov/about_us/water_boards_structure/history_water_policy.html).

### California Department of Water Resources

The DWR's mission is, "To sustainably manage the water resources of California, in cooperation with other agencies, to benefit the state's people and protect, restore, and enhance the natural and human environments."<sup>32</sup>

"Established in 1956 by the California State Legislature, DWR protects, conserves, develops, and manages much of California's water supply. This includes the State Water Project (SWP), the nation's largest state-built water conveyance program. The SWP supplies water to an almost 27 million Californians and 750,000 acres of farmland."<sup>33</sup> "DWR's major responsibilities include:

- Overseeing the statewide process of developing and updating the California Water Plan (Bulletin 160 series)
- Planning, designing, constructing, operating, and maintaining the SWP
- Protecting and restoring the Sacramento-San Joaquin Delta
- Regulating dams, providing flood protection, and assisting in emergency management
- Working to preserve the natural environment and wildlife
- Educating the public about the importance of water, water conservation, and water safety
- Providing grants and technical assistance to service local water needs
- Collecting, analyzing, and reporting data in support of our mission to manage and protect California's water resource."<sup>34</sup>

### Regional Water Quality Control Board

"The primary duty of the Regional Board is to protect the quality of the waters within the Region for all beneficial uses. This duty is implemented by formulating and adopting water quality plans for specific ground or surface water basins and by prescribing and enforcing requirements on all agricultural, domestic and industrial waste discharges. Specific responsibilities and procedures of the Regional Boards and the State Water Resources Control Board are contained in the Porter-Cologne Water Quality Control Act."<sup>35</sup>

"The State Water Resources Control Board (State Water Board) was created by the Legislature in 1967. The joint authority of water allocation and water quality protection enables the State Water Board to provide comprehensive protection for California's waters."<sup>36</sup>

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<sup>32</sup> DWR, 2016. About Us – Overview. <https://water.ca.gov/About>

<sup>33</sup> Ibid.

<sup>34</sup> Op. Cit.

<sup>35</sup> California Water Boards Central Valley R-5. 2021. Our Mission. Accessed January 2021 at: [https://www.waterboards.ca.gov/centralvalley/about\\_us/](https://www.waterboards.ca.gov/centralvalley/about_us/)

<sup>36</sup> California Water Boards Central Valley R-5. 2021. Water Board's Structure. Accessed January 2021 at: [https://www.waterboards.ca.gov/about\\_us/water\\_boards\\_structure/](https://www.waterboards.ca.gov/about_us/water_boards_structure/)



“The State Water Board consists of five full-time salaried members, each filling a different specialty position. Board members are appointed to four-year terms by the Governor and confirmed by the Senate.”<sup>37</sup>

“There are nine Regional Water Quality Control Boards (Regional Boards). The mission of the Regional Boards is to develop and enforce water quality objectives and implementation plans that will best protect the State's waters, recognizing local differences in climate, topography, geology and hydrology.”<sup>38</sup>

“Each Regional Board has seven part-time members appointed by the Governor and confirmed by the Senate. Regional Boards develop “basin plans” for their hydrologic areas, issue waste discharge requirements, take enforcement action against violators, and monitor water quality.”<sup>39</sup>

“The task of protecting and enforcing the many uses of water, including the needs of industry, agriculture, municipal districts, and the environment is an ongoing challenge for the State and Regional Water Quality Control Boards.”<sup>40</sup>

### ***Local Policy & Regulations***

#### **Tulare County Land Development Regulations**

The Tulare County Resource Management Agency (RMA) is responsible for review, approval, and enforcement of planning and land development throughout the unincorporated portions of Tulare County. County of Tulare regulations that direct planning and land development (and related water and wastewater utilities) include the Tulare County General Plan, Zoning Ordinance, Subdivision Ordinance, and CEQA procedures. These responsibilities are divided between Planning Branch, Public Works Branch, and other divisions or departments of RMA, and in coordination with the Environmental Health Division of the Tulare County Health and Human Services Agency, and the Tulare County Fire Department.

The County’s flood damage prevention code is intended to promote public health, safety, and general welfare in addition to minimizing public and private losses due to flood conditions. The County code provisions to protect against flooding include requiring uses vulnerable to floods be protected against flood damage at the time of initial construction; controlling the alteration of natural flood plains; and preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas. The County flood damage prevention code, most recently amended by Ord. No. 3212 and effective October 29, 1998, is modeled based upon FEMA guidance.

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<sup>37</sup> Ibid.

<sup>38</sup> Op. Cit.

<sup>39</sup> Op. Cit.

<sup>40</sup> Op. Cit.

### Three Rivers Community Services District

“The Three Rivers Community Services District (CSD) is a locally elected government agency comprised of a five member Board of Directors. Board members are elected to a four-year term of office, volunteering their service to the district and receive no monetary compensation.”<sup>41</sup>

The CSD monitors the quality of the river and well water in the area, reporting to the California Water Quality Board its findings; provides Three Rivers’ residents low cost drinking water testing; inspects septic systems; advises County agencies, investigates and takes action on claims of septic, groundwater, surface water and drinking water problems; provides homeowners with information on how septic systems operate and ensures community adherence to state and local ordinances.<sup>42</sup>

### Tulare County Environmental Health and Human Services Agency (HHSA)

“Tulare County Environmental Health permits and regulates State Small Water Systems, which serve drinking water to between 5 and 14 service connections, and no more than an average of 25 persons no more than 60 days out of the year. There are currently 42 of these systems, throughout Tulare County, which serve about 314 connections and approximately 640 people. These systems are inspected by Tulare County Environmental Health, and are required to routinely monitor their water quality.”<sup>43</sup>

### Tulare County General Plan 2030 Update

The Tulare County General Plan 2030 Update contains the following goals and policies that relate to hydrology and water quality and which have potential relevance to the Project’s California Environmental Quality Act (CEQA) review:

**AG-1.17 Agricultural Water Resources** - The County shall seek to protect and enhance surface water and groundwater resources critical to agriculture.

**HS-4.4 Contamination Prevention** - The County shall review new development proposals to protect soils, air quality, surface water, and groundwater from hazardous materials contamination.

**HS-5.1 Development Compliance with Federal, State, and Local Regulations** - The County shall ensure that all development within the designated floodway or floodplain zones conforms to FEMA regulations and the Tulare County Flood Damage Prevention Ordinance.

New development and divisions of land, especially residential subdivisions, shall be developed to minimize flood risk to structures, infrastructure, and ensure safe access and evacuation during flood conditions.

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<sup>41</sup> *Three Rivers Community Services District*, 2016. <http://www.3riverscsd.com/index.php>

<sup>42</sup> Ibid.

<sup>43</sup> Tulare County HHSA. 2021. Water Systems Program. Accessed January 2021 at: <http://www.tularecountyeh.org/eh/index.cfm/our-services/water-systems-program/>

**HS-5.2 Development in Floodplain Zones** - The County shall regulate development in the 100-year floodplain zones as designated on maps prepared by FEMA in accordance with the following:

1. Critical facilities (those facilities which should be open and accessible during emergencies) shall not be permitted.
2. Passive recreational activities (those requiring non-intensive development, such as hiking, horseback riding, picnicking) are permissible.
3. New development and divisions of land, especially residential subdivisions, shall be developed to minimize flood risk to structures, infrastructure, and ensure safe access and evacuation during flood conditions.

**HS-5.10 Flood Control Design** - The County shall evaluate flood control project involving further channeling, straightening, or lining of waterways until alternative multipurpose modes of treatment, such as wider berm and landscaped levees, in combination with recreation amenities, are studied.

**HS-5.11 Natural Design** - The County shall encourage flood control designs that respect natural curves and vegetation of natural waterways while retaining dynamic flow and functional integrity.

**PFS-3.5 Wastewater System Failures** - The County shall require landowners to repair failing septic tanks, leach field, and package systems that constitute a threat to water quality and public health or connect to an existing community system through applicable County and/or Regional Water Quality Control Board standards and requirements.

**PFS-2.3 Well Testing** - The County shall require new development that includes the use of water wells to be accompanied by evidence that the site can produce the required volume of water without impacting the ability of existing wells to meet their needs.

**PFS-2.5 New Systems or Individual Wells** where connection to a community water system is not feasible per PFS-2.4, service by individual wells or new community systems may be allowed if the water source meets standards for quality and quantity.

**PFS-3.1 Private Sewage Disposal Standards** - The County shall maintain adequate standards for private sewage disposal systems (e.g., septic tanks) to protect water quality and public health;

**WR-1.1 Groundwater Withdrawal** - The County shall cooperate with water agencies and management agencies during land development processes to help promote an adequate, safe, and economically viable groundwater supply for existing and future development within the County. These actions shall be intended to help the County mitigate the potential impact on ground water resources identified during planning and approval processes.

**WR-1.6 Expand Use of Reclaimed Water** - The County shall encourage the use of tertiary treated wastewater and household gray water for irrigation of agricultural lands, recreation and open space areas, and large landscaped areas as a means of reducing demand for groundwater resources.

**WR-2.1 Protect Water Quality** - All major land use and development plans shall be evaluated as to their potential to create surface and groundwater contamination hazards from point and non-point sources. The County shall confer with other appropriate agencies, as necessary, to assure adequate water quality review to prevent soil erosion; direct discharge of potentially harmful substances; ground leaching from storage of raw materials, petroleum products, or wastes; floating debris; and runoff from the site.

**WR-2.2 National Pollutant Discharge Elimination System (NPDES) Enforcement** - The County shall continue to support the State in monitoring and enforcing provisions to control non-point source water pollution contained in the U.S. EPA NPDES program as implemented by the Water Quality Control Board.

**WR-2.3 Best Management Practices (BMPs)** - The County shall continue to require the use of feasible BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities, agricultural operations requiring a County Permit and urban runoff in coordination with the Water Quality Control Board.

**WR-2.4 Construction Site Sediment Control** - The County shall continue to enforce provisions to control erosion and sediment from construction sites.

**WR-2.8 Point Source Control** - The County shall work with the Regional Water Quality Control Board to ensure that all point source pollutants are adequately mitigated (as part of the California Environmental Quality Act review and project approval process) and monitored to ensure long-term compliance.

**WR-3.5 Use of Native and Drought Tolerant Landscaping** - The County shall encourage the use of low water consuming, drought-tolerant and native landscaping and emphasize the importance of utilizing water conserving techniques, such as night watering, mulching, and drip irrigation.

## IMPACT EVALUATION

### Would the project:

- a) **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?**

Project Impact Analysis:

***Less Than Significant Impact***

The State Water Resources Control Board requires any new construction project greater than one acre to complete a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP would be prepared for the proposed Project by a qualified engineer or erosion control specialist as a condition of approval and would be submitted to the County for review and approval before being implemented during

construction. The SWPPP would be designed to reduce potential impacts related to erosion and surface water quality during construction activities and throughout the life of the proposed Project. It would include proposed Project information and best management practices (BMP). The BMPs would include dewatering procedures, stormwater runoff quality control measures, concrete waste management, watering for dust control, and construction of perimeter silt fences, as needed. Implementation of the SWPPP will minimize the potential for the proposed Project to substantially alter the existing drainage pattern in a manner that will result in substantial erosion or siltation onsite or offsite. There will be no discharge to any surface or groundwater sources which may impact water quality standards. As such, the proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, the proposed Project would result in a less than significant impact to this resource.

Cumulative Impact Analysis: *Less Than Significant Impact*

The geographic area of this cumulative analysis is in the foothill region of Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), and/or the Three Rivers Community Plan 2018 Update and accompanying EIR.

As proposed Project will result in *Less Than Significant Impact* related to this Checklist Item.

Mitigation Measure(s): *None Required*

Conclusion: *Less Than Significant Impact*

With implementation of State and County level policies and guidelines, there will be less than significant Project-specific impacts related to this Checklist Item. As there will be less than significant cumulative impacts related to this Checklist item, the Project will result in *Less Than Significant Impact*.

**b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?**

Project Impact Analysis: *Less Than Significant Impact*

The proposed Project site is located in the Kaweah Watershed. The Department of Water Resources (DWR) has estimated that the nine (9) watersheds within the Kaweah Watershed cover 82,636 acres. As noted earlier, combined, the tributaries supplying the Kaweah Watershed consists of 67,789 acres (approximately 80%) of the estimated 82,636 acres of the nine local watershed of the Three Rivers planning area. As noted earlier, the “*Abbreviated Water Supply Evaluation to support the Three Rivers Community Plan EIR Memorandum*” (Memorandum) concludes that there is sufficient water supply to meet the approximately 940 acre-feet annually of future water demand at full build-out of the Three Rivers Community Plan, including residential, commercial, and industrial demand of the estimated 50,000 acre-

feet of annual average groundwater recharge in the watershed. The proposed Project applicant's engineer (Ald General Engineering) estimates that it will use approximately 15.37 acre feet of water per year (or approximately 5,009,625 gallons per year or 13,725 gallons per day<sup>44</sup>). Of the 940 acre-feet annual future water demand estimated in the Memorandum, the proposed Project would consume approximately 0.0163% of the 940 acre-feet (or about 0.0003%) of the estimated annual 50,000 acre-feet of the groundwater recharge in the watershed. It is noted that Ald General Engineering, as a hypothetical exercise, also provided as estimate for a parcel directly west of the proposed Project site of 3,450 gallons per day of water usage (or 1,259,250 gallons per year or 3.86 acre-feet per year) if hypothetical development would occur on this parcel. Combined, this would result in approximately 19.23 acre-feet per year (or approximately 0.0204%) of the estimate 940 acre-feet of annual future demand of the entire Three Rivers Community Plan planning area. It is noted, that ***no application or development proposal*** (emphasis added) has been received by Tulare County RMA for the adjacent parcel directly west of the proposed Project site. As such, the proposed Project (including the potential project west of the proposed Project site) would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

The proposed Project will result in ***Less Than Significant Cumulative Impacts*** to the water supply.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is in the foothill region of Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR).

The proposed Project will result in ***Less Than Significant Cumulative Impacts*** related to this Checklist Item.

Mitigation Measure(s): ***None Required***

Conclusion: ***Less Than Significant Impact***

The proposed Project will result in ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist Item.

- c) **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious**

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<sup>44</sup> "Hampton Inn & Suites Report of Waste Discharge Technical Report Wastewater Treatment System for the Proposed Hampton Inn & Suites 40758 Sierra Drive, Three Rivers, California." (Waste Discharge Technical Report) September 2020. Page 4. Prepared by Ald General Engineering, Inc. and included in Attachment "D" of this Draft EIR.

surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

Project Impact Analysis:

***Less Than Significant Impact***

- i) ***Erosion and Siltation; Less Than Significant Impact:*** The extent of potential erosion will vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. As noted in resource discussion 3.6 Geology and Soils, Item b), site construction-related activities will include trenching, earthmoving, pouring concrete, grading, building construction typical of a hotel structure. These activities could expose soils to erosion processes. The extent of erosion will vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. The site has very little slope (i.e., a slight grade from west to east) and will have a flat topography after grading. As stated earlier, the relatively flat nature of the site reduces the need for grading which would be generally limited to access roads, parking, and the hotel structure itself. The site is and will continue to have a relatively-flat topography after site construction. Also, as noted earlier, a SWPPP will be in place during construction, as described earlier in Item a). Therefore, construction-related activities will minimally disturb the ground surface resulting in a less than significant impact from erosion and siltation.
- ii) ***Runoff resulting in Flooding On- or Off-site; Less Than Significant Impact:*** The site will not result in waters capable of flooding either on- or off-site. The site is not subject to flooding and lies within Flood Zone X (area of minimal flooding) per the Federal Emergency Management Agency FIRM map.<sup>45</sup> Also, the site will not generate substantial amounts of runoff that would result in on- or off-site flooding due to the nature of the Project as a renewable energy producer (i.e., solar energy). The Project will avoid runoff type water from dust suppression activities through implementation of conditions of approval and project design features. As such, the Project would result in a less than significant impact to or from this resource Item.
- iii) ***Runoff affecting Drainage Systems and Polluted Runoff; No Impact:*** See Items c) i) and ii). Also, the Project will not connect to any existing or planned stormwater drainage system, as such it will not provide any additional sources of polluted runoff. Therefore, the Project would result in no impact to this resource. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and as such, would result in no impact.

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<sup>45</sup> Federal Emergency Management Agency FIRM Panel 06107CL300E June 16, 2009. Accessed January 2021 at: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-119.24027126756349,36.137670866489145,-119.15718716111826,36.17232174266695>

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. Alteration of a stream or river will be subject to the regulations of several federal agencies including the U.S. Army Corps of Engineers, the California Department of Fish and Wildlife, and the California State Water Resources Control Board.

As noted earlier in Item a), with implementation of State and County level policies and guidelines (e.g.; a SWPPP) will adequately address potential stormwater impacts through the implementation of Project design features. Therefore, ***Less Than Significant Cumulative Impacts*** related to this Checklist Item will occur.

Mitigation Measure(s): ***None***

Conclusion: ***Less Than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

**d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

Project Impact Analysis: ***No Impact***

The Project is not located on or near any areas that would result in or be impact by a flood hazard, tsunami, or seiche zones, that would result in a risk release of pollutants due to project inundation. As noted earlier in Item 10 c) ii), the Project does not lie within an area nor is it subject not subject to flooding within Flood Zone X (area of minimal flooding) per the Federal Emergency Management Agency FIRM map; it is not exposed to or near any river, reservoirs, pond, or lake subject to seiches from earthquake activity; and it is greater than 100 miles east of the nearest coastline that would be subject to tsunami. Therefore, there would be no impact from potential inundation by the flood hazard, tsunami, or seiches.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is in the foothill region of Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR).

The proposed Project will result in ***No Cumulative Impacts*** related to this Checklist Item.

Mitigation Measure(s): ***None Required.***



Conclusion: *No Impact*

As noted earlier, *No Project-specific and No Cumulative Impacts* related to this Checklist Item will occur.

**e) Conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan?**

Project Impact Analysis: *No Impact*

As indicated earlier in Item b), the proposed Project would not conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan.

Cumulative Impact Analysis: *No Impact*

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the requirements of the Central Valley Regional Water Quality Control Board.

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. As such, *No Cumulative Impacts* related to this Checklist Item will occur.

Mitigation Measure(s): *None Required.*

Conclusion: *No Impact*

As noted earlier, *No Project-specific Impacts* related to this Checklist item will occur. *No Cumulative* impacts related to this Checklist Item will occur.

## DEFINITIONS/ACRONYMS

### Definitions

**MS4** - A conveyance or system of conveyances, including roads with drainage systems, curbs, gutters, drainage inlets, storm drains ditches and channels used for collection or conveying storm water and runoff.<sup>46</sup>

**Flood, flooding, or flood water** - 1. A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any source; and/or mudslides (i.e., mudflows); and 2. The condition resulting from flood-related erosion.<sup>47</sup>

**Floodplain** - Land adjacent to a stream, slough or river that is subject to flooding or inundation from a storm event. FEMA defines the floodplain to be the area inundated by the 100-year flood.<sup>48</sup>

**Floodway** - The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. Also referred to as "Regulatory Floodway."<sup>49</sup>

**Onsite Wastewater Treatment System** - Individual disposal systems, community collection and disposal systems, and alternative collection and disposal systems that use subsurface (waste) disposal. The short form of the term may be singular or plural. OWTS do not include "graywater" systems pursuant to Health and Safety Code Section 17922.12.<sup>50</sup>

**Siltation** – The deposition or accumulation of silt (or small grained material) in a body of water.<sup>51</sup>

**Sump pump**- Device used to remove water from seepage or rainfall that collects in areas protected by a levee, floodwall, or dry floodproofing. In addition, a sump pump is often part of a standard house drainage system that removes water that collects below a basement slab floor.<sup>52</sup>

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<sup>46</sup> Tulare County, 2008. NPDES Phase II Storm Water Management Plan. Page 2-1. Accessed November 2020 at:

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/swmp/tulare\\_co\\_swmp.pdf](http://www.waterboards.ca.gov/water_issues/programs/stormwater/swmp/tulare_co_swmp.pdf)

<sup>47</sup> DWR, 2006. California Floodplain Management Ordinance. Page 4. <http://www.water.ca.gov/ncro/4-RegionalPlanningAndCoord/docs/NFIP/Ordinances/Noncoastal%20December%202006%20CA%20Ordinance.pdf>

<sup>48</sup> Ibid. <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>.

<sup>49</sup> Op. Cit.

<sup>50</sup> SWRCB, 2012. OWTS Policy. Page 9. Accessed November 2020 at: [http://www.swrcb.ca.gov/water\\_issues/programs/owts/docs/owts\\_policy.pdf](http://www.swrcb.ca.gov/water_issues/programs/owts/docs/owts_policy.pdf).

<sup>51</sup> USGS. 2013. Water Basics Glossary. Accessed November 2020 at: [https://water.usgs.gov/water-basics\\_glossary.html](https://water.usgs.gov/water-basics_glossary.html).

<sup>52</sup> FEMA. 1999. Appendix B - Glossary of Terms. Page B-12. Accessed November 2020 at: [https://www.fema.gov/pdf/fima/pbffd\\_appendix\\_b.pdf](https://www.fema.gov/pdf/fima/pbffd_appendix_b.pdf).

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Acronyms

AF	Acre-feet
BMPs	Best Management Practices
CEQA	California Environmental Quality Act
CCRs	Consumer Confidence Reports
CVP	Central Valley Project
CWA	Federal Clean Water Act
CWP/SWP	California (or State) Water Plan
DWR	Department of Water Resources
EOP	Emergency Operations Plan
EPA	Federal Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Federal Insurance Rate Map
GPM	Gallons Per Minute
HHSA	Tulare County Health and Human Services Agency
KBWQA	Kaweah Basin Water Quality Association
LAFCo	Tulare County Local Agency Formation Commission
LTRID	Lower Tule River Irrigation District
MG	Millions Gallons
MGD	Millions Gallons per Day
MS4	Small Municipal Separate Storm Sewer System
MSR	Municipal Service Review
NFIP	National Flood Insurance Program
NPDES	National Pollutant Discharge Elimination System
OCAP	Operating Criteria and Plan
OES	Office of Emergency Services
OWTS	Onsite Wastewater Treatment System
RWQCB	Regional Water Quality Control Board
SDWA	Federal Safe Drinking Water Act
SFHA	Special Flood Hazard Area
SWPPP	Stormwater Pollution Prevention Plan
SOI	Sphere of Influence
SSRWMG	Southern Sierra Regional Water Management Group
SSIRWMP	Southern Sierra Integrated Regional Water Management Plan
SWRCB	State Water Resources Control Board
SWMP	Storm Water Management Program
TDS	Total Dissolved Solids

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# Land Use and Planning

## Chapter 3.11

### SUMMARY OF FINDINGS

The proposed Three Rivers-Hampton Inn & Suites (Project) will result in *No Impact* to Land Use and Planning.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Land Use and Planning. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2(a), “[a]n EIR shall identify and focus on the significant environmental effects of the proposed Project. In assessing the impact of a proposed Project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the Project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the Project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision will have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

The “Environmental Setting” section provides a description of the Land Use and Planning setting in the County. The “Regulatory Setting” section provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare

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<sup>1</sup> CEQA Guidelines, Section 15126.2(a)



County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR) incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance:

The thresholds of significance for this section are established by the CEQA Checklist Item questions. The following are potential thresholds for significance.

- Divide Community
- Conflict with Applicable land use plan policy, or regulation of an agency with jurisdiction over the Project
- Conflict with applicable habitat conservation plan

## **ENVIRONMENTAL SETTING**

### Tulare County

Tulare County is located in a geographically diverse region with the majestic peaks of the Sierra Nevada framing its eastern region, while its western portion includes the San Joaquin valley floor, a fertile area that is extensively cultivated. As of 2019 Tulare County was a leader in national agricultural production and the top dairy production in the nation with \$1.61 billion in milk production in 2019.<sup>2</sup> In addition to its agricultural production, the county's economic base also includes agricultural packing and shipping operations. Small and medium size manufacturing plants are located in the western part of the county and are increasing in number. Tulare County contains portions of Sequoia National Forest, Sequoia National Monument, Inyo National Forest, and Kings Canyon National Park. Sequoia National Park is entirely contained within the county.<sup>3</sup>

The County encompasses approximately 4,840 square miles of classified lands (lands with identified uses) and can be divided into three general topographical zones: valley region; foothill region east of the valley area; and mountain region just east of the foothills. The eastern half of the county is generally comprised of public lands, including the Mountain Home State Forest, Golden Trout Wilderness area, and portions of the Dome Land and south Sierra Wilderness areas.<sup>4</sup> Federal lands, which include wilderness, national forests, monuments and parks, and County parks, account for approximately 52.2 percent of the County land. Agricultural uses, which include row crops, orchards, dairies, and grazing lands on the Valley floor and foothills account for approximately 43 percent of the County land. Urban uses including incorporated cities,

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<sup>2</sup> Tulare County Crop & Livestock Report 2019, Tulare County: It Does a Business Good. Accessed November 2020 at: <https://agcomm.co.tulare.ca.us/ag/index.cfm/standards-and-quarantine/crop-reports1/crop-reports-2011-2020/2019-crop-report/>.

<sup>3</sup> Tulare County. 2010. Tulare County General Plan 2030 Update Background Report. Page 1-2.

<sup>4</sup> Ibid. Page 1-4.

communities, hamlets, unincorporated urban uses, and infrastructure rights-of-way account for the remaining land in the County.<sup>5</sup>

Land use in Tulare County is predominately agriculture, and the County is committed to retaining the rich agricultural land. The foothill and mountain regions are controlled predominantly by the State and federal governments. However, as population increases, so does the demand for public services, including solid waste disposal. Agricultural land around the cities is being converted into urban uses. Housing, land, employment and economics are balanced to minimize the amount of agricultural land utilized for urban development. Economic principles tend to take precedence over the conservation of land.

As indicated in the 2018 Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS), Draft Environmental Impact Report (SCH #2012081070); “A vital input to the SCS development process was a credible forecast of population, housing and jobs. TCAG developed a new forecast for this RTP/SCS based on the most comprehensive and up-to-date regional forecasts and projections available. The growth forecast for the 2018 RTP/SCS incorporates substantial new data available from the 2010 Census and new projections published by the California Department of Finance, Demographic Research Office (DOF) in 2017. The growth forecast, based on the DOF projection, is much more restrained than in the previous 2014 RTP/SCS (see RTP Appendix F). The new demographic forecast is summarized in Table 3.0-5 [of the RTP/SCS], Tulare County Demographic Forecast The new 2017 DOF population projection for the year 2040 (594,348) is significantly lower than that of the 2013 DOF projection for the year 2040 (722,838) used for the 2014 RTP/SCS, a difference of 128,490 persons. This is due to lower birthrates consistent with the state as a whole and the fact that Tulare County is still experiencing negative net migration (-150 persons in 2015) as opposed to the peak (+4,473 persons in 2004), as a result of the Great Recession.”<sup>6</sup>

Approximately 169,300 people were employed in Tulare County in November 2020. The unemployment rate in the Tulare County was 9.8 percent in November 2020, down from a revised 10.5 percent in October 2020, and above the year-ago estimate of 8.7 percent. This compares with an unadjusted unemployment rate of 7.9 percent for California and 6.4 percent for the nation during the same period.<sup>7</sup> The current COVID-19 crisis (2020) has resulted in fluctuating employment; however, this fluctuation is anomalous and anticipated to self-adjust over time.

As of January 1, 2020, population estimates produced annually by the Department of Finance calculated Tulare County with a population estimate of 479,977 residents<sup>8</sup>. The State Controller’s Office uses Finance’s estimates to update their population figures for distribution of state

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<sup>5</sup> Tulare County. 2012. Tulare County General Plan 2030 Update. Page 4-3. Accessed December 2020 at: <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>

<sup>6</sup> RTP/SCS PEIR 2018. Pages 3.0-47 and -48. April 2018. Accessed October 2020 at: <https://tularecog.org/tcag/planning/regional-transportation-plan-rtp-rtp-20181/environmental-impact-report/>

<sup>7</sup> California Employment Development Department. Labor Market Information December 18, 2020. Accessed January 2021 at: [https://www.labormarketinfo.edd.ca.gov/file/1fmonth/visa\\$pd.pdf](https://www.labormarketinfo.edd.ca.gov/file/1fmonth/visa$pd.pdf)

<sup>8</sup> California Department of Finance. 2019 E-1 Population Estimates for Cities, Counties, and the State–January 1, 2018 and 2019. Accessed October 2020 at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/>.

subventions to cities and counties, and to comply with various state codes. Additionally, estimates are used for research and planning purposes by federal, state, and local agencies, the academic community, and the private sector.

### Community of Three Rivers

“Three Rivers is a diverse, rural community located in the western foothills of the Sierra Nevada Mountain Range in the unincorporated portion of Tulare County. It is situated approximately 52 miles southeast of Fresno in the north central area of Tulare County. Three Rivers is positioned adjacent to State Route 198, which connects it with Visalia, the County Seat, located 30 miles southwest of Three Rivers. The community is five miles south of the entrance to Sequoia National Park. It lies in a natural valley area created by the convergence of the North, Middle, East, and South Forks of the Kaweah River near the eastern edge of the Lake Kaweah ”<sup>9</sup>

### Three Rivers Urban Development Boundary

“The Urban Boundaries Element, first adopted in 1974, identified two types of boundaries: Urban Area Boundaries (UABs) and Urban Improvement Areas (UIAs). At the time of the Urban Boundaries Element adoption, the UIAs were defined as the twenty-year growth boundaries and the UABs were defined as the ultimate growth boundary for each city and community. In 1983, the Urban Boundaries Element was amended to replace the UIAs with UDBs, and to modify the UAB model to include a "comment" area around incorporated cities, keeping UABs as the next logical area for urban expansion. In addition, UABs were no longer established around unincorporated communities.”<sup>10</sup>

“The UDB lines established a twenty-year growth boundary for unincorporated communities for which services will likely be extended to allow new urban growth. The County used population, existing County policies, and a development suitability analysis to determine the location and size of the community UDBs.”<sup>11</sup>

“The Urban Boundaries Element directed that community plans be adopted for 22 unincorporated communities to guide future development within their community boundaries. ... Community Plans supplement County-wide General Plan policies. These plans have their own Land Use Diagrams and circulation plans, and include land use designations and development standards to guide area growth.”<sup>12</sup> Three Rivers is among the communities with adopted community plans as of 2009.

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<sup>9</sup> Tulare County. Three Rivers Community Plan 2018 Update. Pages 23. Accessed October 2020 at:

<https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>

<sup>10</sup> Tulare County. Tulare County General Plan 2030 Update. 2012. Page 2-4. Accessed October 2020 at:

<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>

<sup>11</sup> Ibid.

<sup>12</sup> Op. Cit.

The Three Rivers Community Plan (General Plan Amendment GPA 14-004) was adopted on June 26, 2018 via Tulare County Board of Supervisors Resolution No's. 2018-0481, 2018-0482, 2018-0483, and 2018-0484; Tulare County Planning Commission Recommendations: Resolution No's .9457, 9458, 9459, 9460, 9461, 9462, and 9463; Zoning District Map: PZC 17-048; and Section 18.9 Zoning Ordinance (Mixed Use): PZC 17-047. "All community plans, including this one, must address a range of diverse, sometimes divergent, public interests. They must do so within a consistent, well-integrated policy framework. A county utilizes broad discretion to weigh and balance competing interests in formulating community plan policies. In implementing those policies, it is the task of the Board of Supervisors, or its delegates, to make determinations in a manner that promotes the objectives and policies of all aspects of the community plan, and does not obstruct their attainment. Policy implementation may require reasonable and thoughtful consideration of a number of community plan policies. Such implementation decisions will be made on a case-by-case basis as the Board of Supervisors, Planning Commission, County staff, and others work to implement the entire community plan. When implementing the Community plan or reviewing projects or approvals for consistency with the Community plan, the County will need to balance numerous planning, environmental and policy considerations."<sup>13</sup>

### Existing Land Uses

Project site is located in the unincorporated community of Three Rivers and is adjacent to an existing hotel along and east of SR 198/Sierra Drive. The County requires development within existing eligible State Scenic Highway corridors to adhere to land use and design standards and guidelines required by the State Scenic Highway Program. The immediate area surrounding the Project site is generally level; there are two nearby hills northeast and east of the site and numerous hills north and west the site (north and west of the Kaweah River). The Comfort Inn and Suites is located to the northeast, the Kaweah River is west of site (west of SR 198) and scattered development (i.e., two rural residences), undeveloped land to the southeast and, a rural residence and two large compressed natural gas tanks to the south.

### Zoning and Land Use

The Three Rivers Community Plan 2018 Update includes Tables 51 and 52 which show land use and zoning acreage; respectively.<sup>14</sup> Table 51 shows 536 acres as Commercial Recreation, and 92 acres as Community Commercial, for a total of 626 commercial-related land use designations. Table 52 shows 271 total commercial-related zoned acres which includes the location of the proposed Project which is zoned as C-2-MU-SC. As indicated in the Three Rivers Community Plan 2018 Update, "Mixed Use Zoning allows a mix of uses that promotes flexibility in the types of entitlements that can be issued. All uses outlined in the, C-2, C-1, R-1, R-2, and R-3 uses are allowed"<sup>15</sup> "The purpose of the Scenic Corridor Combining Zone shall be to preserve and protect the scenic quality of the immediately visible land area adjacent to those scenic highways and scenic

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<sup>13</sup> Tulare County. Three Rivers Community Plan 2018 Update. Pages 44-45. Accessed October 2020 at:

<https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>

<sup>14</sup> Ibid. Table 51 and Table 52. Page 300.

<sup>15</sup> Op. Cit. 294.

roads established by the Tulare County General Plan, and to prevent visual obstructions of the extended view from such scenic highways and roads. This zone is intended to be combined with other zones and may be applied only to those areas visible from and adjacent to those scenic highways and scenic roads established by the Tulare County General Plan. When this zone is applied to property in conjunction with another zone set forth in this Ordinance, a new zone is thereby created and the regulations set forth in this section shall be applicable in addition to those otherwise applicable in the underlying or base zone. In addition, where the provisions of the underlying or base zone conflict with the requirements of this section, the requirements of this section shall prevail over those in the underlying or base zone. The new combined zone shall be shown on the Zoning Map by the letters "SC" following the symbol of the underlying or base zone.”<sup>16</sup> The Three Rivers Community Plan 2018 Update states, “The General Commercial Zone is intended for retail stores and businesses which do not involve the manufacture, assembling, packaging, treatment or processing of articles of merchandise for distribution and retail sale.”<sup>17</sup> Commercial development within the Three Rivers UDB is generally located along SR 198. Commercial development of a highway oriented and community nature will occur primarily along SR 198 because of readily convenient access from all areas of the community and the exposure to the traveling public. Additionally, commercial development will be directed to the Town Center location. Professional office development will be attracted to commercial areas along SR 198 because of its accessibility and exposure to local residents and highway travelers. Professional office development is also a component of the mixed-use development planned for the Town Center location. Depending upon a potential developer’s preference and availability of a suitable property for a proposed project, an applicant for a proposed project has options to select an appropriate location suitable for their business plan. The site is located within the Three Rivers Community planning area which designates the existing proposed Project area as C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone); as such, the proposed Project is an allowed use.

## **REGULATORY SETTING**

### ***Federal Agencies & Regulations***

Federal regulations for land use are not relevant to the Project because it is not a federal undertaking (the Project site is not located on lands administered by a federal agency, and the project applicant is not requesting federal funding or a federal permit).

### **Federal Endangered Species Act**

“Through federal action and by encouraging the establishment of state programs, the 1973 Endangered Species Act provided for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife, and plants depend. The Act:

- authorizes the determination and listing of species as endangered and threatened;

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<sup>16</sup> Op. Cit.

<sup>17</sup> Op. Cit. 297.

- prohibits unauthorized taking, possession, sale, and transport of endangered species;
- provides authority to acquire land for the conservation of listed species, using land and water conservation funds;
- authorizes establishment of cooperative agreements and grants-in-aid to States that establish and maintain active and adequate programs for endangered and threatened wildlife and plants;
- authorizes the assessment of civil and criminal penalties for violating the Act or regulations;
- authorizes the payment of rewards to anyone furnishing information leading to arrest and conviction for any violation of the Act or any regulation issued there under.”<sup>18</sup>

### ***State Agencies & Regulations***

The Project is being evaluated pursuant to CEQA; however, there are no state regulations, plans, programs, or guidelines associated with land use and planning that are applicable to the proposed Project.

#### California Department of Fish and Game

“The Mission of the Department of Fish and Wildlife is to manage California’s diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public.”<sup>19</sup> This includes habitat protection and maintenance in a sufficient amount and quality to ensure the survival of all species and natural communities. The department is also responsible for the diversified use of fish and wildlife including recreational, commercial, scientific and educational uses.

#### California Endangered Species Act

“The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. The California Department of Fish and Wildlife will work with all interested persons, agencies and organizations to protect and preserve such sensitive resources and their habitats.”<sup>20</sup>

### ***Regional Planning Policies and Agencies***

#### San Joaquin Valley Regional Blueprint

“The San Joaquin Valley Blueprint is the result of an unprecedented effort of the eight Valley Regional Planning Agencies (RPA), that include the i) Fresno Council of Governments, ii) Kern Council of Governments, iii) Kings County Association of Governments, iv) Madera County

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<sup>18</sup> Federal Endangered Species Act. Accessed January 2021 at: <http://www.fws.gov/laws/lawsdigest/esact.html>.

<sup>19</sup> California Department of Fish and Game. Accessed January 2021 at: <https://www.wildlife.ca.gov/Explore>.

<sup>20</sup> California Endangered Species Act Accessed January 2021 at: [www.wildlife.ca.gov/Conservation/CESA/](http://www.wildlife.ca.gov/Conservation/CESA/).

Transportation Commission, v) Merced County Association of Governments, vi) San Joaquin Council of Governments, vii) Stanislaus Council of Governments, and viii) Tulare County Association of Governments, to develop a long-term regional growth strategy for the future of the San Joaquin Valley. Following three years of visioning and outreach by the eight Valley RPAs, the Regional Policy Council (RPC), the decision-making body for the Valleywide process, adopted the Valley Blueprint in April 2009.

The Blueprint is a long range vision for a more efficient, sustainable, and livable future for the Valley. The Valleywide Blueprint is made up of three elements: i) 2050 growth scenario diagram that identifies areas of existing development, new development, and future regional transit and highway improvements; ii) Valleywide average target density of 6.8 units per acre for new residential growth to the year 2050; and a iii) set of 12 Smart Growth Principles. Importantly, the Blueprint recognizes and incorporates by reference the visioning and outreach efforts undertaken by the eight Valley Regional Planning Agencies.”<sup>21</sup>

#### Tulare County Association of Governments (TCAG)

The Tulare County Association of Governments (TCAG) is responsible for overseeing and planning projects with the county and each of its cities, helping to bring tax money back home to fund bus service, road improvements, projects that will improve our air quality, and more. “TCAG and its member agencies felt that it was important to prepare a Tulare County Regional Blueprint that clarified Tulare County’s role in the Blueprint process. The Tulare County Regional Blueprint is a stand-alone policy document that is consistent with the San Joaquin Valley Regional Blueprint. This document represents Tulare County’s local vision and goals as a participant in the San Joaquin Valley Regional Blueprint process.” Key elements of the preferred growth scenario outlined in the Tulare County Regional Blueprint include 25% increase in overall density and focused growth in urban areas.

#### ***Local Policy & Regulations***

##### Tulare County General Plan 2030 Update

The Tulare County General Plan 2030 Update (Chapter 4 – Land Use, Chapter 8 – Environmental Resources Management and Part II Chapter 1 - Rural Valley Lands Plan) contains goals and policies that relate to land use and which have potential relevance to the Project’s California Environmental Quality Act (CEQA) review.

“The Foothill Growth Management Plan (FGMP) was originally adopted in 1981 and includes a comprehensive statement of the development policies and standards that prescribe land use and circulation patterns for the foothills of Tulare County, generally above the 600-foot elevation line (Part II-Figure 3-1: Foothill Growth Management Plan)...The communities of Springville and Three Rivers, each with their own community plans, lie within the FGMP boundaries.”<sup>22</sup> However,

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<sup>22</sup> Tulare County General Plan 2030 Update. Area Plan Policies (Part II). Chapter 3. Page 3.1

“Land within an unincorporated UDB is assumed appropriate for development and is not subject to the Rural Valley Lands Plan or Foothill Growth Management Plan.”<sup>23</sup>

There are many County policies that guide development in the Three Rivers area. However, those which have direct effect on the establishment of the community's UDB include the policies in the Tulare County General Plan Planning Framework Element which indicate that the County shall limit urban development to the area within the designated UDB for each community. The General Plan contains the following policies aimed at reducing potential land use conflicts, promoting an efficient urban form, and ensuring consistency with local land use and environmental plans. General Plan policies that relate to the proposed Project are listed as follows:

**ED-3.1 Diverse Economic Base** - The County shall actively promote the development of a diversified economic base by continuing to promote agriculture, recreation services, and commerce, and by expanding its efforts to encourage industrial development including the development of energy resources.

**ED-5.7 Foothills** - The County shall encourage additional recreational and visitor-serving development in the Sierra and foothills in areas such as Three Rivers and Springville.

**ED-5.14 Interagency Cooperation** - The County shall cooperate with federal land management agencies to develop and promote Three Rivers and Springville as gateway communities.

**ERM-2.9 Compatibility** - The County will encourage the development of mineral deposits in a manner compatible with surrounding land uses.

**PF-1.1 Maintain Urban Edges** - The County shall strive to maintain distinct urban edges for all unincorporated communities within the valley region or foothill region, while creating a transition between urban uses and agriculture and open space.

**PF-1.2 Location of Urban Development** - The County shall ensure that urban development only takes place in the following areas:

1. Within incorporated cities and CACUDBs;
2. Within the UDBs of adjacent cities in other counties, unincorporated communities, planned community areas, and HDBs of hamlets;
3. Within foothill development corridors as determined by procedures set forth in Foothill Growth Management Plan;
4. Within areas set aside for urban use in the Mountain Framework Plan and the mountain sub-area plans; and
5. Within other areas suited for non-agricultural development, as determined by the procedures set forth in the Rural Valley Lands Plan.

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<sup>23</sup> Tulare County General Plan 2030 Update. Goals and Policies Report (Part I). Chapter 2. Page 2-3.



**PF-1.3 Land Uses in UDBs/HDBs** - The County shall encourage those types of urban land uses that benefit from urban services to develop within UDBs and HDBs. Permanent uses which do not benefit from urban services shall be discouraged within these areas. This shall not apply to agricultural or agricultural support uses, including the cultivation of land or other uses accessory to the cultivation of land provided that such accessory uses are time-limited through Special Use Permit procedures.

**PF-1.4 Available Infrastructure** - The wherein the County shall encourage urban development to locate in existing UDBs and HDBs where infrastructure is available or may be established in conjunction with development. The County shall ensure that development does not occur unless adequate infrastructure is available, that sufficient water supplies are available or can be made available and that there are adequate provisions for long term management and maintenance of infrastructure and identified water supplies.

**PF-2.1 Urban Development Boundaries – Communities** - The County shall limit urban development to the area within the designated UDB for each community.

**PF-2.4 Community Plans** - The County shall ensure that community plans are prepared, updated, and maintained for each of the communities. These plans shall include the entire area within the community's UDB and shall address the community's short and long term ability to provide necessary urban services.

**PF-2.7 Improvement Standards in Communities** - The County shall require development within the designated UDBs to meet an urban standard for improvements. Typical improvements shall include curbs, gutters, sidewalks, and community sewer and water systems.

**PF-2.8 Inappropriate Land Use** - Areas within UDBs are hereby set aside for those types of urban land uses which benefit from urban services. Permanent uses which do not benefit from such urban services shall be discouraged within the UDBs.

**PF-3.4 Mixed Use Opportunities** - Unless or until a traditional plan approach is requested by the hamlet and such a plan is adopted, land use designations within the HDB shall be the mixed use land use designations as provided in Chapter 4-Land Use that promotes the integration of a compatible mix of residential types and densities, commercial uses, public facilities and services, and employment opportunities.

**LU-1.2 Innovative Development** - The County shall promote flexibility and innovation through the use of planned unit developments, development agreements, specific plans, Mixed Use projects, and other innovative development and planning techniques.

**LU-1.3 Prevent Incompatible Uses** - The County shall discourage the intrusion into existing urban areas of new incompatible land uses that produce significant noise, odors, or fumes.

**LU-1.8 Encourage Infill Development** - The County shall encourage and provide incentives for infill development to occur in communities and hamlets within or adjacent to existing development

in order to maximize the use of land within existing urban areas, minimize the conversion of existing agricultural land, and minimize environmental concerns associated with new development.

**LU-2.3 Open Space Character** - The County shall require that all new development requiring a County discretionary approval, including parcel and subdivision maps, be planned and designed to maintain the scenic open space character of open space resources including, but not limited to, agricultural areas, rangeland, riparian areas, etc., within the view corridors of highways. New development shall utilize natural landforms and vegetation in the least visually disruptive way possible and use design, construction and maintenance techniques that minimize the visibility of structures on hilltops, hillsides, ridgelines, steep slopes, and canyons.

**LU-7.15 Energy Conservation** - The County shall encourage the use of solar power and energy conservation building techniques in all new development.

**LU-7.16 Water Conservation** - The County shall encourage the inclusion of “extra-ordinary” water conservation and demand management measures for residential, commercial, and industrial indoor and outdoor water uses in all new urban development.

**LU-4.4 Travel-Oriented Tourist Commercial Uses** - The County shall require travel-oriented tourist commercial uses (for example, entertainment, commercial recreation, lodging, fuel) to be used in areas where traffic patterns are oriented to major arterials and highways. Exceptions may be granted for resort or retreat related developments that are sited based on unique natural features.

#### Tulare County Zoning Ordinance

The County’s primary regulatory tool for implementing the General Plan is the Zoning Ordinance. Tulare County’s first zoning ordinance was adopted in 1947 as Ordinance 352. The current *Tulare County Zoning Ordinance and Related State and Local Land Use Regulations* was revised in September 2005 and covers the entire unincorporated county.<sup>24</sup> The Zoning Ordinance has been amended many times since 2005, but has not undergone a comprehensive update. The zoning regulations regulate the extent and type of development that can occur in the unincorporated areas, therefore the outdated ordinance is limiting the County’s holding capacity and build out potential. A major difference between the General Plan and Zoning Ordinance is that the General Plan provides guidance on the location, type, density, and timing of new growth and development over the long-term, while the Zoning Ordinance determines what development can occur on a site specific basis. The General Plan land use designations, and the zoning classifications and development standards of the Zoning Ordinance, determine the County’s holding capacity and buildout potential.

The Zoning Ordinance establishes three residential zones, four commercial zones, three industrial zones, and seven other zones related to agriculture, timber, and resource-related uses. The purpose

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<sup>24</sup> The Zoning Ordinance can be found online at <http://www.tularecounty.ca.gov/rma/index.cfm/documents-and-forms/planning-documents/tulare-county-zoning-ordinance/>

of the zones is to translate the broad land use categories established by the Tulare County General Plan into detailed land use classifications that are applied to properties with much greater precision than the General Plan. The zoning classifications follow specific property lines and road alignments and correspond to the applicable General Plan categories. Working with the zoning classifications, the text of the Zoning Ordinance provides detailed regulations for the development and use of land. The proposed Project is located in a zoning classification (C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone)) which allows the hotel “by-right”.

### Three Rivers Community Plan

#### Policy Relationship to the General Plan

“The Three Rivers Community Plan is a component in Part III of the Tulare County General Plan and, as such, has the same force and effect as any other adopted element of the General Plan. Structurally, the Three Rivers Community Plan is part of the Land Use and Circulation Element of the overall General Plan. The principal emphasis of the community plan is on establishing local land use and circulation system patterns and prescribing associated standards and policies. In addition to the specific prescriptions of the community plan, the broader policies and standards of the overall Land Use and Circulation Element apply to Three Rivers. Also applicable to Three Rivers, and governing all future development in the community, are the other elements (e.g. Planning Framework, Environmental Resources Management, Air Quality, Health and Safety, Transportation and Circulation, etc.) of the Tulare County General Plan. In instances where the policies and/or standards of the Three Rivers Community Plan are more specific or more restrictive than those in other elements of the General Plan, the community plan shall take precedence and prevail.”<sup>25</sup>

“Another overall principle to guide the reading and interpreting of the Community plan and its policies is that none of its provisions will be interpreted by the County in a manner that violates State or Federal law. For example, PFS-1.3: Impact Mitigation (Tulare County General Plan Chapter 14), requires new development to pay for its proportionate share of the costs of infrastructure required to serve the project. This policy will be implemented subject to applicable legal standards, including but not limited to the U.S. Constitution’s “Takings” clause. In reading every provision of the Community plan, one should infer that it is limited by the principle: “to the extent legally permitted.”<sup>26</sup>

Following are goals, objective, policies within the Three Rivers Community Plan 2018 Update that apply to the proposed Project: Goal 1: Compatible Development: Maintain the Rural Gateway Character of Three Rivers through land uses and new development that are compatible and consistent with the existing development in Three Rivers, preserve the unique visual and community character and natural environment and create a distinct sense of place.

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<sup>25</sup> Ibid. 209.

<sup>26</sup> Op. Cit.

**Objective 1.1 Development Compatibility:** Ensure compliance with the Community Plan to ensure compatibility between and within new and existing development. **Policies:** **1.1.1 New Residential Development Compatibility** to ensure that new residential development is compatible with the character of the community through the enforcement of rural standards and guidelines; **1.1.2 Mixed Uses** to ensure that development to accommodate growth includes a balanced mix of residential, commercial and public uses that enhance the community's economic vitality while maintaining its rural character and quality of life; **1.1.3 Commercial Uses- Limiting Negative Impacts** to limit commercial or recreational uses that generate negative impacts, such as noise, lighting, traffic, odors and emissions in residential and rural residential neighborhoods; **1.1.4 Compatible Commercial Establishments** to encourage compatible commercial establishments necessary to serve residents and tourists that are commensurate with the scale and intensity of the community, preserve the environment, and which do not have to the extent feasible, significant traffic, light, noise or visual impacts to the community; **1.1.5 Cluster Commercial Uses** to cluster commercial uses in compact areas and development patterns to discourage strip development and encourage the development of a Town Center or Centers; **1.1.6 Land Use Protections** to protect land uses adjacent to SR 198 from noise impacts by requiring adequate landscape screening and buffering; **1.1.7 Buffers** to require adequate buffers (setback, side and rear yards, landscaping and screening) between commercial and/or industrial development and residential areas; **1.1.8 Increase Public Input** to increase the opportunities for public involvement and participation for planning and development processes in Three Rivers; **1.1.9 LU-1.3 Prevent Incompatible Uses** wherein the County shall discourage the intrusion into existing residential and rural residential areas of new incompatible land uses that produce significant noise, odors, or fumes; **1.1.12 LU-4.5 Commercial Building Design** wherein the County shall encourage that new commercial development is consistent with the existing design of the surrounding community or neighborhood by encouraging similar façades, proportionate scale, parking, landscaping, and lighting that provides for night sky conservation and protection and; **1.1.15 LU-7.14 Contextual and Compatible Design** wherein the County shall ensure that new development respects Three Rivers' long heritage by requiring that development respond to its context, be compatible with the traditions and character of the community, and develop in an orderly fashion which is compatible with the scale of surrounding structures.

**Objective 1.2 Rural Gateway Character:** Maintain and balance the existing natural environment with the rural gateway character of Three Rivers. **Policies:** **1.2.1 New Development Compatibility** to ensure that the size, type, and scale of new development in Three Rivers is compatible with the rural character of the community and; **1.2.13 SL-3.3 Highway Commercial** wherein the County shall require highway commercial uses to be located and designed to reduce their visual impact on the travel experience along State scenic highways and County scenic routes.

**Objective 1.3 Rural Development Standards:** Establish and implement standards for rural development which incorporate the rural standards of the community. **Policies:** **1.3.1 County Project Review Committee** wherein new development proposals may be subject to County Project Review Committee for all new development in Three Rivers; **1.3.2 Development Standards** to ensure that development proposals conform to all development standards and guidelines to the extent feasible as determined to be reasonable and appropriate by the affected decision makers; **1.3.3 Noise Standards** to apply the noise standards found in the Tulare County

Health and Safety Element (Part 1 Section 10.8). Utilize recommendations included in the community plan EIR to address and develop feasible noise standards to the extent feasible reflective of a foothill canyon environment; **1.3.4 Setbacks** to require adequate setbacks for residential, commercial and industrial uses, including, side and rear yards, landscaping and screening, as determined by the County Project Review Committee; **1.3.5 Signage Standards** to require standards for signage in Three Rivers, including regulations for: size, height, scale, color, lighting, and material. Incorporate Caltrans signage standards with community standards, as they apply to SR 198; **1.3.6 Lighting Standards** to establish lighting standards and guidelines as feasible and appropriate to minimize light pollution, glare, and light trespass and to protect the dark skies in Three Rivers and; **1.3.7 Vegetation Standards** to establish vegetation standards for residential and commercial development, and encourage the use of native vegetation in landscaping, when visible to common roadways.

**Objective 1.4 Quality Office, Commercial and Light Industrial Development:** Establish and apply development and design standards to ensure quality professional office, commercial, and light, non-polluting industrial development. **Policies:** **1.4.1 Professional Office Design Standards** to design professional office, commercial and light, non-polluting, industrial developments to minimize adverse traffic impacts to residential areas; **1.4.2 Buffer Strips** to require office, commercial, and light industrial development to provide a naturally planted buffer strip, including shade trees, to separate the structures and the parking areas from SR 198; **1.4.3 Visual Standards** to establish landscaping, screening, and visual standards for commercial and industrial uses along SR 198 and; **1.4.4 Visual Screening** to require automobile storage yards and commercial and multi-family trash bins to be screened from view.

**Goal 2: Economic Vitality:** A strong, diversified economic environment within Three Rivers which is consistent with the rural and visual atmosphere of the community. **Policies:** **2.1.3 Concentrate Commercial Development** to promote a concentration of industrial, professional office, and commercial activities and high density residential development within selected areas to allow for cost efficient provision of necessary services and to protect residential neighborhoods from negative impacts; **2.1.4 Highway-Oriented Commercial Development** to maintain existing commercial areas along SR 198 to the extent feasible for highway-oriented commercial development; **2.1.5 ED-5.4 Recreational Accommodations** wherein the County shall support the development of visitor-serving attractions and accommodations in unincorporated areas near natural amenities and resources that would not be diminished by tourist activities; **2.1.6 ED-5.5 Rivers** wherein the County shall encourage the development of recreational activities and promote tourism along the Kaweah River; **2.1.7 ED-5.6 Lakes** wherein the County shall promote Lake Kaweah as a major recreational area that includes camping, water sports, hiking, golf, conference/hotel facilities, and historic attractions; **2.1.8 ED-5.7 Foothills** wherein the County shall encourage additional recreational and visitor-serving development in the Sierra and foothills in areas such as Three Rivers; **2.1.11 ED-5.10 Visitor-Serving Business** wherein the County shall encourage visitor-serving businesses to coordinate their advertising; **2.1.13 ED-5.13 National Parks Tourism** wherein the County shall work with Sequoia and Kings Canyon National Parks, Giant Sequoia National Monument, Sequoia National Forest, and others to market these areas of the County as tourist destinations and; **2.1.14 ED-5.14 Interagency Cooperation** wherein the

County shall cooperate with federal land management agencies to develop and promote Three Rivers as a gateway community.

**Objective 2.2 Business Attraction, Expansion, and Retention:** To promote business growth and industry diversification and maintain a favorable business climate and a supportive economic foundation. **Policies: 2.2.1 ED-2.1 Business Retention** wherein the County shall participate in regional business retention and expansion programs, such as the Rapid Response program to ensure that County services are accessible to businesses. **2.2.2 ED-2.5 Small Business** by recognizing the powerful job creation potential of small businesses, the County shall support entrepreneurial development and small business expansion and; **2.2.3 ED-2.6 Agency Support for Small Businesses** wherein the County shall coordinate with other agencies to provide well-tailored services and job creation resources for small businesses, such as incubator zones. **Goal 4: Protection And Conservation Of The Environment:** Land use patterns and design solutions which protect and conserve the environmental quality and natural beauty in Three Rivers.

**Objective 4.1 Protection of the Natural Environment:** Protect the natural environment by prohibiting land uses, activities, and development patterns that will have an adverse effect on the environmental quality of Three Rivers. **Policies: 4.1.1 Preserving the Natural Environment** to maintain a serene and attractive natural environment by prohibiting land use activities that create excessive and unwanted noise and/or light in the community; **4.1.2 CEQA Compliance** to be consistent with CEQA, protect water quality and wildlife including sensitive and critical habitat in Three Rivers by prohibiting, to the extent feasible and appropriate, land use activities that endanger water quality and/or wildlife as a result of pollution and/or sedimentation and; **4.1.3 Mitigating Traffic Impacts** to ensure that new development does not excessively increase traffic flow through existing or planned residential areas. The County shall require an analysis of traffic impacts for land development projects that may generate increased traffic on County roads. Typically, applicants of projects generating over 100 peak hour trips per day or where LOS “D” or worse occurs, will be required to prepare and submit this study. The traffic impact study will evaluate impacts from all vehicles, including truck traffic.

## IMPACT EVALUATION

**Would the project:**

**a) Physically divide an established community?**

Project Impact Analysis:

*No Impact*

The proposed Project is located within the Three Rivers Community Plan Urban Development Boundary and is properly zoned to accommodate the proposed Project. Further, the proposed Project is consistent with Tulare County General Plan policies and Three Rivers Community Plan goals, objectives, and policies noted earlier. The Project will not physically divide any established community or cause a significant environmental impact due to a conflict with any

land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the Project would result in ***No Impact*** to this resource.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, Tulare County General Plan 2030 Update RDEIR, and/or the Three Rivers Community Plan 2018 Update.

The proposed Project will not divide an established community. As such, the Project would result in ***No Impact*** related to this Checklist Item.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific or Cumulative Impacts*** related to this Checklist Item will occur.

**b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?**

Project Impact Analysis: ***No Impact***

The proposed Project is located within the Three Rivers Community Plan Urban Development Boundary and is properly zoned to accommodate the proposed Project. Further, the proposed Project is consistent with Tulare County General Plan policies and Three Rivers Community Plan goals, objectives, and policies noted earlier. The Project will not physically divide any established community or cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the Project would result in no impact to this resource.

Cumulative Impact Analysis: ***No Impact***

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, as such, the proposed Project will not significantly contribute to a cumulative impact to this resource.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

As noted earlier, ***No Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

## **DEFINITIONS AND ABBREVIATIONS/ACRONYMS**

### Definitions

None

### Abbreviations and Acronyms

C-2-MU-SC	General Commercial-Mixed Use-Scenic Corridor Combining Zone
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
DEIR	Draft Environmental Impact Report
DOF	State of California, Department of Finance
EIR	Environmental Impact Report
FGMP	Foothill Growth Management Plan
GPA	General Plan Amendment
HDP	Hamlet Development Plan
LOS	Level of Service
RPC	Regional Policy Council
RPA	Regional Planning Agencies
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SR	State Route (for example, SR 198)
TCAG	Tulare County Association of Governments
UAB	Urban Area Boundary
UDB	Urban Development Boundary
UIA	Urban Improvement Area

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# Mineral Resources

## Chapter 3.12

### SUMMARY OF FINDINGS

The proposed Three Rivers Hampton Inn & Suites (Project) will result in *No Impacts* related to Mineral Resources, as the Project area is not located near a known mineral resource area. No mitigation measures will be required. A detailed review of potential impacts is provided in the following analysis.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Mineral Resources. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2, “An EIR shall identify and focus on the significant effects of the proposed project on the environment. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected. For example, the EIR should evaluate any potentially significant direct, indirect, or cumulative environmental impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas), including both short-term and long-term conditions, as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

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<sup>1</sup> California Natural Resource Agency, 2019 CEQA Statutes and Guidelines, Item (a) of 15126.2 CONSIDERATION AND DISCUSSION OF SIGNIFICANT ENVIRONMENTAL IMPACTS. Accessed December 2020 at: [https://resources.ca.gov/-/media/CNRA-Website/Files/Programs-and-Projects/CEQA/CEQA-Homepage/2019\\_CEQA\\_Statutes\\_and\\_Guidelines.pdf](https://resources.ca.gov/-/media/CNRA-Website/Files/Programs-and-Projects/CEQA/CEQA-Homepage/2019_CEQA_Statutes_and_Guidelines.pdf)

The “Environmental Setting” section provides a description of the Mineral Resources in the County. The “Regulatory Setting” section provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR) incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

#### Thresholds of Significance

The Tulare County General Plan 2030 Update identifies known Mineral Resource areas. The threshold of significance for this section will include the following:

- Result in the loss of availability of a known mineral resource.
- Result in the loss of availability of a locally-important mineral resource recovery site.

### **ENVIRONMENTAL SETTING**

Per the Tulare County General Plan Background Report, Tulare County is divided into two major physiographic and geologic provinces: the Sierra Nevada Mountains and the Central Valley. The Sierra Nevada Physiographic Province, in the eastern portion of the Tulare County, is underlain by metamorphic and igneous rock. It consists mainly of homogeneous granitic rocks, with several islands of older metamorphic rock. The central and western parts of the County are part of the Central Valley Province, underlain by marine and non-marine sedimentary rocks. It is basically a flat, alluvial plain, with soil consisting of material deposited by the uplifting of the mountains.

Economically, the most important minerals that are extracted in Tulare County are sand, gravel, crushed rock, and natural gas. Other minerals that could be mined commercially include tungsten, which has been mined to some extent, and relatively small amounts of chromite, copper, gold, lead, manganese, silver, zinc, barite, feldspar, limestone, and silica. Minerals that are present but do not exist in the quantities desired for commercial mining include antimony, asbestos, graphite, iron, molybdenum, nickel, radioactive minerals, phosphate, construction rock, and sulfur.

Aggregate resources are the most valuable mineral resource in Tulare County because it is a major component of the Portland cement concrete (PCC) and asphaltic concrete (AC). PCC and AC are essential to constructing roads, buildings, and providing for other infrastructure needs. There are four streams that have provided the main source of high quality sand and gravel in Tulare County: Kaweah River, Lewis Creek, Deer Creek and the Tule River. The highest quality deposits are located at the Kaweah and Tule Rivers. Lewis Creek deposits are considerably inferior to those of the other two rivers.

## **REGULATORY SETTING**

### ***Federal Agencies & Regulations***

There are no federal or local regulations pertaining to mineral resources relevant to the proposed project.

### ***State Agencies & Regulations***

#### **California Surface Mining and Reclamation Act of 1975**

Enacted by the State Legislature in 1975, the Surface Mining and Reclamation Act (SMARA), Public Resources Code Section 2710 et seq., insures a continuing supply of mineral resources for the State. The act also creates surface mining and reclamation policy to assure that:

- Production and conservation of minerals is encouraged;
- Environmental effects are prevented or minimized;
- Consideration is given to recreational activities, watersheds, wildlife, range and forage, and aesthetic enjoyment;
- Mined lands are reclaimed to a useable condition once mining is completed; and
- Hazards to public safety both now and in the future are eliminated.

Areas in the State (city or county) that do not have their own regulations for mining and reclamation activities rely on the Department of Conservation, Division of Mines and Geology, Office of Mine Reclamation to enforce this law. SMARA contains provisions for the inventory of mineral lands in the State of California. The State Geologist, in accordance with the State Board's Guidelines for Classification and Designation of Mineral Lands, must classify Mineral Resource Zones (MRZ) as designated below:

- MRZ-1. Areas where available geologic information indicates that there is minimal likelihood of significant resources.
- MRZ-2. Areas underlain by mineral deposits where geologic data indicate that significant mineral deposits are located or likely to be located.
- MRZ-3. Areas where mineral deposits are found but the significance of the deposits cannot be evaluated without further exploration.
- MRZ-4. Areas where there is not enough information to assess the zone. These are areas that have unknown mineral resource significance.

SMARA only covers mining activities that impact or disturb the surface of the land. Deep mining (tunnel) or petroleum and gas production is not covered by SMARA.

### The Division of Mine Reclamation (DMR)

“In 1991, the Division of Mine Reclamation (DMR) was created to provide a measure of oversight for local governments as they administer the Surface Mining and Reclamation Act (SMARA) within their respective jurisdictions. While the primary focus is on existing mining operations and the return of those mined lands to a usable and safe condition, issues relating to abandoned legacy mines are addressed through the Abandoned Mine Lands Unit.”<sup>2</sup>

In April 2016 following significant revisions to the Surface Mining and Reclamation Act of 1975 (SMARA), the Division of Mine Reclamation (DMR) was created, effective January 1, 2017. DMR replaces the Office of Mine Reclamation that was established in 1991 to provide a measure of oversight for local governments as they administer SMARA within their respective jurisdictions.<sup>3</sup>

### ***Local Policy & Regulations***

#### Tulare County General Plan 2030 Update

The Tulare County General Plan 2030 Update: Chapter 8 – Environmental Resources Management contains the following goals and policies that relate to mineral resources and which have potential relevance to the Project’s California Environmental Quality Act (CEQA) review:

**ERM-2.1 Conserve Mineral Deposits** - The County will encourage the conservation of identified and/or potential mineral deposits, recognizing the need for identifying, permitting, and maintaining a 50 year supply of locally available PCC grade aggregate.

**ERM-2.2 Recognize Mineral Deposits** - The County will recognize as a part of the General Plan those areas of identified and/or potential mineral deposits.

**ERM-2.9 Compatibility** - The County will encourage the development of mineral deposits in a manner compatible with surrounding land uses.

## **IMPACT EVALUATION**

### **Would the project:**

- a) **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

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<sup>2</sup> California Department of Conservation. Accessed October 2020 at: <https://www.conservation.ca.gov/dmr>.

<sup>3</sup> California Department of Conservation. Fact Sheet. Accessed October 2020 at: <https://www.conservation.ca.gov/index/Documents/DMR-fact-sheet-2017.pdf>

Project Impact Analysis: *No Impact*

Mineral resources located within Tulare County are predominately sand and gravel resources primarily provided by four streams: Kaweah River, Lewis Creek, Deer Creek, and the Tule River. The Kaweah River is the nearest of these four streams to the proposed Project site and is located west of the proposed Project site. Although very near the Kaweah River, the Project will not result in the loss of an available known mineral resource. The Tulare County General Plan Update (see Figure 8.1 Mineral Resource Zone in the General Plan) shows the locations of State-designated Mineral Resource Zones. According to the map, the proposed Project site is not located in or near a Mineral Resource Zone. The California Department of Conservation indicates that the nearest, active mining operation (Britten Granite, decomposed granite) is located approximately 0.5 miles east of the Project site.<sup>4</sup> As such, the proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. As such, *No Project-specific Impacts* related to this Checklist Item will occur.

Cumulative Impact Analysis: *No Impact*

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), and/or Three Rivers Community Plan 2018 Update and EIR.

As noted earlier, the proposed Project does not include mining operations and is not located within a known mineral resource zone. As such, *No Cumulative Impacts* related to this Checklist Item will occur.

Mitigation Measure(s): *None Required.*

Conclusion: *No Impact*

As there are no known mineral resources on the proposed Project site, and the nearest operation is an active decomposed granite operation, the proposed Project would not contribute to a cumulative impact. *No Project-specific or Cumulative Impacts* related to this resource will occur.

- b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

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<sup>4</sup> State of California Department Of Conservation Division of Mine Reclamation, Maps: Mines and Mineral Resources accessed May 2019 at: <https://maps.conservation.ca.gov/mol/index.html>.

Project Impact Analysis: *No Impact*

The proposed Project site is not delineated on a local land use plan as a locally important mineral resource recovery site. Therefore, the proposed Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. As such, there would be *No Impact* to this resource Item.

Cumulative Impact Analysis: *No Impact*

As there are no known mineral resources on the proposed Project site, and the nearest operation is an active decomposed granite operation (Britten Granite, decomposed granite) is located approximately 0.5 miles east of the Project site. Therefore, the proposed Project would not contribute to a cumulative impact. As such, *No Cumulative Impacts* related to this Checklist Item will occur.

Mitigation Measure(s): *None Required.*

Conclusion: *No Impact*

As noted earlier, *No Project-specific or Cumulative Impacts* related to this Checklist Item will occur.

## DEFINITIONS/ACRONYMS

### Definitions

**Aggregate:** (a) A mass of rock particles, grains of minerals, or both. (b) Irregular mass of crystals (c) Sand, gravel, crushed stone or rock that forms the major part of concrete.<sup>5</sup>

**Mineral Resource:** A concentration of naturally occurring solid, liquid, or gaseous material in or on the earth's crust in such form and amount that economic extraction of a commodity from the concentration is currently or potentially feasible.<sup>6</sup>

**Mineral Resource Zone:** Lands with a presence or absence of significant concrete-grade aggregate deposits rated with a criteria system i.e. MRZ-1; 2a; 2b; 3a; and 4.<sup>7</sup>

### Acronyms

CGS	California Geological Survey
DMR	Department of Mine Reclamation
ERM	Environmental Resources Management
MRZ	Mineral Resource Zone
OMR	Office of Mine Reclamation
SMGB	State Mining & Geology Board
SMARA	Surface Mining and Reclamation Act

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<sup>5</sup> CA DoC. 2016. A Glossary of Rock and Mineral Terminology. Accessed March 2021 at:  
<https://www.conservation.ca.gov/cgs/minerals/minerals-glossary>

<sup>6</sup> CA DoC. 1997. Page 20. Mineral Land Classification of Concrete Aggregate Resources in the Tulare County Production-Consumption Region, 1997. Accessed March 2021 at: <https://www.conservation.ca.gov/cgs/Pages/Publications/Counties/tul.aspx>

<sup>7</sup> Ibid. 18.



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# Noise

## Chapter 3.13

### SUMMARY OF FINDINGS

The proposed Three Rivers Community Plan Update (Project) will result in ***Less Than Significant Impacts*** related to Noise. The “Noise Impact Assessment for the Three Rivers Hampton Inn & Suites Project August” (NIA) prepared by ECORP Consulting, Inc. (Consultant) is included as Attachment “E” of this Initial Study. This NIA is used as the basis for determining that, based on the evidence/documentation (including incorporation of recommendations contained in the Report) and the expertise of qualified consultant ECORP Consulting, Inc. (Consultant), the proposed Project will result in a less than significant impact.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts related to Noise. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2(a), “[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains,

coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

The “Environmental Setting” section provides a description of the Noise setting in Tulare County. The “Regulatory Setting” section provides a description of applicable Federal, State, and Local regulatory policies that were developed in part from information contained in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR) incorporated by reference and summarized below. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts. Tulare County’s Land Use Compatibility for Community Noise Environments is shown in **Figure 3.13-1**.

### Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist Item questions. The following are potential thresholds for significance:

- The exposure of persons to or generation of noise levels in excess of established standards (i.e., Tulare County Standards for Noise Levels)
- The exposure of persons to or generation of excessive groundborne vibration
- A substantial permanent increase in ambient noise levels
- A substantial temporary or periodic increase in ambient noise levels
- The exposure of people to excessive noise levels within an airport land use plan
- The exposure of people to excessive noise levels within the vicinity of a private airstrip

## **ENVIRONMENTAL SETTING**

The Health and Safety section of Tulare County’s 2030 General Plan serves as the primary policy statement for the County for implementing policies to maintain and improve the noise environment in Tulare County. The Health and Safety section presents Goals and Objectives relative to planning for the noise environment within the County. Future noise/land use incompatibilities can be avoided or reduced with implementation of Tulare County’s noise criteria and standards. Tulare County realizes that it may not always be possible to avoid constructing noise sensitive developments in existing noisy areas and therefore provides noise reduction strategies to be implemented in situations with potential noise/land use conflicts.

“Noise level data collected during continuous monitoring included the hourly Leq and Lmax and the statistical distribution of noise levels over each hour of the sample period. The community noise survey results indicate that typical noise levels in noise-sensitive areas of the unincorporated

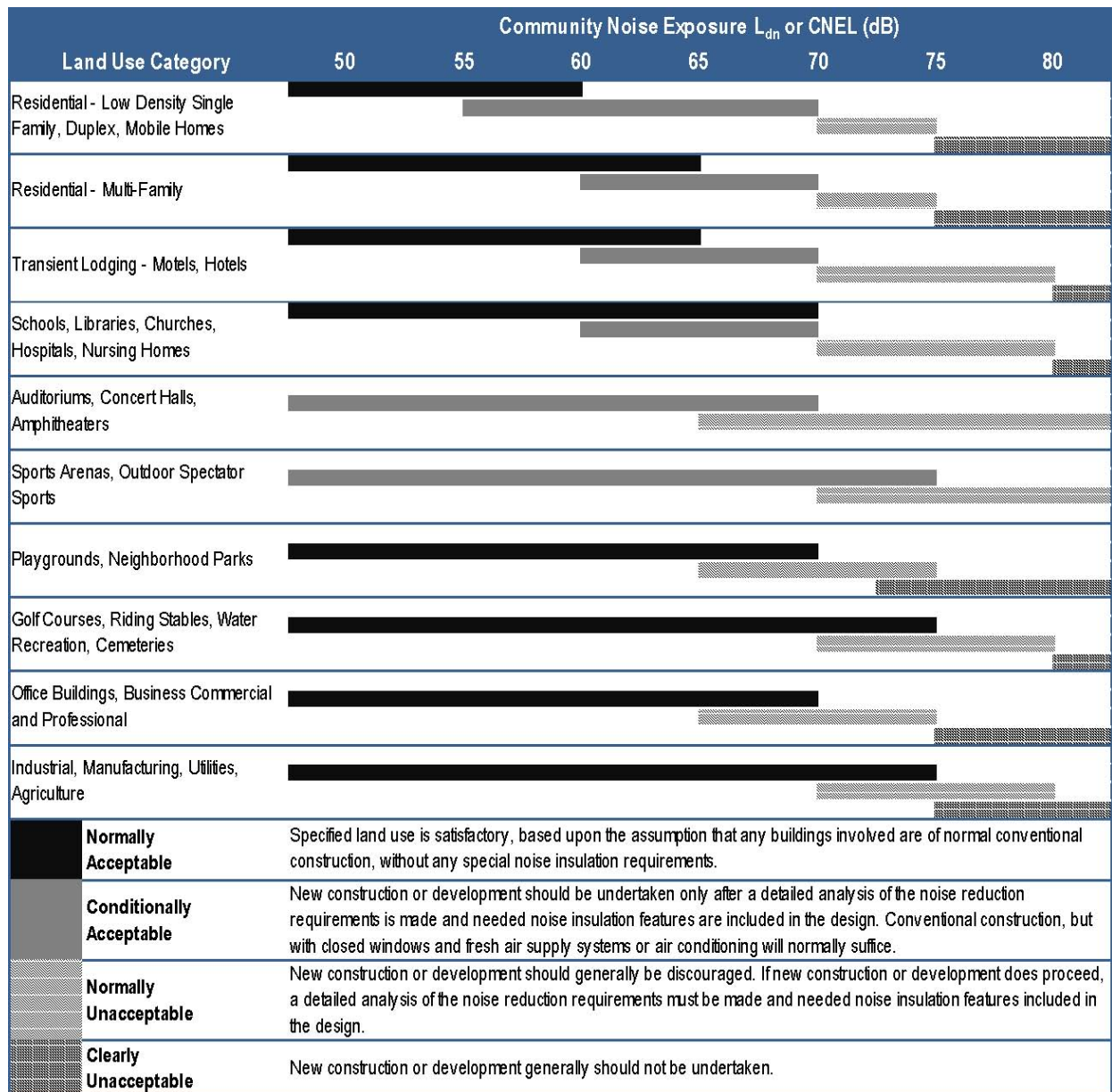
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<sup>1</sup> California Natural Resources Agency, 2015. CEQA. Consideration and Discussion of Significant Environmental Impacts. Section 15126.2. Accessed November 2020 at: <http://resources.ca.gov/ceqa/guidelines/art9.html>

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areas of Tulare County are in the range of 29-65 dB Ldn. As would be expected, the quietest areas are those that are removed from major transportation-related noise sources and industrial or stationary noise sources.”<sup>2</sup>

**Figure 3.13-1  
Land Use Compatibility for Community Noise Environments**



Source: Tulare County General Plan

<sup>2</sup> Tulare County General Plan Background Report. Page 8-77. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>.

## Regulatory Setting

### *Federal Agencies & Regulations*

#### Environmental Protection Agency

“Inadequately controlled noise presents a growing danger to the health and welfare of the Nation's population, particularly in urban areas. The major sources of noise include transportation vehicles and equipment, machinery, appliances, and other products in commerce. The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. The Act also serves to (1) establish a means for effective coordination of Federal research and activities in noise control; (2) authorize the establishment of Federal noise emission standards for products distributed in commerce; and (3) provide information to the public respecting the noise emission and noise reduction characteristics of such products. While primary responsibility for control of noise rests with State and local governments, Federal action is essential to deal with major noise sources in commerce, control of which require national uniformity of treatment. EPA is directed by Congress to coordinate the programs of all Federal agencies relating to noise research and noise control. ”<sup>3</sup>

#### Federal Aviation Administration (FAA)

“Aircraft operated in the U.S. are subject to certain federal requirements regarding noise emissions levels. These requirements are set forth in Title 14 CFR, Part 36. Part 36 establishes maximum acceptable noise levels for specific aircraft types, taking into account the model year, aircraft weight, and number of engines.”<sup>4</sup>

“The FAA regulates the maximum noise level that an individual civil aircraft can emit through requiring aircraft to meet certain noise certification standards. These standards designate changes in maximum noise level requirements by "stage" designation. The U.S. noise standards are defined in the Code of Federal Regulations (CFR) [Title 14 Part 36 – Noise Standards: Aircraft Type and Airworthiness Certification](#) (14 CFR Part 36). The FAA publishes certified noise levels in the advisory circular, [Noise Levels for U.S. Certificated and Foreign Aircraft](#). This advisory circular provides noise level data for aircraft certified under 14 CFR Part 36 and categorizes aircraft into their appropriate "stages.””<sup>5</sup>

#### Federal Highways Administration (FHWA)

“The Federal Highway Administration (FHWA) is the agency responsible for administering the Federal-aid highway program in accordance with Federal statutes and regulations. The FHWA

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<sup>3</sup> U.S. EPA. Summary of the Noise Control Act. 42 U.S.C. §4901 et seq. (1972). Accessed October 2020 at: <https://www.epa.gov/laws-regulations/summary-noise-control-act>.

<sup>4</sup> Tulare County Association of Governments 2018 Regional Transportation Plan/Sustainable Communities Draft EIR. Page 4.8-17. Accessed October 2020 at: <https://tularecog.org/tcag/planning/regional-transportation-plan-rtp/rtp-20181/environmental-impact-report/>

<sup>5</sup> Federal Aviation Administration. Aircraft Noise Levels and Stages. Accessed October 2020 at: <https://www.faa.gov/noise/levels/>

developed the noise regulations as required by the Federal-Aid Highway Act of 1970 (Public Law 91-605, 84 Stat. 1713). The regulation, 23 CFR 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise, applies to highway construction projects where a State department of transportation has requested Federal funding for participation in the project. The regulation requires the highway agency to investigate traffic noise impacts in areas adjacent to federally-aided highways for proposed construction of a highway on a new location or the reconstruction of an existing highway to either significantly change the horizontal or vertical alignment or increase the number of through-traffic lanes. If the highway agency identifies impacts, it must consider abatement. The highway agency must incorporate all feasible and reasonable noise abatement into the project design.”<sup>6</sup>

#### FHWA Highway Traffic Noise Prediction methodology

“In March 1998, the Federal Highway Administration (FHWA) released the Traffic Noise Model, Version 1.0 (FHWA TNM®). It was developed as a means for aiding compliance with policies and procedures under FHWA regulations. Since its release in March 1998, Version 1.0a was released in March 1999, Version 1.0b in August 1999, Version 1.1 in September 2000, Version 2.0 in June 2002, Version 2.1 in March 2003 and the current version, Version 2.5 in April 2004. The FHWA TNM is an entirely new, state-of-the-art computer program used for predicting noise impacts in the vicinity of highways. It uses advances in personal computer hardware and software to improve upon the accuracy and ease of modeling highway noise, including the design of effective, cost-efficient highway noise barriers.”<sup>7</sup>

#### Federal Transit Administration (FTA)

“The Federal Transit Administration has guidance on how to assess noise and vibration impacts of proposed mass transit projects: Transit Noise and Vibration Impact Assessment (PDF). This guidance is used by project sponsors seeking funding from FTA to evaluate these impacts during the environmental review process. All types of bus and rail projects are covered. The focus is on noise and vibration impacts during operations, but construction impacts are also covered. The guidance describes a range of measures for controlling excessive noise and vibration.”<sup>8</sup>

The FTA has published guidance relative to vibration impacts. According to the FTA, engineered concrete and masonry buildings can be exposed to groundborne vibration levels of 0.3 inch per second without experiencing structural damage. Buildings extremely susceptible to vibration damage can be exposed to groundborne vibration levels of 0.12 inch per second without experiencing structural damage.<sup>9</sup>

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<sup>6</sup> U.S. Department of Transportation. Federal Highway Administration . Highway Traffic Noise. Accessed October 2020 at: <http://www.fhwa.dot.gov/environment/noise/>.

<sup>7</sup> U.S. Department of Transportation. Federal Highway Administration. Traffic Noise Model. Accessed October 2020 at: [http://www.fhwa.dot.gov/environment/noise/traffic\\_noise\\_model/](http://www.fhwa.dot.gov/environment/noise/traffic_noise_model/). Accessed October 2020.

<sup>8</sup> Federal Transit Administration. Noise and Vibration. Accessed October 2020 at: <https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/noise-and-vibration>, accessed October 2020.

<sup>9</sup> Tulare County Association of Governments 2018 Regional Transportation Plan/Sustainable Communities Draft EIR. Page 4.8-17. Accessed October 2020 at: <https://tularecog.org/tcag/planning/regional-transportation-plan-rtp/rtp-20181/environmental-impact-report/>



### Federal Vibration Policies

The Federal Railway Administration (FRA) and the Federal Transit Administration (FTA) have published guidance relative to vibration impacts. According to the FRA, fragile buildings can be exposed to ground-borne vibration levels of 0.5 PPV without experiencing structural damage. The FTA has identified the human annoyance response to vibration levels as 80 RMS (Root Mean Square = The square root of the arithmetic average of the squared amplitude of the signal).<sup>10</sup>

### ***State Agencies & Regulations***

#### CA Health and Safety Code Section 46000-46002

“The California State Legislature has found that excessive noise is a serious hazard to the public health and welfare. Exposure to certain levels of noise can result in physiological, psychological, and economic damage. There is a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. Government has not taken the steps necessary to provide for the control, abatement, and prevention of unwanted and hazardous noise. The State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. All Californians are entitled to a peaceful and quiet environment without the intrusion of noise which may be hazardous to their health or welfare. It is the policy of the state to provide an environment for all Californians free from noise that jeopardizes their health or welfare.”<sup>11</sup>

The California Noise Control Act was enacted in 1973 (Health and Safety Code § 46010 et seq.), and states that the Office of Noise Control (ONC) should provide assistance to local communities in developing local noise control programs. It also indicates that ONC staff will work with the OPR to provide guidance for the preparation of the required noise elements in city and county General Plans, pursuant to Government Code § 65302(f). California Government Code § 65302(f) requires city and county general plans to include a noise element. The purpose of a noise element is to guide future development to enhance future land use compatibility.

The State of California General Plan Guidelines, published by the Office of Planning and Research, provides guidance on implementing Government Code 65302 (f) relating to a noise element of a general plan. In addition to the required noise element contents, OPR also provide its Noise Element Guidance in Appendix D of the General Plan Guidelines.<sup>12</sup>

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<sup>10</sup> U.S. Department of Transportation, “The Noise and Vibration Impact Assessment Manual”. September 2018. FTA Report No. 0123 Federal Transit Administration Page 113. Accessed October 2020 at: [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf)

<sup>11</sup> California Legislative Information. 46000. Accessed October 2020 at: [https://leginfo.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=HSC&sectionNum=46000](https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=46000)

<sup>12</sup> Office of Planning and Research Chapter 4: Required Elements. Noise. Page 131. Accessed October 2020 at: [https://www.opr.ca.gov/docs/OPR\\_COMPLETE\\_7.31.17.pdf](https://www.opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf)

“Government Code 62302(f) requires:

- (1) A noise element that shall identify and appraise noise problems in the community. The noise element shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for all of the following sources:
  - (A) Highways and freeways.
  - (B) Primary arterials and major local streets.
  - (C) Passenger and freight online railroad operations and ground rapid transit systems.
  - (D) Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation.
  - (E) Local industrial plants, including, but not limited to, railroad classification yards.
  - (F) Other ground stationary noise sources, including, but not limited to, military installations, identified by local agencies as contributing to the community noise environment
- (2) Noise contours shall be shown for all of these sources and stated in terms of community noise equivalent level (CNEL) or day-night average level (Ldn). The noise contours shall be prepared on the basis of noise monitoring or following generally accepted noise modeling techniques for the various sources identified in paragraphs (1) to (6), inclusive.
- (3) The noise contours shall be used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of community residents to excessive noise.
- (4) The noise element shall include implementation measures and possible solutions that address existing and foreseeable noise problems, if any. The adopted noise element shall serve as a guideline for compliance with the state’s noise insulation standard for the acceptability of projects within specific CNEL/Ldn contours. The guidelines also present adjustment factors that may be used in order to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community’s sensitivity to noise, and the community’s assessment of the relative importance of noise pollution.”<sup>13</sup>

#### Noise Compatibility Guidelines

“The state has published guidance for locating land uses in areas compatible with the existing noise environment. These guidelines are shown in Table 4.8-7, Land Use Compatibility for Community Noise Environments [in the 2018 TCAG RTP/SCS. Program EIR]. For example, it would normally be acceptable for a single-family residence to be located in an area with an existing noise level of 60 dBA CNEL or less.”<sup>14</sup>

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<sup>13</sup> Ibid. 131-132.

<sup>14</sup> Tulare County Association of Governments 2018 Regional Transportation Plan/Sustainable Communities Draft EIR. Page 4.8-19.  
<https://tularecog.org/tcag/planning/regional-transportation-plan-rtp/rtp-20181/environmental-impact-report/>



### California Noise Insulation Standards

Noise insulation standards were adopted by the California Commission of Housing and Community Development in 1974. In November 1988, the Building Standards Commission approved revisions to these standards (Title 24, Part 2, California Code of Regulations). The standards currently can be found in Chapter 12 of the California Building Code and apply to all new construction in the State of California. Title 24 requires that interior noise levels attributable to exterior sources must not exceed 45 dB in any habitable room.<sup>15</sup> Additionally, the code specifies that multi-family residential buildings or structures that will be located within exterior community noise equivalent level contours of 60 dB of an existing or adopted freeway, expressway, parkway, major street, thoroughfare, airport, rail line, rapid transit line or industrial noise source shall require an acoustical analysis showing that the proposed building has been designed to limit intruding noise to the allowable interior noise levels prescribed in Section 1092(e)(2).<sup>16</sup>

### California Department of Transportation (Caltrans)

“The State of California establishes noise limits for vehicles licensed to operate on public roads. For heavy trucks, the state passby standard is consistent with the federal limit of 80 dBA at 15 meters from the centerline. The state passby standard for light trucks and passenger cars (less than 4.5 tons gross vehicle rating) is also 80 dBA at 15 meters from the centerline.”<sup>17</sup> Caltrans also has standards for new roadway, new proposed freeways, aeronautics, and aviation; however, these standards would not apply to this proposed Project.

### ***Local Policy & Regulations***

Analytical noise modeling techniques, in conjunction with actual field noise level measurements, were used to develop generalized Ldn or Community Noise Equivalent Level (CNEL) contours for traffic noise sources within Tulare County for existing conditions. Traffic data representing annual average daily traffic volumes, truck mix, and the day/night distribution of traffic for existing conditions (1986) and future were obtained from the Tulare County Public Works Department and used in the Tulare County Noise Element. The Tulare County General Plan 2030 Update Health & Safety Element (2012) includes noise and land use compatibility standards for various land uses. These are shown in **Figure 3.13-1 Land Use Compatibility for Community Noise Environments**<sup>18</sup>:

### Tulare County General Plan Policies

The General Plan has a number of policies that apply to projects within Tulare County. General Plan policies that relate to the proposed Project are listed below.

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<sup>15</sup> Tulare County, Tulare County Housing Element. Page 6-7. Accessed October 2020 at:

<http://www.tularecounty.ca.gov/rma/assets/File/Final%20Tulare%20County%202015%20Housing%20Element%20Update%2012-8-2015.pdf>

<sup>16</sup> MLA Acoustics, 2010, page 2. California Noise Insulation Standards. 1092 Noise Insulation Standards.

<http://www.tularecounty.ca.gov/rma/assets/File/Final%20Tulare%20County%202015%20Housing%20Element%20Update%2012-8-2015.pdf>

<sup>17</sup> Tulare County Association of Governments 2018 Regional Transportation Plan/Sustainable Communities Draft EIR. Page 4.8-20.

<sup>18</sup> Tulare County General Plan 2030 Update. Goals and Policies Report. Page 10-25.

**HS-8.1 Economic Base Protection** - The County shall protect its economic base by preventing the encroachment of incompatible land uses on known noise-producing industries, railroads, airports, and other sources.

**HS-8.2 Noise Impacted Areas** - The County shall designate areas as noise-impacted if exposed to existing or projected noise levels that exceed 60 dB Ldn (or Community Noise Equivalent Level (CNEL)) at the exterior of buildings.

**HS-8.3 Noise Sensitive Land Uses** - The County shall not approve new noise sensitive uses unless effective mitigation measures are incorporated into the design of such projects to reduce noise levels to 60 dB Ldn (or CNEL) or less within outdoor activity areas and 45 dB Ldn (or CNEL) or less within interior living spaces.

**HS-8.6 Noise Level Criteria** - The County shall ensure noise level criteria applied to land uses other than residential or other noise-sensitive uses are consistent with the recommendations of the California Office of Noise Control (CONC).

**HS-8.8 Adjacent Uses** - The County shall not permit development of new industrial, commercial, or other noise-generating land uses if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas designated and zoned for residential or other noise-sensitive uses, unless it is determined to be necessary to promote the public health, safety and welfare of the County.

**HS-8.10 Automobile Noise Enforcement** - The County shall encourage the CHP, Sheriff's office, and local police departments to actively enforce existing sections of the California Vehicle Code relating to adequate vehicle mufflers, modified exhaust systems, and other amplified noise.

**HS-8.11 Peak Noise Generators** - The County shall limit noise generating activities, such as construction, to hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generating activities shall be allowed to occur outside of normal business hours without County approval.

**HS-8.13 Noise Analysis** - The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Health and Safety Element, where there is development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels (such as those referenced in Table 10-1 of the Health and Safety Element).

**HS-8.14 Sound Attenuation Features** - The County shall require sound attenuation features such as walls, berming, heavy landscaping, between commercial, industrial, and residential uses to reduce noise and vibration impacts.

**HS-8.15 Noise Buffering** - The County shall require noise buffering or insulation in new development along major streets, highways, and railroad tracks.

**HS-8.16 State Noise Insulation** -

The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code.

**HS-8.17 Coordinate with Caltrans** - The County shall work with Caltrans to mitigate noise impacts on sensitive receptors near State roadways, by requiring noise buffering or insulation

**HS-8.18 Construction Noise** - The County shall seek to limit the potential noise impacts of construction activities by limiting construction activities to the hours of 7 am to 7pm, Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors.

**HS-8.19 Construction Noise Control** - The County shall ensure that construction contractors implement best practices guidelines (i.e. berms, screens, etc.) as appropriate and feasible to reduce construction-related noise-impacts on surrounding land uses.

## IMPACT EVALUATION

### Would the project result in:

- a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in a local general plan or noise ordinance, or applicable standards of other agencies?**

Project Impact Analysis: *Less Than Significant Impact*

Three Rivers lies within the Foothill Growth Management Plan (FGMP) and is managed in accordance with the provisions and outlook established for such communities by the Tulare County General Plan 2030 Update.<sup>19</sup> Chief among the concerns regarding development of such areas is a commitment by the County to, “Rationally direct urban/suburban growth into specific areas of the foothills in order to protect the fragile environment and preserve important agricultural land.”<sup>20</sup>

A Noise Impact Assessment (NIA) was prepared for Tulare County, by qualified expert consultant ECORP Consulting, Inc., to assess the land use compatibility of the Proposed Project within the existing noise environment affecting the Project area.

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<sup>19</sup> Tulare County General Plan 2030 Update. August 2012. Part II. Page 3-1. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>.

<sup>20</sup> Ibid. 3-2.

### *Noise Sensitive Land Uses*

As indicated in the NIA for the proposed Project, “Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The Project site is generally surrounded by farmland and rural residential development, with commercial development concentrated along State Route (SR) 198. The nearest noise-sensitive receptors to the Project site are the Comfort Inn and Suites hotel building, located approximately 113 feet north of the Project site, a vacant commercial building located approximately 96 feet west of the Project site at the nearest point, and a residence located across State Highway 198 from the site at approximately 270 feet to the west. The distances to the Comfort Inn and Suites and the vacant commercial building were measured from the property line of the Proposed Project to the physical building. The parking lot and outdoor area associated with hotels and commercial uses are not considered sensitive receptors. Noise-sensitive hotel activities, such as sleeping and resting, would be performed indoors.”<sup>21</sup>

### *Existing Ambient Noise Environment*

In addition to describing noise sensitive land uses within the vicinity of the proposed Project, the NIA also includes a description of the existing ambient noise environment as follows; “The primary noise source in the Project vicinity is traffic. Existing roadway noise levels were calculated for the roadway segments in the Project vicinity. This task was accomplished using the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) (see Attachment B [of the NOI]) and traffic volumes from the Project’s Traffic Impact Study (VRPA Technologies, Inc. 2020). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) used in the FHWA model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data shows that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along these roadway segments are presented in Table 2-3 [Table 3.13-1 of this DEIR].”<sup>22</sup>

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<sup>21</sup> “Noise Impact Assessment for the Three Rivers Hampton Inn & Suites Project August.” 2020. Pages 9-10. Prepared by ECORP Consulting, Inc. and included in Appendix “D” of this Draft EIR.

<sup>22</sup> Ibid. 10.

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<b>Table 3.13-1 Existing (Baseline) Traffic Noise Levels</b>		
<b>Roadway Segment</b>	<b>Surrounding Uses</b>	<b>CNEL at 100 feet from Centerline of Roadway</b>
<b>SR 198</b>		
South of Old Three Rivers Road	Residential and Commercial	58.4
Between Old Three River Road & Project Driveway	Residential and Commercial	58.4
North of Project Driveway	Residential and Commercial	58.4
<b>Old Three Rivers Road</b>		
East of SR 198	Residential	48.7
<i>Source: Traffic noise levels were calculated by ECORP using the FHWA roadway noise prediction model in conjunction with the trip generation rate identified by VRPA Technologies, Inc. (2020). Refer to Attachment B for traffic noise modeling assumptions and results. Note: A total of two intersections were analyzed in the Traffic Impact Study; roadway segments that impact sensitive receptors were included.</i>		

“As shown, the existing traffic-generated noise level on Project-vicinity roadways currently ranges from 48.7 to 58.4 dBA CNEL. As previously described, CNEL is 24-hour average noise level with a 5 dBA “weighting” during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

The community of Three Rivers in the County of Tulare, which encompasses the Project site, is impacted by various noise sources. It is subject to both typical urban and rural noise, such as noise generated by traffic, heavy machinery, and day-to-day outdoor activities as well as noise generated from the various land uses (i.e., residential, commercial, and agricultural) throughout Three Rivers that generate stationary source noise. Mobile sources of noise, especially cars and trucks, are the most common source of noise in the community. The ambient noise environment in the County of Tulare is largely influenced by roadway noise. The Project site is located directly off SR 198, identified by the Tulare General Plan as one of two major regional state highways which traverse the County. The General Plan states that SR 198 connects from U.S. Highway 101 on the west and continues eastward to the County of Tulare, passing through the City of Visalia and into Sequoia National Park (Tulare 2012).”<sup>23</sup>

#### *Tulare County General Plan 2030 Update*

“The Health and Safety Element of the General Plan provides policy direction for minimizing noise impacts in the County and for establishing noise control measures for construction and operation of land use projects. By identifying noise-sensitive land uses and establishing compatibility guidelines for land use and noise, noise considerations will influence the general

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<sup>23</sup> Op. Cit. 10-11.

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distribution, location, and intensity of future land use. The result is that effective land use planning and mitigation can alleviate the majority of noise problems.

The most basic planning strategy to minimize adverse impacts on new land uses due to noise is to avoid designating certain land uses at locations within the County that would negatively affect noise sensitive land uses. Uses such as schools, hospitals, childcare, senior care, congregate care, churches, and all types of residential use should be located outside of any area anticipated to exceed acceptable noise levels as defined by the Land Use Compatibility for Community Noise Environments table and pertinent goals and policies. Additionally, these uses should be protected from excess noise through sound attenuation measures such as site and architectural design and sound walls.

The County of Tulare has adopted these guidelines as a basis for planning decisions based on noise considerations. The land use compatibility guidelines are shown in Table 2-4 [of the NIA, **Table 3.13-2** herein]. In the case that the noise levels identified at a proposed project site fall within levels considered normally acceptable, the project is considered compatible with the existing noise environment. The General Plan also identifies noise goals and policies set to minimize noise impacts within the County.<sup>24</sup>

<b>Table 3.13-2</b>				
<b>Land Use Compatibility for Community Noise Environments</b>				
<b>Land Use Category</b>	<b>Community Noise Exposure (Ldn or CNEL, dB)</b>			
	<b>Normally Acceptable</b>	<b>Conditionally Acceptable</b>	<b>Normally Unacceptable</b>	<b>Clearly Unacceptable</b>
Residential - Low Density Single Family, Duplex, Mobile Homes	≤ 60	55 - 70	70 - 75	≥ 75
Residential – Multi-Family	≤ 65	60 - 70	70 - 75	≥ 75
Transient Lodging – Motels, Hotels	≤ 65	60 - 70	70 - 80	≥ 80
Schools, Libraries, Churches, Hospitals, Nursing Homes	≤ 70	60 - 70	70 - 80	≥ 80
Auditoriums, Concerts Halls, Amphitheaters	NA	≤ 70	NA	≥ 65
Sports Arenas, Outdoor Spectator Sports	NA	≤ 75	NA	≥ 70
Playgrounds, Neighborhood Parks	≤ 70	NA	68-75	≥ 73
Golf Courses, Riding Stables, Water Recreation, Cemeteries	≤ 75	NA	70 – 80	≥ 80
Office Buildings, Business Commercial and Professional	≤ 70	68 – 78	≥ 75	NA
Industrial, Manufacturing, Utilities, Agriculture	≤ 75	70 - 80	≥ 75	NA
<i>Source: County of Tulare General Plan Health and Safety Element</i>				
<i>Notes:</i>				
<i>NA: Not Applicable; CNEL: Community Noise Equivalent Level</i>				

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<sup>24</sup> Op. Cit. 11-12.

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<b>Table 3.13-2</b>				
<b>Land Use Compatibility for Community Noise Environments</b>				
<b>Land Use Category</b>	<b>Community Noise Exposure (Ldn or CNEL, dB)</b>			
	<b>Normally Acceptable</b>	<b>Conditionally Acceptable</b>	<b>Normally Unacceptable</b>	<b>Clearly Unacceptable</b>
<i>Normally Acceptable –</i>	<i>Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.</i>			
<i>Conditionally Acceptable –</i>	<i>New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.</i>			
<i>Normally Unacceptable –</i>	<i>New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Outdoor areas must be shielded.</i>			
<i>Clearly Unacceptable –</i>	<i>New construction or development should generally not be undertaken</i>			

### *Construction-Generated Noise*

As detailed in the NIA, “The nearest noise receptors to the Project site are the Comfort Inn and Suites located approximately 113 feet north of the Project site, a vacant commercial building located approximately 96 feet west of the Project parking lot at the nearest point, and a residence located across State Highway 198 [SR 198] from the site at approximately 270 feet to the west... As previously described, per General Plan Safety Element policy *HS-8.18*, construction activity is exempted provided that noise generating activity does not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday. As mandated by General Plan policy *HS-8.11*, no peak noise generating activities shall be allowed to occur outside of normal business hours without County approval. In addition, General Plan Policy *HS-8.19* requires construction noise control best practices to be implemented to minimize construction noise impacts.”<sup>25</sup>

Construction noise associated with the Proposed Project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. “To estimate the worst-case construction noise levels that may occur at the nearest noise-sensitive receptors in the Project vicinity, the construction equipment noise levels were calculated using the Roadway Noise Construction Model for the site preparation, grading and building construction, paving and architectural coating. The anticipated short-term construction noise levels generated for the necessary equipment is presented in Table 2-5 [in the NIA, **Table 13.3-3** in this Draft EIR].”<sup>26</sup>

“...[T]he nearest noise-sensitive receptor is located approximately 190 feet from the center of the Project site. As shown in Table 2-5 [in the NIA, **Table 13.3-3** in this Draft EIR], the predicted maximum eight-hour noise levels at the vacant commercial building to the west could potentially reach approximately 74.4 dBA Leq, which is below the NIOSH threshold of 85

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<sup>25</sup> Op. Cit. 16

<sup>26</sup> Op. Cit.

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dBA. Thus, construction noise would reach even lower levels at the Comfort Inn and Suites and the nearest residence.”<sup>27</sup>

<b>Table 13.3-3 Construction Average (dBA) Noise Levels at Nearest Receptor</b>			
<b>Equipment</b>	<b>Estimated Exterior Construction Noise Level @ Nearest Residence (dBA <math>L_{eq}</math>)</b>	<b>NIOSH Construction Noise Standards (dBA <math>L_{eq}</math>)</b>	<b>Exceeds Standard at Nearest Sensitive Receptor?</b>
<b>Site Preparation</b>			
Grader	69.4	85	<b>No</b>
Scraper	68.0	85	<b>No</b>
Tractor/ Loader/ Backhoe	62.0	85	
<b>Combined Site Preparation Equipment</b>	<b>72.2</b>	85	<b>No</b>
<b>Grading</b>			
Rubber Tired Dozers	66.1	85	<b>No</b>
Graders	69.4	85	<b>No</b>
Tractors/Loaders/Backhoes (2)	62.0 (each)	85	<b>No</b>
<b>Combined Grading Equipment</b>	<b>72.0</b>	85	<b>No</b>
<b>Building Construction/ Paving/ Architectural Coating</b>			
Crane	61.0	85	<b>No</b>
Forklifts (2)	63.5 (each)	85	<b>No</b>
Generator Set	66.0	85	<b>No</b>
Tractors/Loaders/Backhoes (2)	62.0 (each)	85	<b>No</b>
Welders (3)	58.4	85	<b>No</b>
Cement and Mortar Mixer	63.2	85	
Paver	62.6	85	<b>No</b>
Rollers (2)	61.4 (each)	85	<b>No</b>
Paving Equipment	62.6	85	<b>No</b>
Air Compressors	66.3	85	<b>No</b>
<b>Combined Building Equipment</b>	<b>74.4</b>	85	<b>No</b>
<p><i>Source: Construction noise levels were calculated by ECORP Consulting, Inc. using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Attachment A for Model Data Outputs.</i></p> <p><i>Notes: Construction equipment used during construction derived from CalEEMod 2016.3.2. CalEEMod is designed to calculate air pollutant emissions from construction activity and contains default construction equipment and usage parameters for typical construction projects based on several construction surveys conducted in order to identify such parameters. The distance to the nearest sensitive receptor was calculated from the center of the Project site consistent with FTA (2018) recommendations (approximately 190 feet). Building construction, paving and architectural coating are assumed to occur simultaneously.</i></p>			

<sup>27</sup> Op. Cit. 17



“As shown [in **Table 3-13.3**], no individual piece of construction equipment or cumulative construction equipment would exceed the NOISH threshold of 85 dBA at the closest residence. Therefore, Project construction activities would not expose persons to and generate noise levels in excess of NOISH standards and all construction activities would occur during the times permitted by the County.”<sup>28</sup>

The Tulare County Resource Management Agency (RMA) agrees with the conclusions contained within and supported in the NIA prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would not expose persons to and generate noise levels in excess of NOISH standards and would comply with County noise limitation periods.

*Project Operational Offsite Traffic Noise*

“The calculated noise levels as a result of the Project at affected sensitive land uses are compared to the operational noise standards in the County General Plan (Policy HS-8.3). In the case that the existing ambient noise levels already exceed the applicable numeric noise threshold, an increase of more than 5 dBA over the existing ambient noise level is considered significant. As previously described, a change in level of at least 5 dBA is required before any noticeable change in community response would be expected.”<sup>29</sup>

Table 13.3-4 Existing Plus Project Conditions - Predicted Traffic Noise Levels					
Roadway Segment	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway		Noise Standard (dBA CNEL)	Exceed Standard/ Significant Impact?
		Existing Conditions	Existing + Project Conditions		
SR 198					
South of Old 3 Rivers Road	Residential and Commercial	58.4	58.6	60	No
Between Old 3 Rivers Road and Project Driveway	Residential and Commercial	58.4	58.5	60	No
North of Project Driveway	Residential and Commercial	58.4	58.4	60	No
Old Three River Road					
East of SR 198	Residential	48.7	48.7	60	No

<sup>28</sup> Op. Cit. 18.

<sup>29</sup> Op. Cit.

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Table 13.3-4 Existing Plus Project Conditions - Predicted Traffic Noise Levels					
Roadway Segment	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway		Noise Standard (dBA CNEL)	Exceed Standard/ Significant Impact?
		Existing Conditions	Existing + Project Conditions		
Source: Traffic noise levels were calculated by ECORP Consulting using the FHWA’s Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels in conjunction with the trip generation rate identified by VRPA Technologies, Inc. 2020. Refer to Attachment B for traffic noise modeling assumptions and results.					
Notes: A total of 2 intersections were analyzed in the Traffic Impact Study; however, all roadway segments that impact sensitive receptors were included for the purposes of this analysis.					

“As shown in Table 2-6 [in the NIA, **Table 13.3-4** in this Draft EIR], predicted increase in traffic noise levels associated with the Project would be less than the County noise standards.”<sup>30</sup>

The RMA agrees with the conclusions contained within and supported in the NIA prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would result in noise level below the County noise standards.

#### *Operational Stationary Noise*

“The loudest source of noise associated with the proposed hotel would be parking lot noise. Previous measurements were taken by ECORP staff during a weekday in the middle of a parking lot serving a large grocery store identified noise levels reaching 61.1 dBA at approximately 5 feet distant. These measurements were taken with a Larson Davis SoundExpert LxT precision sound level meter, which satisfies the American National Standards Institute for general environmental noise measurement instrumentation. Prior to the measurements, the SoundExpert LxT sound level meter was calibrated according to manufacturer specifications with a Larson Davis CAL200 Class I Calibrator. The proposed hotel would not be expected to generate noise levels at the same intensity as a large grocery store and therefore this reference noise applied to the Project is conservative.

The Project is proposing the development of a 105-room hotel. As stated previously, the parking lot would be the main source of stationary noise. Based on prior parking lot noise measurements taken by ECORP staff, the Project parking lot is conservatively estimated to reach a maximum noise level of 61.1 dBA, as explained above.”<sup>31</sup>

“Considering the conservative parking lot noise measurement of 61.1 dBA at approximately five feet distant, the nearest noise-sensitive receptor, the vacant commercial building located

<sup>30</sup> Op. Cit. 19

<sup>31</sup> Op. Cit. 19-20

96 feet away from the Proposed Project Parking lot, would experience operational stationary noise levels of below 35.5 dBA. This falls below the County of Tulare operational noise threshold of 60 dBA (Policy HS-8.8).”<sup>32</sup>

“Thus, the Proposed Project would not result in noise levels in excess of County noise standards. The Project would have a less than significant impact in this area”<sup>33</sup>.

The RMA agrees with the conclusions contained within and supported in the NIA prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would not exceed County noise standards.

#### *Land Use Compatibility*

“The County of Tulare provides a Land Use Compatibility Table to gauge the compatibility of new land uses (the Proposed Project) relative to existing noise levels... As shown in Table 2-4 [in the NIA, **Table 13.3-2** in this Draft EIR], a clearly compatible noise level for locating hotel uses is anything 65 dBA and under.”<sup>34</sup>

“The predominant noise source in the Project vicinity is generated by traffic on SR 198. As shown in Table 2-6 above [in the NIA, **Table 13.3-4** in this Draft EIR], traffic noise would not exceed 60 dBA under existing plus Project conditions.”<sup>35</sup>

“Considering the attenuation of sound with distance and the reduction of exterior-to-interior noise levels provided by building walls, the noise experienced inside the proposed new hotel would be significantly less than 61.1 dBA. Thus, noise emitted from the adjacent hotel and commercial building would not exceed 65 dBA.

Therefore, the Project is considered a compatible land use with the adjacent hotel and vacant commercial building, both in terms of commercial land use class and in terms of noise falling in the normally compatible range for hotels and motels. Thus, the proposed and existing land uses are considered compatible.”<sup>36</sup>

The RMA agrees with the conclusions contained within and supported by qualified expertise in the NIA prepared by consultant ECORP Consulting, Inc., that the proposed Project would result in a less than significant impact.

Cumulative Impact Analysis: *Less Than Significant Impact*

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<sup>32</sup> Op. Cit. 20

<sup>33</sup> Op. Cit.

<sup>34</sup> Op. Cit.

<sup>35</sup> Op. Cit.

<sup>36</sup> Op. Cit. 20-21.

Cumulative noise impacts were analyzed in the NIA for cumulative construction noise and cumulative operational noise; both analyses concluded that the proposed Project would not result in cumulative impacts. Regarding cumulative construction noise the NIA concluded, “Construction activities associated with the Proposed Project and other construction projects in the area may overlap, resulting in construction noise in the area. However, construction noise impacts primarily affect the areas immediately adjacent to the construction site. Construction noise for the Proposed Project was determined to be less than significant following compliance with the County General Plan’s construction timing and construction noise control guidelines... In addition, the individual Project would not exceed the NOISH construction noise standard prior to implementation of construction noise control. Cumulative development in the vicinity of the Project site could result in elevated construction noise levels at sensitive receptors in the Project area. However, each project would be required to comply with the applicable County General Plan limitations on allowable hours of construction and the NOISH construction noise limits. Therefore, the Project would not contribute to cumulative impacts and impacts in this regard are not cumulatively considerable.”<sup>37</sup> Regarding cumulative operational noise the NIA concluded, “Cumulative long-term noise sources associated with development at the Project, combined with other cumulative projects, could cause local noise level increases... Operations of the Proposed Project would not result in any substantial changes in the noise environment due to onsite sources. Noise increase as a result of the Project would not exceed County standards... Therefore, the Project would not contribute to cumulative impacts during operations.”<sup>38</sup>

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, the Tulare County General Plan 2030 Update Background Report, the Tulare County 2030 General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), Foothill Growth Management Plan, and/or the Three Rivers Community Plan Update and accompanying EIR. The RMA agrees with the conclusions contained within and supported in the NIA prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would not significantly contribute to a cumulative impact to this resource. Further, as there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. Therefore, the proposed Project will result in ***Less Than Significant Cumulative Impacts*** related to this Checklist Item.

Mitigation Measure(s):

***None Required.***

Conclusion:

***Less Than Significant Impact***

As noted earlier, the analysis indicates that a ***Less Than Significant Impact*** would occur as a result of the Project-specific and Cumulative impacts related to the Noise resource.

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<sup>37</sup> Op. Cit.

<sup>38</sup> Op. Cit. 23.

**b) Generation of excessive groundborne vibration or groundborne noise levels?**

Project Impact Analysis:

***Less Than Significant Impact***

A vibration analysis is also included in the NIA prepared by ECORP Consulting, Inc. As such, the NIA presents substantial and expert evidence that the proposed Project would not adversely impact the vibration component of the Noise resource. “Vibration decreases rapidly with distance and it is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with typical construction equipment are summarized in Table 2-7 [in the NIA, **Table 3.13-5** in this Draft EIR].

The County of Tulare does not regulate construction vibration. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020) recommended standard of 0.2 inch per second PPV with respect to the prevention of structural damage for normal buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings.”<sup>39</sup>

<b>Table 3.13-5 Representative Vibration Source Levels for Construction Equipment</b>	
<b>Equipment Type</b>	<b>Peak Particle Velocity at 20 Feet (inches per second)</b>
Large Bulldozer	0.124
Caisson Drilling	0.124
Loaded Trucks	0.106
Rock Breaker	0.115
Jackhammer	0.049
Small Bulldozer/Tractor	0.004
<i>Source: FTA 2018; Caltrans 2020</i>	

“Based on the vibration levels presented in Table 2-7 [in the NIA, **Table 13.3-5** in this Draft EIR], ground vibration generated by heavy-duty equipment would not be anticipated to exceed approximately 0.124 inch per second PPV at 20 feet. Thus, the nearby structures would not be negatively affected.”<sup>40</sup>

In addition to analyzing the potential to expose structures to substantial groundborne vibration during construction, the NIA analyzed the potential of the proposed Project’s operation to result in excessive groundbourne vibration. As concluded in the NIA, “Project operations

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<sup>39</sup> Op. Cit. 21

<sup>40</sup> Op. Cit. 22.

would not include the use of any stationary equipment that would result in excessive groundborne vibration levels.”<sup>41</sup>

The RMA agrees with the conclusions contained within and supported by qualified expertise in the NIA prepared by consultant ECORP Consulting, Inc., that the proposed Project would not generate excessive groundbourne vibration or groundbourne noise.

This Project in and of itself will not expose people in the planning area to excessive ground borne vibration or ground borne noise levels in excess of standards established in the local general plan or the applicable standards of other agencies. Any construction activity that were to occur within the Project area over the course of the planning horizon would be subject to applicable federal, state and County laws and regulations that govern and safeguard community noise standards. Therefore, there will be ***Less Than Significant Impacts*** to this Checklist Item.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, the Tulare County General Plan 2030 Update Background Report, the Tulare County 2030 General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), Foothill Growth Management Plan, and/or the Three Rivers Community Plan Update and accompanying EIR. The RMA agrees with the conclusions contained within and supported in the NIA prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would not significantly contribute to a cumulative impact to this resource. Further, as there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. Therefore, the proposed Project will result in ***No Cumulative Impacts*** related to this Checklist Item.

Mitigation Measure(s): ***None***

Conclusion: ***Less Than Significant Impact***

As noted earlier, the analysis indicates that a Less Than Significant Impact would occur as a result of the Project-specific and Cumulative Impacts related to the Noise resource.

- c) **For a project located within the vicinity of a private air strip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

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<sup>41</sup> Op. Cit.

Project Impact Analysis:

***No Impact***

The nearest public airport or public use or airport, Woodlake Airport (in the City of Woodlake), is located approximately 16 miles west of the proposed Project site. Therefore, the proposed Project site is located outside of the 55 dB CNEL noise contour. The proposed Project is not within an airport land use plan or within two miles of a public airport or public use airport. The proposed Project will not conflict with Tulare County Airport Land Use Plan policy. The project would not expose people residing or working in the project area to excessive noise levels. This conclusion is supported by the NIA which notes, “Although aircraft flight patterns may cover Three Rivers, noise from aircrafts is not a significant issue in the community. As shown in the Tulare General Plan, the community of Three Rivers is well outside of the airport zone. Aircraft noise does not significantly impact the community of Three Rivers and the Proposed Project would not expose people visiting or working on the Project site to excess airport noise levels.”<sup>42</sup> The RMA agrees with the conclusions contained within and supported in the NIA prepared by qualified expert consultant ECORP Consulting, Inc. Therefore, there will be no impact.

Cumulative Impact Analysis:

***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, the Tulare County 2030 Update Recirculated Draft Environmental Impact Report (RDEIR), Foothill Growth Management Plan, and/or the Three Rivers Community Plan Update and accompanying EIR. The RMA agrees with the conclusions contained within and supported in the NIA prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would not significantly contribute to a cumulative impact to this resource. Further, as there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. Therefore, the proposed Project will result in ***No Cumulative Impacts*** related to this Checklist Item.

Mitigation Measure(s):

***None Required.***

Conclusion:

***No Impact***

As noted earlier, ***No Project-Specific or Cumulative Impacts*** related to this Checklist Item will occur.

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<sup>42</sup> Op. Cit.

## DEFINITIONS/ACRONYMS & ABBREVIATIONS

### Definitions

**Ambient Noise** - All-encompassing noise levels at a given place and time, usually a composite of sounds from all sources near and far, including specific noise sources of interest.<sup>43</sup>

**Attenuation** - Reduction in the level of sound resulting from absorption by the topography, the atmosphere, distance, barriers, and other factors.<sup>44</sup>

**A-weighted decibel (dBA)** - A unit of measurement for noise based on a frequency weighting system that approximates the frequency response of the human ear.<sup>45</sup>

**Community Noise Equivalent Level (CNEL)** - Used to characterize average sound levels over a 24-hour period, with weighting factors included for evening and nighttime sound levels. Leq values (equivalent sound levels measured over a 1-hour period - see below) for the evening period (7:00 p.m. to 10:00 p.m.) are increased by 5 dB, while Leq values for the nighttime period (10:00 p.m. to 7:00 a.m.) are increased by 10 dB. For a given set of sound measurements, the CNEL value will usually be no more than 1 dB higher than the Ldn value (see below). In practice, CNEL and Ldn are often used interchangeably.<sup>46</sup>

**Decibel (dBA)** - A unit of measurement describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure (which is 20 micronewtons per square meter).<sup>47</sup>

**Day-Night Average Sound Level (Ldn)** - Average sound exposure over a 24-hour period. Ldn values are calculated from hourly Leq values, with the Leq values for the nighttime period (10:00 p.m. to 7:00 a.m.) increased by 10 dB to reflect the greater disturbance potential from nighttime noises.<sup>48</sup>

**Equivalent Sound Level (Leq)** - The level of a steady-state sound that, in a stated time period and at a stated location, has the same sound energy as the time-varying sound (approximately equal to the average sound level). The equivalent sound level measured over a 1-hour period is called the hourly Leq or Leq (h).<sup>49</sup>

**L<sub>max</sub> and L<sub>min</sub>** - The maximum and minimum sound levels, respectively, recorded during a measurement period. When a sound meter is set to the “slow” response setting, as is typical for

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<sup>43</sup> Caltrans. Technical Noise Supplement to the Traffic Noise Analysis Protocol. Page 8-2. Accessed October 2020 at: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>.

<sup>44</sup> Tulare County, 2010. General Plan 2030 Update Background Report. Page 8-46. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>

<sup>45</sup> Ibid.

<sup>46</sup> Op. Cit.

<sup>47</sup> Op. Cit.

<sup>48</sup> Op. Cit.

<sup>49</sup> Op. Cit.



most community noise measurements, the Lmax and Lmin values are the maximum and minimum levels recorded typically for 1-second periods.<sup>50</sup>

**Noise Contour (map)** – A graphic representation

**Peak Particle Velocity** - The maximum instantaneous positive or negative peak of the vibration signal.<sup>51</sup>

**Percentile-Exceeded Sound Level (Lx)** - The sound level exceeded during a given percentage of a measurement period. Examples include L10, L50, and L90. L10 is the A-weighted sound level that is exceeded 10% of the measurement period, L50 is the level exceeded 50% of the period, and so on. L50 is the median sound level measured during the measurement period. L90, the sound level exceeded 90% of the time, excludes high localized sound levels produced by nearby sources such as single car passages or bird chirps. L90 is often used to represent the background sound level. L50 is also used to provide a less conservative assessment of the background sound level.<sup>52</sup>

**Root Mean Square** - The square root of the mean-square value of an oscillating waveform, where the mean-square value is obtained by squaring the value of amplitudes at each instant of time and then averaging these values over the sample time.<sup>53</sup>

**Sensitive Receptors** - Sensitive receptors are defined to include residential areas, hospitals, convalescent homes and facilities, schools, and other similar land uses.”<sup>54</sup>

**Vibration** - An oscillation wherein the quantity is a parameter that defines the motion of a mechanical system.<sup>55</sup>

#### Acronyms

ADT	Average Daily Traffic
CNEL	Community Noise Equivalent Level
dB	Decibel
dBA	A-weighted decibel
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
Leq	Equivalent Sound Level
Ldn	Day-Night Average Sound Level

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<sup>50</sup> Op. Cit. 8-47.

<sup>51</sup> Federal Transit Administration. Transit Noise and Vibration Impact Assessment. Page 7-3. Accessed October 2020.  
[https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA\\_Noise\\_and\\_Vibration\\_Manual.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf)

<sup>52</sup> Tulare County, 2010. General Plan 2030 Update Background Report. Page 8-47. Accessed October 2020 at:  
<http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>

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<sup>54</sup> Tulare County, 2010. General Plan 2030 Update Background Report. Page 8-47. Accessed October 2020 at:  
<http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>

<sup>55</sup> Federal Transit Administration. Transit Noise and Vibration Impact Assessment, Appendix A-8. Accessed October 2020 at:  
[https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA\\_Noise\\_and\\_Vibration\\_Manual.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf)

Lmax and Lmin	The maximum and minimum sound levels
NAC	Noise Abatement Criteria
PPV	Peak Particle Velocity
RMS	Root Mean Square

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# Population and Housing

## Chapter 3.14

### SUMMARY OF FINDINGS

The proposed Three Rivers-Hampton Inn & Suites (Project) will result in *No Impacts* related to Population and Housing. Therefore, no mitigation measures are required. A detailed review of potential impacts is provided in the following analysis.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Population and Housing. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2, “An EIR shall identify and focus on the significant effects of the proposed project on the environment. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected. For example, the EIR should evaluate any potentially significant direct, indirect, or cumulative environmental impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas), including both short-term and long-term conditions, as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

The “Environmental Setting” section provides a description of the Population and Housing in the County. The Regulatory Setting” section provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare

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<sup>1</sup> California Natural Resource Agency, 2019 CEQA Statutes and Guidelines, Item (a) of 15126.2 CONSIDERATION AND DISCUSSION OF SIGNIFICANT ENVIRONMENTAL IMPACTS. Accessed December 2020 at: [https://resources.ca.gov/-/media/CNRA-Website/Files/Programs-and-Projects/CEQA/CEQA-Homepage/2019\\_CEQA\\_Statutes\\_and\\_Guidelines.pdf](https://resources.ca.gov/-/media/CNRA-Website/Files/Programs-and-Projects/CEQA/CEQA-Homepage/2019_CEQA_Statutes_and_Guidelines.pdf)

County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR) incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

### Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist Item questions. The following are potential thresholds for significance.

- Induce Substantial Population Growth
- Displace Housing or People
- Displace People Necessitating New Construction Elsewhere

### **ENVIRONMENTAL SETTING**

The California Department of Finance (DOF) provides population estimates for Tulare County. According to DOF population estimates, between 2010 and 2018, Tulare County grew from 442,179 to 475,834<sup>2</sup> persons; an increase of 33,655 persons. Between 2010 and 2018, the County experienced an average yearly population growth of 0.84 percent, for a total (Year 2018) population of 475,837. As of January 1, 2020, population estimates produced annually by the Department of Finance calculated Tulare County with a population estimate of 479,977 residents<sup>3</sup>.

As indicated in the 2018 Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS), Draft Environmental Impact Report (SCH #2012081070); “A vital input to the SCS development process was a credible forecast of population, housing and jobs. TCAG developed a new forecast for this RTP/SCS based on the most comprehensive and up-to-date regional forecasts and projections available. The growth forecast for the 2018 RTP/SCS incorporates substantial new data available from the 2010 Census and new projections published by the California Department of Finance, Demographic Research Office (DOF) in 2017. The growth forecast, based on the DOF projection, is much more restrained than in the previous 2014 RTP/SCS (see RTP Appendix F). The new demographic forecast is summarized in Table 3.0-5 [of the RTP/SCS], Tulare County Demographic Forecast. The new 2017 DOF population projection for the year 2040 (594,348) is significantly lower than that of the 2013 DOF projection for the year 2040 (722,838) used for the 2014 RTP/SCS, a difference of 128,490 persons. This is due to lower birthrates consistent with the state as a whole and the fact that Tulare County is still experiencing negative net migration (-150

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<sup>2</sup> State of California, Department of Finance. E-4 Population Estimates for City, Counties, and the State, 2011-2018 With 2010 Census Benchmark. Sacramento, California. November 2012. Accessed in October 2020 at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-4/2010-18/>

<sup>3</sup> California Department of Finance. 2019 E-1 Population Estimates for Cities, Counties, and the State—January 1, 2018 and 2019. Accessed December 2019 at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/>.

persons in 2015) as opposed to the peak (+4,473 persons in 2004), as a result of the Great Recession.”<sup>4</sup>

## **Regulatory Setting**

### ***Federal***

#### U.S. Department of Housing and Urban Development (HUD)

“HUD’s mission is to create strong, sustainable, inclusive communities and quality affordable homes for all. HUD is working to strengthen the housing market to bolster the economy and protect consumers; meet the need for quality affordable rental homes; utilize housing as a platform for improving quality of life; build inclusive and sustainable communities free from discrimination; and transform the way HUD does business.”<sup>5</sup> However, as the Project does not propose any housing, HUD or other federal regulations do not apply to this Project.

### ***State***

#### California Department of Housing and Community Development (HCD)

HCD’s mission is to “Promote safe, affordable homes and strong vibrant communities throughout California.”<sup>6</sup> “In 1977, the State Department of Housing and Community Development (HCD) adopted regulations under the California Administrative Code, known as the Housing Element Guidelines, which are to be followed by local governments in the preparation of local housing elements. AB 2853, enacted in 1980, further codified housing element requirements. Since that time, new amendments to State Housing Law have been enacted. Each of these amendments has been considered during development of this Housing Element.”<sup>7</sup>

#### California Relocation Assistance Act

The State of California adopted the California Relocation Assistance Act (California Government Code §7260 et seq.) in 1970. This State law, which follows the federal Uniform Relocation Assistance and Real Property Acquisition Act, requires public agencies to provide procedural protections and benefits when they displace businesses, homeowners, and tenants in the process of implementing public programs and projects. This State law calls for fair, uniform, and equitable treatment of all affected persons through the provision of relocation benefits and assistance to minimize the hardship of displacement on the affected persons.

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<sup>4</sup> RTP/SCS PEIR 2018. Pages 3.0-47 and -48. April 2018. Accessed October 2020 at: <https://tularecog.org/tcag/planning/regional-transportation-plan-rtp/rtp-20181/environmental-impact-report/>

<sup>5</sup> U.S. Department of Housing and Urban Development. Mission. Accessed October 2020 at: <https://www.hud.gov/about/mission>.

<sup>6</sup> California Department of Housing and Community Development. Mission. Accessed October 2020 at: <http://www.hcd.ca.gov/about/mission.shtml>. Accessed October 2020.

<sup>7</sup> Tulare County Housing Element 2015 Update. Page 1-3.

## ***Local***

### Tulare County Regional Housing Needs Assessment Plan 2014-2023

The Tulare County Association of Governments (TCAG) was responsible for allocating the State's projections to each local jurisdiction within Tulare County including the County unincorporated area, which is reflected in this Housing Element. Tulare County has no control over the countywide population and housing projections provided to TCAG when it prepared the Regional Housing Needs Assessment Plan.

### Tulare County Regional Blueprint 2009

This Blueprint includes the following preferred growth scenario principals:<sup>8</sup>

- Increase densities county-wide by 25% over the status quo densities;
- Establish light rail between cities;
- Extend Highway 65 north to Fresno County;
- Expand transit throughout the county;
- Maintain urban separators around cities; and
- Growth will be directed toward incorporated cities and communities where urban development exists and where comprehensive services and infrastructure are or will be provided.

### Tulare County Housing Authority

"The Housing Authority of the County of Tulare (HATC) has been officially designated as the local public housing agency for the County of Tulare by the Board of Supervisors and was created pursuant to federal and state laws. ...HATC is a unique hybrid: a public sector agency with private sector business practices. Their major source of income is the rents from residents. The HATC mission is "to provide affordable, well-maintained rental housing to qualified low- and very low-income families. Priority shall be given to working families, seniors and the disabled. Tenant self sufficiency and responsibility shall be encouraged. Programs shall be self-supporting to the maximum extent feasible.""<sup>9</sup>

"HATC provides rental assistance to very low and moderate-income families, seniors and the handicapped throughout the county. HATC offers many different programs, including the conventional public housing program, the housing choice voucher program (Section 8), the farm labor program for families with farm labor income, senior housing programs, and other programs.

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<sup>8</sup> TCAG. Tulare County Regional Blueprint. May 2009. Page 18. Accessed October 2020 at: <http://www.tularecog.org/RTPSCS/TulareCountyBluePrint.pdf>.

<sup>9</sup> Tulare County Housing Element 2015 Update. Page 5-12. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/110Part%20I%20Voluntary%20Elements%20Chapters%206,%2012%20and%2015/001CHP%206%20Tulare%20County%20Housing%20Element%20Update%202015/CHP%206%20TULARE%20COUNTY%20HOUSING%20ELEMENT%20UPDATE%202015.pdf>.

They also own or manage some individual subsidized rental complexes that do not fall under the previous categories, and can provide information about other affordable housing that is available in Tulare County. All programs are handicap accessible. Almost all of the complexes have 55-year recorded affordability covenants.”<sup>10</sup>

#### Tulare County General Plan/Housing Element Policies

As this is a commercial hotel project that provides temporary, transient housing for visitors/tourists and others seeking temporary accommodations (i.e., no housing units are proposed); there are no policies from the Tulare County General Plan/Housing Element that would apply to this Project.

### **IMPACT EVALUATION**

#### **Would the project:**

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Project Impact Analysis: *No Impact*

The proposed Project is the construction and operation of a new hotel within the community of Three Rivers. Construction workers may be drawn from the local and regional area and would not result in the need for additional, permanent housing to accommodate this temporary workforce. The proposed Project will not induce population growth; rather, as noted earlier, it will provide temporary accommodations for visitors/tourists. There will be no impact that the proposed Project would induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). Additionally, the Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. As such, the proposed Project will result in *No Impact* to this resource.

Cumulative Impact Analysis: *No Impact*

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

Mitigation Measure(s): *None Required.*

Conclusion: *No Impact*

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<sup>10</sup> Ibid.



As noted earlier, the Project, is the construction and operation of a new hotel within the community of Three Rivers. Construction workers may be drawn from the local and regional area and would not result in the need for additional, permanent housing to accommodate this temporary workforce. The proposed Project will not induce population growth. As such, ***No Significant Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

**b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

Project Impact Analysis: ***No Impact***

The proposed Project is the construction and operation of a new hotel within the community of Three Rivers. Construction workers may be drawn from the local and regional area and would not result in the need for additional, permanent housing to accommodate this temporary workforce. The proposed Project will not induce population growth; rather, as noted earlier, it will provide temporary accommodations for visitors/tourists. There will be no impact that the proposed Project would induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). Additionally, the Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. As such, the proposed Project will result in ***No Impact*** to this resource.

Cumulative Impact Analysis: ***No Impact***

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource item.

Mitigation Measure(s): ***None Required***

Conclusion: ***No Impact***

Since the proposed Project is the construction and operation of a new hotel within the community of Three Rivers. Construction workers may be drawn from the local and regional area and would not result in the need for additional, permanent housing to accommodate this temporary workforce. There will be no induced population growth related to this Project. As such, ***No Significant Project-specific and Cumulative Impacts*** related to this Checklist Item will occur.

## DEFINITIONS AND ACRONYMS

### Definitions

**Census Designated Place** – Statistical counterpart of incorporated places, delineated to provide data for settled concentrations of population identifiable by name but not legally incorporated under the laws of the state in which they are located. CDPs are delineated cooperatively by state and local officials and the Census Bureau, following Census Bureau guidelines.<sup>11</sup>

### Abbreviations and Acronyms

CDP	Census Designated Place
HATC	Housing Authority of the County of Tulare, also known as the Housing Authority of Tulare County
HCD	California Department of Housing and Community Development
HUD	United States Department of Housing and Urban Development
MPOs	Metropolitan Planning Organizations
RHNA	Regional Housing Needs Assessment
RHNP	Regional Housing Need Plan
RTP	Regional Transportation Plan
SB 375	Senate Bill 375, also known as the Sustainable Communities and Climate Protection Act of 2008
SCS	Sustainable Communities Strategy
TCAG	Tulare County Association of Governments

## REFERENCES

California Department of Finance. (2017). E-4 Historical Population Estimates for Cities, Counties, and the State. Website: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/>.

California Department of Housing and Community Development (HCD). Website: [www.hcd.ca.gov/mission.html](http://www.hcd.ca.gov/mission.html).

California Department of Water Resources. Disadvantaged Communities (DAC) Mapping Tool. Website: <https://gis.water.ca.gov/app/dacs/>.

California Government Code, Section 7260 et seq.

California Natural Resources Agency. (2015). CEQA. Consideration and Discussion of Significant Environmental Impacts. Section 15126.2. Website: <http://resources.ca.gov/ceqa/guidelines/art9.html>.

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<sup>11</sup> United States Census Bureau. Accessed April 2016 at: <https://www.census.gov/glossary/>.

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Tulare County Association of Governments, Tulare County Regional Blueprint, May 2009

Tulare County. (2012). 2030 Update Tulare County General Plan, August 2012. Website: <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>. Accessed June 1, 2017.

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Tulare County Housing Element 2015 Update, adopted November 17, 2015

United States Census Bureau. (2017). American Community Survey. Website: [http://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml). [Note: the American Community Survey is no longer operational]

United States Department of Housing and Urban Development (HUD). Website: <http://portal.hud.gov/hudportal/HUD?src=/about/mission>.

# Public Services

## Chapter 3.15

### SUMMARY OF FINDINGS

The proposed Three Rivers-Hampton Inn & Suites Project will result in *Less Than Significant Impact* related to Public Services. A detailed review of potential impacts is provided in the following analysis.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Public Services. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2, “An EIR shall identify and focus on the significant effects of the proposed project on the environment. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected. For example, the EIR should evaluate any potentially significant direct, indirect, or cumulative environmental impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas), including both short-term and long-term conditions, as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

The “Environmental Setting” section provides a description of the Public Services in the County. The “Regulatory Setting” section provides a description of applicable Federal, State and Local

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<sup>1</sup> California Natural Resource Agency. CEQA Statutes and Guidelines, Item (a) of 15126.2 CONSIDERATION AND DISCUSSION OF SIGNIFICANT ENVIRONMENTAL IMPACTS. Accessed December 2020 at: [https://resources.ca.gov/-/media/CNRA-Website/Files/Programs-and-Projects/CEQA/CEQA-Homepage/2019\\_CEQA\\_Statutes\\_and\\_Guidelines.pdf](https://resources.ca.gov/-/media/CNRA-Website/Files/Programs-and-Projects/CEQA/CEQA-Homepage/2019_CEQA_Statutes_and_Guidelines.pdf)

regulatory policies that were developed in part from information contained in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR) incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

### Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist Item questions. The following are potential thresholds for significance:

- Impact Fire Services
- Impact Police Services
- Impact Schools
- Impact Parks
- Impact Other Public Facilities

## **ENVIRONMENTAL SETTING**

Several agencies provide fire protection within Three Rivers including the County of Tulare, Cal Fire, the National Park Service, and the U.S. Forest Service, the latter two organizations through memoranda of understanding (MOU) with Tulare County.<sup>2</sup> Cal Fire Station 35, Tulare County Station 14 (located at 41412 South Fork Drive in Three Rivers) and the National Park Service's Hammond Station (located at 44726 Mineral King Road) are within the Three Rivers UDB and provide the community with apparatus and crews to respond to fire outbreaks (structural and wildland) during fire season. Generally, Cal Fire has responsibility over wildland and vegetation fires, and the County handles structural fires.<sup>3</sup> Additionally, the next nearest Tulare County Fire Station is Fire Station 13 located in Lemon Cove (at 32490 State Route 198), approximately 12 miles southwest of Three Rivers.<sup>4</sup>

The Tulare County Sheriff's Department has a resident deputy serving the rural population of Three Rivers. The resident deputy works one shift, five days week. The Sheriff's Department does not maintain a substation in Three Rivers. After hours law enforcement response to the community is dependent on request for service.<sup>5</sup>

The Three Rivers Union Elementary School is located on a 9.14-acre parcel of land (at 41932 State Route 198) within the Three Rivers Union School District. The school offers Kindergarten through

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<sup>2</sup> Tulare County. Three Rivers Community Plan 2018 Update Draft EIR. Page 3.14-3.

<sup>3</sup> Ibid.

<sup>4</sup> Op. Cit.

<sup>5</sup> 3.14-4.

8th grade education and has had an average enrollment of 139 total students between school years 2014-2015 thru 2019-2020.<sup>6</sup> The school has 20 full and part-time employees including 10 teachers. Students beyond the 8th grade level attend Woodlake Union High School District. The Woodlake Union High School District serves grades 9-12 in the central region of Tulare County. The school district operates on a traditional schedule with 33 teachers. There is a maximum student capacity of 800 and an average daily attendance of 825 students. The district has two high schools, Bravo Lake High (continuation) serving grades 9-12 and Woodlake Union High serving grades 9-12.<sup>7</sup> Enrollment for year Grades 9-12 during the 2019-20 school year was 726 students.<sup>8</sup>

Three Rivers does not have any public parks. The community is bordered to the west by a federal recreation area and to the north, south and east by a national park and BLM-administered multi-use area(s). Also, see Item 15 Recreation of this Draft EIR.

## REGULATORY SETTING

### *Federal Agencies & Regulations*

None that are applicable to this Project.

### *State Agencies & Regulations*

#### California Fire Code and Building Code

The purpose of the California Fire Code (Title 24, Part 9 of the California Code of Regulations) is to establish the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety and general welfare from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency operations.<sup>9</sup>

#### California Department of Forestry and Fire Protection (Cal Fire)

“California Department of Forestry and Fire Protection (CAL FIRE) are dedicated to the fire protection and stewardship of over 31 million acres of California's privately-owned wildlands. In addition, the Department provides varied emergency services in 36 of the State's 58 counties via contracts with local governments.

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<sup>6</sup> CA Department of Education. 2020. Enrollment by Multi-Years 2016-2020. Accessed October 2020 at: <https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdYears.aspx?cds=5472207&aggllevel=district&year=2019-20>

<sup>7</sup> Tulare County, 2010. Tulare County General Plan 2030 Update Background Report. Page 7-86. <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>

<sup>8</sup> CA Department of Education. 2020. 2019-2020 Enrollment by Grade. Figure derived by using percentage of students in Grades 9-12 of total Woodlake School District student enrollment. Accessed October 2020 at: <https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdLevels.aspx?cds=54767945430285&aggllevel=school&year=2019-20>

<sup>9</sup> 2016 California Fire Code (Title 24, Part 9 of the California Code of Regulations). Page 3. Accessed May 2019. <https://www.citymb.info/Home/ShowDocument?id=28089>

Preventing wildfires in the State Responsibility Area (SRA) is a vital part of CAL FIRE's mission. While these efforts have occurred since the early days of the Department, CAL FIRE has adapted to the evolving destructive wildfires and succeeded in significantly increasing its efforts in fire prevention. The Department's Fire Prevention Program consists of multiple activities including wildland pre-fire engineering, vegetation management, fire planning, education and law enforcement. Typical fire prevention projects include brush clearance, prescribed fire, defensible space inspections, emergency evacuation planning, fire prevention education, fire hazard severity mapping, and fire-related law enforcement activities.

Beyond its wildland firefighting role, CAL FIRE is an "all-risk" department. It may very well be a CAL FIRE engine and crew that is dispatched to the scene of an auto accident, or to a home where a child has become the victim of a drowning incident. The Department is always ready to respond - medical aids; hazardous material spills; swift water rescues; search and rescue missions; civil disturbances; train wrecks; floods, earthquakes and more.”<sup>10</sup>

#### California Department of Fish and Wildlife

“The Mission of the Department of Fish and Wildlife (CDFW) is to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public.”<sup>11</sup>

#### ***Local Agencies***

##### Tulare County Sheriff

The Tulare County Sheriff's Department (TCSO) is the primary law enforcement service provider for the unincorporated areas of Tulare County. The TCSO provides crime prevention and apprehension services across a wide range of activity sectors including: personal crime; property crime; agricultural crime; cybercrime; forensic services and specialized services (e.g., Dive team, Search and Rescue team, etc.). The Sheriff's Department also operates detention facilities for women, men and, juveniles.

##### Tulare County Fire Department (TCFD)

“Tulare County Fire Department mission is to provide all persons who reside, work or travel within the County of Tulare, with the protection of life, property and the environment within those areas, where the Tulare County Fire Department has direct protection responsibility by virtue of law, contract or mutual understanding. Tulare County Fire seeks to reduce public exposure to fire, risk and injury prevention programs that include public education, fire protection planning, fire prevention education, code enforcement, and fire suppression cost recovery.”<sup>12</sup>

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<sup>10</sup> Cal Fire. 2012. [Welcome to About Us \(ca.gov\)](https://www.fire.ca.gov/about-us/) <https://www.fire.ca.gov/about-us/>

<sup>11</sup> CDFW. 2016-1017. Mission Statement. <https://www.wildlife.ca.gov/Explore>

<sup>12</sup> Tulare County. Three Rivers Community Plan 2018 Update Draft EIR. Page 3.14-8.

### ***Local Policy & Regulations***

#### **Tulare County General Plan 2030**

The General Plan has a number of policies that apply to projects within Tulare County. General Plan policies that relate to the proposed Project are listed as follows:

**PFS-7.1 Fire Protection** - The County shall strive to expand fire protection service in areas that experience growth in order to maintain adequate levels of service.

**PFS-7.2 Fire Protection Standards** - The County shall require all new development to be adequately served by water supplies, storage, and conveyance facilities supplying adequate volume, pressure, and capacity for fire protection.

**PFS-7.3 Visible Signage for Roads and Buildings** - The County shall strive to ensure all roads are properly identified by name or number with clearly visible signs.

**PFS-7.5 Fire Staffing and Response Time Standards** - The County shall strive to maintain fire department staffing and response time goals consistent with National Fire Protection Association (NFPA) standards.

<b>Table 3.15-1</b>			
<b>Fire Staffing and Responses Time Standards</b>			
	<b>Demographics</b>	<b>Staffing/Response Time</b>	<b>% of Calls</b>
<b>Urban</b>	> 1,000 people/sq. mi.	15 FF/9 min.	90
<b>Suburban</b>	500-100 people/sq. mi.	10 FF/10 min.	80
<b>Rural</b>	< 500 people/sq. mi.	6 FF/14 min.	80
<b>Remote*</b>	Travel Dist. > 8 min.	4 FF/no specific response time	90

*\*Upon assembling the necessary resources at the emergency scene, the fire department should have the capacity to safely commence an initial attack within 2 minutes, 90% of the time. (FF = Fire Fighters)*

*Source: Tulare County 2030 General Plan*

**PFS-7.6 Provision of Station Facilities and Equipment** - The County shall strive to provide sheriff and fire station facilities, equipment (engines and other apparatus), and staffing necessary to maintain the County's service goals. The County shall continue to cooperate with mutual aid providers to provide coverage throughout the County.

**PFS-7.8 Law Enforcement Staffing Ratios** - The County shall strive to achieve and maintain a staffing ratio of 3 sworn officers per 1,000 residents in unincorporated areas.

**PFS-7.9 Sheriff Response Time** - The County shall work with the Sheriff's Department to achieve and maintain a response time of:

1. Less than 10 minutes for 90 percent of the calls in the valley region; and
2. 15 minutes for 75 percent of the calls in the foothill and mountain regions.



**PFS-7.12 Design Features for Crime Prevention and Reduction** - The County shall promote the use of building and site design features as means for crime prevention and reduction.

The Three Rivers Community Plan

The Three Rivers Community Plan includes the following as applicable to the proposed Project:

**Goal 7: Provide Adequate Emergency And Safety Access: Objective 7.1 Adequate Emergency Access:** Ensure adequate access for emergency and safety vehicles, consistent with the State Response Area (SRA) standards, Foothill Growth Management Plan Development Standards, and Tulare County Improvement standards as applicable. **Policy 7.1.2 Accessibility to Public Safety Services** to require that new development is accessible to the Tulare County Fire Department and Sheriff's Department.<sup>13</sup>

**IMPACT EVALUATION**

- a) **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

**Fire protection**

Project Impact Analysis:

***Less Than Significant Impact***

The County of Tulare will continue to provide fire protection services to the proposed Project site upon development. No residential construction is identified with this Project. Any vegetation that could present a fire hazard will be removed from the Project site. Additionally, the proposed Project site will be predominantly developed with the hotel (and ancillary uses such as the swimming pool) and paved parking areas thereby minimizing areas for ground cover to take root and prevent it from becoming a fire fuel hazard. As noted in the adopted Three Rivers Community Plan Update, "Community response time varies from one minute on a fairly flat terrain to three minutes on steeper terrain." As a result of Cal Fire Station 35, Tulare County Station 14 and the National Park Service's Hammond Station being located within Three Rivers and project design features, impacts to fire protection services will be ***Less Than Significant***.

Cumulative Impact Analysis:

***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan Update, General

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<sup>13</sup> Tulare County. Three Rivers Community Plan 2018 Update. Page 270.

Plan 2030 Update Background Report, Tulare County 2030 General Plan Update Recirculated Draft Environmental Impact Report (RDEIR), and/or the Three Rivers Community Plan 2018 Update.

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

Thus, there will be *Less Than Significant Project Impacts* to the fire department's emergencies services response times, *Less Than Significant Cumulative Impacts* related to this Checklist Item will occur.

Mitigation Measure(s): *None Required.*

Conclusion: *Less Than Significant Impact*

Applicable California fire code, local building codes (including requirements for fire suppression systems) and other applicable rules/regulations through implementation of Project design features will result in *Less Than Significant Project-specific Impacts* and *Less Than Significant Impact Cumulative Impacts* related to this Checklist Item.

### **Police protection**

Project Impact Analysis: *Less Than Significant Impact*

Police services to the Project area, located in unincorporated Tulare County, are provided by the Tulare County Sheriff's Department. The proposed Project site is served by the resident deputy who resides in Three Rivers. The resident deputy provides patrol services for forty hours each week and is subject to after-hour call outs.<sup>14</sup> Additional Sheriff resources are available as needed via dispatch from the main Sheriff's Office in Visalia, CA. Tulare County utilizes interagency cooperative agreements to allow for a multi-agency response to events in Three Rivers and the surrounding area and maintains such agreements with the California Highway Patrol, Bureau of Land Management, National Park Service and California Department of Fish and Wildlife.

The County of Tulare will continue to provide police protection services to the Project site upon development. Emergency response is adequate to the Project site. Should additional police protection services be required, the County of Tulare would request mutual assistance from other law enforcement agencies (e.g., Woodlake P.D., Exeter P.D., California Highway Patrol, etc.) to augment police services. As discussed in Item 14 a), no residential uses are proposed for this Project. As such, any impact to police services will be *Less Than Significant*.

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<sup>14</sup> Tulare County. Three Rivers Community Plan 2018 Update Draft EIR. Page 3.14-4.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan Update, General Plan 2030 Update Background Report and/or Tulare County 2030 General Plan Update Recirculated Draft Environmental Impact Report (RDEIR).

As noted earlier, the proposed Project will result in a ***Less Than Significant Impact Cumulative Impacts*** related to this Checklist Item.

Mitigation Measure(s): ***None***

Conclusion: ***Less Than Significant Impact***

As noted earlier, ***Less Than Significant Impact Project-specific or Cumulative Impacts*** related to this Checklist Item will occur.

### **Schools**

Project Impact Analysis: ***No Impact***

The nearest school, Three Rivers Elementary School, is located approximately 1.25 miles north of the proposed Project site in the Three Rivers. However, as discussed in Item 14 a), the Project will not include construction of any residential structures which could result in increases of school-aged children, nor change the existing land use. The Project will not result in an increase of population that will require additional school facilities because no employees will be assigned to on-site occupancy. There will be ***No Impact***.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report and/or Tulare County 2030 General Plan Update Recirculated Draft Environmental Impact Report (RDEIR).

As noted earlier, the proposed Project will result in ***No Impacts*** to schools. As such, ***No Significant Cumulative Impacts*** related to this Checklist Item will occur.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

The proposed Project does not plan for or contain any proposals to build additional schools in the Project area. ***No Significant Cumulative Impacts*** related to this Checklist Item will occur.

## **Parks**

Project Impact Analysis: *No Impact*

Cutler County Park is the nearest County-operated park and is located approximately 20 miles west of the proposed Project site. As the proposed Project will not induce population growth, the proposed Project will not create a need for additional park or recreational services. No employees will be assigned to on-site occupancy at the proposed Project site. There will be *No Impact*. Also, see Item 16 Recreation.

Cumulative Impact Analysis: *No Impact*

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report and/or Tulare County 2030 General Plan Update Recirculated Draft Environmental Impact Report (RDEIR).

As noted earlier, the proposed Project will not substantially impact Recreational Services. As such, *No Cumulative Impacts* related to this Checklist Item will occur. In addition, the Recreation Chapter provides additional analysis regarding parks which also concludes no impacts to the Recreation resource.

Mitigation Measure(s): *None Required.*

Conclusion: *No Impact*

As noted earlier, *No Project-specific or Cumulative Impacts* related to this Checklist Item will occur.

## **Other public facilities?**

Project Impact Analysis: *No Impact*

The proposed Project will not require the need for other public facilities, as such, the proposed Project will result in *No Impact* to this resource.

Cumulative Impact Analysis: *No Impact*

The nature of the proposed Project will not result in permanent population growth, as such, the proposed Project would not result in demands for additional or expansion of school-related facilities. Fire and police protection services will remain as currently provided for to permanent residents and seasonal visitors/tourists. The proposed Project will not need to rely on or result in the need for addition or alteration of any public services and will utilize existing services provided by or within Tulare County. As there are no other hotel (or motel) or other

development proposals within the vicinity of Three Rivers, the proposed Project will result in ***No Impact*** which would significantly contribute to a cumulative impact to this resource.

Mitigation Measure(s): ***None Required.***

Conclusion: ***No Impact***

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will result in ***No Impact*** which would significantly contribute to a cumulative impact to this resource.

## DEFINITIONS and ABBREVIATIONS

### Definitions

**Extensive Recreation Management Area (ERMA)** - ERMAs recognize existing recreation use, demand, or Recreation and Visitor Services program investments and are managed to sustain principal recreation activities and associated qualities and conditions, commensurate with other resource and resource uses.<sup>15</sup>

**Special Management Recreation Area (SMRA)** - SRMAs recognize unique and distinctive recreation values and are managed to enhance a targeted set of activities, experiences, benefits and recreation setting characteristics, which becomes the primary management focus.<sup>16</sup>

### Abbreviations

BLM	Bureau of Land Management
CPUC	California Public Utilities Commission
ERMA	Extensive Recreational Management Area
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FFPA	Federal Farmland Protection Act
NPS	National Park Service
PIO	Public Information Officer
SMRA	Special Management Recreation Area
UDB	Urban Development Boundary
USFS	United States Forest Service
USACE	United States Army Corps of Engineers

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<sup>15</sup> BLM. 2015. Recreation Definitions. <https://www.blm.gov/or/plans/rmpswesternoregon/files/outreach/RecDefinitions.FINAL.pdf>

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# Recreation

## Chapter 3.16

### SUMMARY OF FINDINGS

The proposed Three Rivers-Hampton Inn & Suites (Project) will result in *No Impacts* related to Recreation. A detailed review of potential impacts is provided in the following analysis.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Recreation. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2, “An EIR shall identify and focus on the significant effects of the proposed project on the environment. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected. For example, the EIR should evaluate any potentially significant direct, indirect, or cumulative environmental impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas), including both short-term and long-term conditions, as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

The “Environmental Setting” section provides a description of the Recreational Resources in the County. The “Regulatory Setting” section provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare

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<sup>1</sup> California Natural Resource Agency. CEQA Statutes and Guidelines, Item (a) of 15126.2 CONSIDERATION AND DISCUSSION OF SIGNIFICANT ENVIRONMENTAL IMPACTS. Accessed December 2020 at: [https://resources.ca.gov/-/media/CNRA-Website/Files/Programs-and-Projects/CEQA/CEQA-Homepage/2019\\_CEQA\\_Statutes\\_and\\_Guidelines.pdf](https://resources.ca.gov/-/media/CNRA-Website/Files/Programs-and-Projects/CEQA/CEQA-Homepage/2019_CEQA_Statutes_and_Guidelines.pdf)

County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR) incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

### Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist Item questions. The following are potential thresholds for significance.

- Increase use of existing recreational facilities
- Include or require additional recreational facilities

## **Environmental Setting**

“Tulare County contains several county, state, and federal parks. Aside from parks in the county, there are many open space areas as well. This section will highlight these various parks and open space areas and identify recreational opportunities within them.”<sup>2</sup> Two new parks were completed and became operational in the unincorporated communities of Plainview (Plainview Community Park) in 2016 and Earlimart (Earlimart Community Park) in 2017. In addition to the 15 parks and recreation facilities that are owned and operated by Tulare County, there are State Parks and Forests, National Parks and National Forests, trails, and recreational areas.

Cutler County Park (an approximately 70-acre facility) is the nearest park to the Project site and located approximately twenty miles west of the proposed Project site. Lastly, each incorporated city in the County maintains and operates municipal park and recreation facilities which can also be accessed by the County's total population.

### ***Recreational Facilities***

#### Federal Recreation Areas

##### *Lakes Kaweah and Success*

“Lake Kaweah was formed after the construction of the Terminus Dam on the Kaweah River in 1962. The lake offers many recreational opportunities including fishing, camping, and boating. Lake Kaweah is located 20 miles east of Visalia on Highway 198 and was constructed by the U.S. Army Corps of Engineers for flood control and water conservation purposes. The lake has a maximum capacity to store 143,000 acre-feet of water. There are a total of 80 campsites at the lake’s Horse Creek Campground, which contains toilets, showers and a playground. Campfire

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<sup>2</sup> Tulare County General Plan 2030 Update Background Report. February 2010. Page 4-1. Accessed January 2020 at: <http://generalplan.co.tulare.ca.us/documents.html> then scroll to Recirculated Draft EIR, then click on “Appendix B-Background Report”

programs are also available. Aside from camping, boat ramps are provided at the Lemon Hill and Kaweah Recreation Areas. Both Kaweah and Horse Creek provide picnic areas, barbecue grills and piped water. Swimming is allowed in designated areas. In addition, there is a one-mile hiking trail between Slick Rock and Cobble Knoll, which is ideal for bird watching.

Lake Success was formed by construction of the Success Dam on the Tule River in 1961. The lake offers many recreational activities including fishing, boating, waterskiing, and picnicking. The U.S. Army Corps of Engineers (USACOE) constructed this reservoir for both flood control and irrigation purposes. The lake has a capacity of 85,000 acre-feet of water. The lake is located eight miles east of Porterville in the Sierra Nevada foothills area. Recreational opportunities include ranger programs, camping at the Tule campground, which provides 104 sites, boating, fishing, picnic sites, playgrounds and a softball field. Seasonal hunting is also permitted in the 1,400-acre Wildlife Management Area.”<sup>3</sup>

#### National Parks and National Forests

“Most of the recreational opportunities in the county are located in Sequoia National Forest, Giant Sequoia National Monument, and in Sequoia and Kings Canyon National Parks (SEKI). Although these parks span adjacent counties, they make a significant contribution to the recreational opportunities that Tulare County has to offer.”<sup>4</sup>

#### *Sequoia National Forest*

“Sequoia National Forest takes its name from the Giant Sequoia, which is the world’s largest tree. There are more than 30 groves of sequoias in the lower slopes of the park. The park includes over 1,500 miles of maintained roads, 1,000 miles of abandoned roads and 850 miles of trails for hikers, off-highway vehicle users and horseback riders. The Pacific Crest Trail connecting Canada and Mexico, crosses a portion of the forest, 78 miles of the total 2,600 miles of the entire trail. It is estimated that 10 to 13 million people visit the forest each year.”<sup>5</sup>

#### *Giant Sequoia National Monument*

“The Giant Sequoia National Monument was created in 2000 by President Clinton in an effort to preserve 34 groves of ancient sequoias located in the Sequoia National Forest. The Monument includes a total of 327,769 acres of federal land, and provides various recreational opportunities, including camping, picnicking, fishing, and whitewater rafting. According to the Giant Sequoia National Monument Management Plan EIS, the Monument includes a total of 21 family campgrounds with 502 campsites and seven group campgrounds. In addition, there are approximately 160 miles of system trails, including 12 miles of the Summit National Recreation Trail.”<sup>6</sup>

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<sup>3</sup> Ibid. 4-7

<sup>4</sup> Op. Cit. 4-8.

<sup>5</sup> Op. Cit. 4-9.

<sup>6</sup> Op. Cit.

*Sequoia and Kings Canyon National Parks (SEKI)*

“The U.S. Congress created the Kings Canyon National Park in 1940 and Sequoia National Park in 1890. Because they share many miles of common boundaries, they are managed as one park. The extreme large elevation ranges in the parks (from 1,500 to 14,491 feet above sea level), provide for a wide range of vegetative and wildlife habitats. This is witnessed from exploring Mt. Whitney, which rises to an elevation of 14,491 feet, and is the tallest mountain in the contiguous United States. During the summer months, park rangers lead walks through the parks, and tours of Crystal and Boyden Caves. During the winter, visitors explore the higher elevations of the parks via cross country skis or snowshoes, or hike the trails in the foothills. The SEKI also contains visitor lodges, the majority of which are open year round. According to the National Parks Conservation Association, a combined total of approximately 1.5 million people visit the two parks on an annual basis.”<sup>7</sup>

State Parks and Forests

*Colonel Allensworth State Park*

The Colonel Allensworth State Park is located approximately 70 miles south of Three Rivers. The park is dedicated to preserving the memory of a town which was founded, financed and governed by African Americans. In 1974 California State Parks purchased land within the historical townsite of Allensworth, and it became Colonel Allensworth State Historic Park.<sup>8</sup>

*Mountain Home State Forest*

“The Mountain Home State Forest is a State Forest managed by the California Department of Forestry and Fire Protection (CDF). The Forest consists of 4,807 acres of parkland containing a number of Giant Sequoias, and is located just east of Porterville. The Forest is a Demonstration Forest, which is considered timberland that is managed for forestry education, research, and recreation. Fishing ponds, hiking trails, and campsites are some of the amenities that can be found in the Forest.”<sup>9</sup> Colonel Allensworth State Historic Park (approximately 3,715 acres in area) is located in the unincorporated community of Allensworth in southwestern Tulare County.

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<sup>7</sup> Op. Cit.

<sup>8</sup> CA Department of Parks and Recreation. 2017. Colonel Allensworth State Historic Park. Accessed January 2021 at [https://www.parks.ca.gov/?page\\_id=583](https://www.parks.ca.gov/?page_id=583)

<sup>9</sup> Tulare County General Plan 2030 Update Background Report. February 2010. Page 4-7. Accessed January 2020 at: <http://generalplan.co.tulare.ca.us/documents.html> then scroll to Recirculated Draft EIR, then click on “Appendix B-Background Report” Op. Cit. 4-7.

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*Other Recreational Facilities*

Other recreational resources available in Tulare County include portions of the Pacific Crest Trail, South Sierra Wilderness Area, Dome Land Wilderness Area, Golden Trout Wilderness Area, International Agri-Center, and the Tulare County Fairgrounds.<sup>10</sup>

In addition, there are several nature preserves open to the public which are owned and operated by non-profit organizations, including the Kaweah Oaks Preserve and Dry Creek - Homer Ranch preserves, both owned and operated by Sequoia Riverlands Trust.

**Table 3.16-1  
Recreational Areas in Tulare County**

ID	Recreation Area	Location	Acres	Type of Use/Features
<b>County</b>				
1	Alpaugh Park	Located in Alpaugh on Road 40.	3	Reservations for picnic areas are taken. No entrance fee.
2	Balch Park Campgrounds	20 miles NE of Springville in the Sierras.	160	71 Campsites. No reservations taken; first come first serve basis. Entrance fee for vehicles.
3	Bartlett Park	8 miles east of Porterville on North Drive.	127.5	Reservations for picnic areas are taken. Entrance fee for vehicles.
4	Camp COTYAC	Near Ponderosa in Eastern Tulare County.	8	County of Tulare Youth Adventure Camp (Camp COTYAC). Cabins, lodge with kitchen, restrooms and showers.
5	Cutler Park	5 miles east of Visalia on Highway 216 to Ivanhoe.	50	Reservations for picnic areas are taken. Entrance fee for vehicles.
6	Elk Bayou Park	6 miles SE of Tulare on Avenue 200.	60	Reservations for picnic areas are taken. No fee for day use.
7	Kings River Nature Preserve	2 miles east of Highway 99 on Road 28	85	This park is only for school environmental programs.
8	Ledbetter Park	1 mile northwest of Cutler on Road 124/Hwy 63	11	Reservations for picnic areas are taken. No fee.
9	Mooney Grove Park	2 Miles south of Caldwell Avenue on Mooney Blvd. In South Visalia.	143	Reservations for picnic areas are taken. Paddle boats, playground, and baseball diamonds. Home of the End Trail statue. One of the largest oak woodlands in Tulare County. Location of the Agriculture and Farm Labor Museum.
10	Tulare County Museum	In Mooney Grove Park, South Visalia.	8.5	Free admission with park fee. Museum is opened Thursday thru Monday (closed Tuesday and Wednesday).
11	Woodville Park	Located in Avenue 166 in Woodville.	10	Reservations for picnic areas are taken. Day use no entrance fee.
12	West Main Street Park	2 blocks west of County Courthouse on Main Street in Downtown Visalia.	5	Day use no entrance fee.
<b>State</b>				
13	Colonel Allensworth State Historic Park	7 miles west of Three Rivers on County Road J22.	NA	15 campsites, open year round.
14	Mountain Home State Forest	Located in Sequoia National Forest	NA	No reservations taken for campgrounds.

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<sup>10</sup> Ibid. 4-10 to 4-11.

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**Table 3.16-1  
Recreational Areas in Tulare County**

ID	Recreation Area	Location	Acres	Type of Use/Features
Federal				
15	Lake Kaweah	25 miles east of Visalia on Highway 198.	2,558	Horse Creek Campground, boat ramps, picnic areas, swimming, and hiking.
16	Lake Success	10 miles SE of Porterville on Highway 198.	2,450	Tule Campground, boating, fishing, picnic areas, playgrounds, and softball field. Hunting is permitted in the Wildlife Management Area.
17	Sequoia National Forest	Southeastern portion of Tulare County.	1,144,296	Campgrounds include Gray's Meadow, Oak Creek, Onion Valley, Stony Creek, Sunset, and Whitney Portal with over 300 campsites.
18	Case Mountain ACEC	Three Rivers, Tulare County	18,530	Hiking, shooting, hunting, mountain biking, birding, equestrian use, picnicking.
19	North Fork SMA	Three Rivers, Tulare County	4,870	Hiking, shooting, hunting, mountain biking, birding, equestrian use, camping, prospecting. Note: Advance, Paradise and Cherry Falls day use sites are closed to public use indefinitely.
20	Giant Sequoia National Monument	Covers areas north and south of Sequoia and Kings Canyon National Parks.	328,315	Walking, hiking, fishing, wood collecting, hunting, picnicking, bicycling, camping.
21	Sequoia and Kings Canyon National Parks (SEKI)	Northeastern portion of Tulare County.	404,063	Campgrounds include Atwell Mill Campground, Buckeye Flat, Cold Springs, Crystal Springs, Dorst Campground, Lodgepole, Moraine, Potwisha, Buckeye, and South Fork with over 800 campsites.
Total Acres			1,905,753	
Source: Tulare County, 2012, page 4-9. General Plan 2030 Update Background Report. <a href="http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf">http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf</a>				

## Local Recreational Facilities

### Parks

Three Rivers does not have a County owned-operated public park. As noted earlier, Cutler County Park is the nearest County owned/operated park near the Project site. It is an approximately 70-acre day use park; reservations for picnic areas area available and there is no entrance fee.

### Schools

“A total of 48 school districts provide education throughout Tulare County... Of the 48 school districts, seven are unified districts providing educational services for kindergarten through 12<sup>th</sup> grade. The remaining 41 districts consist of 36 elementary school districts and four high school districts. Many districts only have one school.”<sup>11</sup> As noted earlier, the nearest school is Three Rivers Elementary located in Three Rivers, approximately 1.25 miles north of the proposed Project site on a 9.14-acre parcel. The school offers Kindergarten through 8th grade education and has had an average enrollment of 139 total students between school years 2014-2015 thru 2019-2020.

<sup>11</sup> Tulare County General Plan 2030 Update Background Report. Pages 7-75 and 7-76. <http://generalplan.co.tulare.ca.us/documents.html> then scroll to Recirculated Draft EIR, the click on “Appendix B-Background Report”

## REGULATORY SETTING

### *Federal*

None that apply to this Project.

### *State*

None that apply to this Project.

### *Local*

None that apply to this Project.

## IMPACT EVALUATION

- a) **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

Project Impact Analysis: *No Impact*

As discussed in the “Other Public Facilities” in the Section 3.14 Public Services, the proposed Project will not increase the demand for recreational facilities nor will it put a strain on the existing recreational facilities. Although approximately 13 employees will work at the proposed Project site, no population growth will be associated with the proposed Project or necessitated by the proposed Project as the employees are anticipated to be drawn from the local workforce. The only potential impact on recreational facilities may occur if construction workers decide to recreate at their own leisure outside of work hours. As noted earlier, the nearest County owned/operated park is Cutler County Park approximately 20 miles west of the proposed Project site. As such, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Therefore, there will be no impact to this resource.

Cumulative Impact Analysis: *No Impact*

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan 2030 Update Background Report, and/or Tulare County 2030 General Plan DEIR.

The nature of the proposed Project will not result in permanent population growth, as such, the proposed Project would not result in demands for additional or expansion of recreation-related facilities. As there are no other hotel (or motel) or other development proposals within the

vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

As such *Less Than Significant Impact Cumulative Impacts* related to this Checklist Item will occur.

Mitigation Measure(s): *None Required.*

Conclusion: *No Impact*

As noted earlier, *No Project-specific or Cumulative Impacts* related to this Checklist Item will occur.

**b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

Project Impact Analysis: *No Impact*

The proposed Project does not include recreational facilities. As there is no population growth associated with the proposed Project, there will be no need to construct or expand any recreational facilities as there would be no adverse physical effect on the environment; therefore, there would be impact to this resource.

Cumulative Impact Analysis: *No Impact*

As mentioned earlier, the nature of the proposed Project will not result in permanent population growth, as such, the proposed Project would not result in demands for additional or expansion of recreation-related facilities. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

Mitigation Measure(s): *None Required.*

Conclusion: *No Impact*

Compliance with the policies of the Tulare County General Plan and proposed Three Rivers Community Plan Update will reduce recreational impacts to *No Impact*.



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# Transportation

## Chapter 3.17

### SUMMARY OF FINDINGS

The proposed Project will result in a ***Less Than Significant Impact*** related to Transportation and Traffic. The “*Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020*” (TIS) report prepared by consultant VRPA Technologies, Inc., is included in Appendix “E” of this document which is used as the basis for determining this Project will result in Less Than Significant Impacts. A detailed review of potential impacts is provided in the following analysis.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Transportation and Traffic. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2 (a), “[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

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<sup>1</sup> CEQA Guidelines, Section 15126.2 (a).

The “Environmental Setting” provides a description of the Transportation and Traffic in the County. The “Regulatory Setting” provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, and/or Tulare County 2030 General Plan EIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

### Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist item questions. The following are potential thresholds for significance:

- Result in a Level of Service (LOS) less than “D”
- Unsafe roadway/circulation design
- Inadequate Access
- Need for additional Public Transit
- Need for additional Bike Facilities
- Need for additional Pedestrian Facilities

### Traffic Reports

Caltrans uses the following criterion as a starting point in determining when a TIS is needed for a project: <sup>2</sup>

1. Generates over 100 peak hour trips assigned to a State highway facility.
2. Generates 50 to 100 peak hour trips assigned to a State highway facility – and, affected State highway facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (LOS “C” or “D”).
3. Generates 1 to 49 peak hour trips assigned to a State highway facility – the following are examples that may require a full TIS or some lesser analysis:
  - a. Affected State highway facilities experiencing significant delay; unstable or forced traffic flow conditions (LOS “E” or “F”).
  - b. The potential risk for a traffic incident is significantly increased (i.e., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points, etc.).
  - c. Change in local circulation networks that impact a State highway facility (i.e., direct access to State highway facility, a non-standard highway geometric design, etc.).

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<sup>2</sup> Caltrans. 2002. Page 2. Guide for the Preparation of Traffic Impact Studies. [http://www.dot.ca.gov/hq/tpp/offices/ocp/igr\\_ceqa\\_files/tisguide.pdf](http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf)

## ENVIRONMENTAL SETTING

As noted in the “*Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020*” (TIS) report prepared by consultant VRPA Technologies, Inc., (included in Appendix “E” of this Draft EIR), “The Project seeks to develop a 105-room hotel to be located off of State Route (SR) 198 (Sierra Drive), approximately 1,100 feet north of Old 3 Rivers Road in the Three Rivers Community.”<sup>3</sup>

“Three Rivers is located in the Kaweah River canyon, just above Lake Kaweah, approximately 28 miles east of the City of Visalia. Three Rivers’ name comes from its location near the junction of the North, Middle, and South Forks of the Kaweah River. The surrounding terrain is marked by oak woodland forest and foothills. Three Rivers is located in the northern portion of Tulare County at an elevation of 825 feet above sea level with a total area of 45.4 square miles. Three Rivers is the gateway town for the Ash Mountain Main Entrance to Sequoia-Kings Canyon National Park, home of the Giant Sequoia trees.”<sup>4</sup>

Travel within Tulare County is a function of the size and spatial distribution of its population, economic activity, and the relationship to other major activity centers within the Central Valley (such as Fresno and Bakersfield) as well as more distant urban centers such as Los Angeles, Sacramento, and the Bay Area. In addition, there is considerable travel between the northwest portions of Tulare County and southern Fresno County and travel to/from Kings County to the west. Due to the interrelationship between urban and rural activities (employment, housing, services, etc.) and the low average density/ intensity of land uses, the private automobile is the dominant mode of travel for residents in Tulare County.”<sup>5</sup>

“Tulare County has two major regional highways, State Highway [State Route (SR)] 99 and 198. State Highway [SR] 99 connects Tulare County to Fresno and Sacramento to the north and Bakersfield to the south. State Highway [SR] 198 connects from U.S. Highway 101 on the west and continues eastward to Tulare County, passing through the City of Visalia and into Sequoia National Park. The highway system in the County also includes State highways, County-maintained roads, and local streets within each of the eight cities.”<sup>6</sup>

“Tulare County’s transportation system is composed of several State Routes, including three freeways, multiple highways, as well as numerous county and city routes. The County’s public transit system also includes two common carriers (Greyhound and Orange Belt Stages), the AMTRAK Service Link, other local agency transit and paratransit services, general aviation, limited passenger air service and freight rail service.”<sup>7</sup>

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<sup>3</sup> “*Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020*” (TIS) report. Page 1. Prepared by VRPA Technologies, Inc., (included in Appendix “E” of this Draft EIR).

<sup>4</sup> Ibid. 1.

<sup>5</sup> Tulare County General Plan Update 2030, Background Report. February 2010. Page 5-4. Accessed January 2021 at: <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>

<sup>6</sup> Tulare County General Plan 2030 Update. Page 13-2.

<sup>7</sup> Ibid. 5-4

“Some prominent county roadways include, but are not limited to, Alta Avenue (Road 80), Caldwell Avenue/Visalia Road (Avenue 280), Demaree Road/Hillman Street (Road 108), Tulare Avenue (Avenue 232), Olive Avenue (Avenue 152), Spruce Road (Road 204), El Monte Way (Avenue 416), Paige Avenue (Avenue 216), Farmersville Boulevard (Road 164), Road 192, and Road 152. Additionally, the highway system includes numerous county-maintained local roads, as well as local streets and highways within each of the eight cities and several unincorporated communities.”<sup>8</sup>

“Travel within Tulare County is a function of the size and spatial distribution of its population, economic activity, and the relationship to other major activity centers within the Central Valley (such as Fresno and Bakersfield) as well as more distant urban centers such as Los Angeles, Sacramento, and the Bay Area. In addition, there is considerable travel between the northwest portions of Tulare County and southern Fresno County and travel to/from Kings County to the west. Due to the interrelationship between urban and rural activities (employment, housing, services, etc.) and the low average density/ intensity of land uses, the private automobile is the dominant mode of travel for residents in Tulare County.”<sup>9</sup>

“The purpose of the highway, streets and roads section is to identify the existing regional circulation system and determine both feasible short-term and long-range improvements. Tulare County's planned circulation system consists of an extensive network of regional streets and roads, local streets and State Highways. The system is designed to provide an adequate [Level of Service] LOS that satisfies the transportation needs of County residents. However, Tulare County has experienced a large increase in population and is beginning to outgrow portions of the circulation system. The need for major improvements to the State Highways, streets and roads network is an important issue.

The existing State Highway system was completed in the 1950's and 60's. The average design life of a State Highway is approximately 20 years and many Tulare County's highways were constructed 50 years ago. The Agricultural and commercial industry continue to utilize the circulation system to get products to market. With industry intensification and other development, many facilities are beginning to show structural fatigue (e.g., surface cracks, potholes, and broken pavement).”<sup>10</sup>

“Caltrans and the Tulare County region will be placing more emphasis on corridors as an important element of the transportation system. The analysis of the regional circulation system in this 2018 RTP emphasizes people movement through transportation corridors. Caltrans defines a corridor as a "broad geographic area that includes various modes of transportation, local roads and State Highways." Corridors may be defined as terms of the number of people or tonnage of freight moved in any particular direction, regardless of the facility.

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<sup>8</sup> Op. Cit. 5-7.

<sup>9</sup> Op. Cit. 5-4.

<sup>10</sup> 2018 Regional Transportation Plan & Sustainable Communities Strategy, Tulare County Association of Governments (TCAG). Page B-50.  
<http://www.tularecog.org/RTPSCS/ActionElement.pdf>

Caltrans and the Tulare County region will be placing more emphasis on corridors as an important element of the transportation system. The analysis of the regional circulation system in this 2018 RTP emphasizes people movement through transportation corridors. Caltrans defines a corridor as a "broad geographic area that includes various modes of transportation, local roads and State Highways." Corridors may be defined as terms of the number of people or tonnage of freight moved in any particular direction, regardless of the facility.

Caltrans, Regional Transportation Planning Agencies (RTPAs), local transit agencies and local governments have developed the analysis of corridor needs. Caltrans developed a System Management Plan to reflect individual corridors and the relationship to each other. The emphasis on corridor planning will require open communication between the District and locals in order to develop a common database and consistent planning practices.

The 2018 RTP contains goals aimed at protecting and enhancing various corridors [see Figures A-2 and A-3 in the RTP for North/South and East-West Regional Corridors<sup>11</sup>; respectively]. The objective provides guidance toward coordination of local planning processes along the corridors. The policy supports limitation of direct access along regionally significant corridors. The data to be analyzed will include volume, length, type, destination, and modal split of person trips. Analysis of this data will help TCAG determine transportation corridor conditions and needs. In Tulare County major travel corridors often closely mirror regionally significant roadways. Major corridors identified by Caltrans and TCAG include:

- SR- 99 (including UP rail line);
- SR-43 (including BNSF rail line);
- City of Visalia to the City of Tulare including Mooney Boulevard, Demaree/Blackstone/Hillman, Akers Road and transit links;
- SR-65 from SR-198 to the City of Lindsay;
- City of Lindsay to City of Porterville, including SR-65 and Orange Belt Dr.;
- SR-65 from the City of Porterville to the Kern County line;
- SR-198/Sequoia National Park/Exeter/Hanford;
- SR-190/Road 152 from the Kings County line to the City of Porterville; and
- SR-137 from the Kings County line to the City of Lindsay.”<sup>12</sup>

“Tulare County has interregional connections along the SR 198 corridor with Kings County, SR 99 with Kern and Fresno County, and SR 65 with Kern County and Ave 416 with Fresno County. The main corridors are currently running at capacity or near capacity. TCAG has coordinated with surrounding counties to improve these significant corridors by way of Proposition 1B funds, and other local and state funds, the SR-198 corridor has been widened between the cities of Visalia and Hanford. Segments of SR-99 have begun widening at the north end of Tulare County. TCAG

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<sup>11</sup> Ibid. B-3 and B-4.

<sup>12</sup> Op. Cit. B-50 and B-51.

will continue to move forward on these major projects, in close partnership with Caltrans and neighboring jurisdictions.”<sup>13</sup>

As indicated in the 2018 RTP, capacity and level of service are two significant criteria used to measure the ability of a roadway to handle volume and the speed of volume flow; respectively. Following are discussion excerpted from the 2018 RTP:

#### “Capacity

According to the 2010 Highway Capacity Manual (HCM), capacity is defined as "the maximum sustainable hourly flow rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, environmental, traffic and control conditions, usually expressed as vehicles per hour or persons per hour." The ratio of the roadway volume to its capacity, V/C, can be useful in determining the preliminary Level of Service (LOS) of a roadway.

$\frac{V}{C}$  = Actual number of vehicles.  
Capacity = Maximum number of vehicles on a particular segment of roadway during a specific time frame.

#### Level of Service

LOS is categorized by two parameters, uninterrupted flow and interrupted flow. Uninterrupted flow facilities have no fixed elements, such as traffic signals, that cause interruptions in traffic flow (e.g., freeways, highways, and controlled access, some rural roads). Interrupted flow facilities have fixed elements that cause an interruption in the flow of traffic such as stop signs and signalized intersections. The definitions and measurements used for determining level of service in interrupted and uninterrupted conditions are shown below:

#### Uninterrupted Traffic Flow Facilities

LOS A: Describes free-flow operations. Free-Flow Speed (FFS) prevails on the freeway, and vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream. The effects of incidents or point breakdowns are easily absorbed.

LOS B: Represents reasonably free-flow operations, and FFS on the freeway is maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents and point breakdowns are still easily absorbed.

LOS C: Provides for flow with speeds near the FFS of the freeway. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the

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<sup>13</sup> Op. Cit. B-51.



part of the driver. Minor incidents may still be absorbed, but the local deterioration in service quality will be significant. Queues may be expected to form behind any significant blockages.

LOS D: At this level speeds begin to decline with increasing flows, with density increasing more quickly. Freedom to maneuver within the traffic stream is seriously limited and drivers experience reduced physical and psychological comfort levels. Even minor incidents can be expected to create queuing, because the traffic stream has little space to absorb disruptions.

LOS E: Describes operation at capacity. Operations on the freeway at this level are highly volatile because there are virtually no useable gaps within the traffic stream, leaving little room to maneuver within the traffic stream. Any disruption to the traffic stream, such as vehicles entering from a ramp or changing lanes, can establish a disruption wave that propagates throughout the upstream traffic flow. At capacity, the traffic stream has ability for serious breakdown and substantial queuing. The physical and psychological comfort afforded to drivers is poor.

LOS F: Describes breakdown, or unstable flow. Such conditions exist within queues forming behind bottlenecks. Breakdowns occur for a number of reasons:

Traffic incidents can temporarily reduce the capacity of a short segment, so that the number of vehicles arriving at a point is greater than the number of vehicles that can move through it.

Points of recurring congestion, such as merge or weaving segments and lane drops, experience very high demand in which the number of vehicles arriving is greater than the number of vehicles that can be discharged.

In analyses using forecast volumes, the projected flow rate can exceed the estimated capacity of a given location.

#### Interrupted Traffic Flow Facilities

LOS A: Describes operations with a control delay of 10 s/veh or less and a volume-to- capacity ratio no greater than 1.0. This level is typically assigned when the volume-to- capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B: Describes operations with a control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to- capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A, with reasonably unimpeded travel between intersections.

LOS C: Describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual cycle failures (i.e. one or more queued vehicles are not able to depart as a result of the insufficient capacity during the cycle) may begin to appear at this level.

The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping. May be longer queues and operations between locations may be more restricted.

LOS D: Describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. Travel speeds are about 40 percent below free flow speeds. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.

LOS E: Describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent. Average travel speed is one-third of free flow speeds. The facility is generally at full capacity.

LOS F: Describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue. Extremely slow speeds with average delay of 80 seconds or more. Frequent stop and go conditions.

Caltrans policy defines LOS D as an acceptable operating condition when planning for future state facilities in urbanized areas. TCAG monitors traffic levels of service on the regional roads. An LOS of D or better is the goal on urban roads, and C on rural roads.”<sup>14</sup>

While the private automobile is the dominant mode of travel within Three Rivers (with 83.4% of the working population using cars, truck, or vans), as it is throughout Tulare County, other modes of transportation are important. The 2019 Census Bureau survey (American Community Survey) estimate for Three Rivers indicates that 74.0% of commuters drive alone to work, while 26.0% used other means (that is, 4.5% carpooled or vanpooled; 1.5% walked; 0.6% bicycled; 1.5% used taxicab, motorcycle, or other means; and 16.6% worked at home).<sup>15</sup> The Census bureau does not collect data on non-work trips, which represent a greater share of travel than work trips, but tend to be less concentrated in peak traffic periods. Due to the COVID crises during 2020-2021, carpooling and working from home have changed from recent trends. This trend may be anomalous and future transportation modes may correct themselves and change over time. However, it is possible that working from home may become more prevalent depending upon the need/circumstances for owners/employees to work outside of their home.

### ***“Public Transit***

An inexpensive and clean alternative to adding additional lanes to highways, streets and roads is to provide mass transit systems. Transit service in the County is currently provided by both local

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<sup>14</sup> Op. Cit. B-7 through B-9.

<sup>15</sup> U.S. Census Bureau, 2019. American Community Survey (ACS). Commuting Characteristics by Sex. 2019 ACS 5-year Estimates. <https://data.census.gov/cedsci/all?q=Three%20Rivers,%20CA>

agencies and contracted private operators. Mass transportation is an economical mode of transportation. In Tulare County, all public mass transportation is provided by fixed route buses and dial-a-ride services that meet all reasonable needs in the region. Tulare County is not directly serviced by passenger rail facilities although it is accessible to Hanford's Amtrak station by bus. Furthermore, inter-agency transfer points are becoming part of Tulare County's overall circulation system, in an effort to coordinate transit systems between adjacent agencies. TCAG will be leading the development of the first-ever Tulare County Regional Long Range Transit Plan. The plan will begin in late 2014. Mass transportation provides transportation to large numbers of people to designated destinations by bus or train.

As noted in the TIS, "While congestion is not a major issue in the Three Rivers Community, overreliance on automobiles creates other costs for both society and households and means that many in the community who cannot drive (the young, the old, the disabled, the poor) must rely on those who can drive for their mobility. For this reason, it is important to encourage public transit systems and increased use of active modes of transportation, including bicycles and walking. The public transit system alternative for Three Rivers is a fixed route public transit system.

Investment in bikeways provides an inexpensive environment-friendly transportation opportunity. Bicycling is considered an effective alternative mode of transportation that can help to improve air quality and reduce the number of vehicles traveling along existing highways, especially within the cities and unincorporated communities. While the numbers of cyclists are small in comparison to the amount of auto traffic, the size of the Three Rivers Community means that most trips within the community can be comparable to using an automobile. Caltrans' SR- 198 Transportation Concept Report, dated June 2016, indicates that bike use is permitted along SR-198 throughout the Three Rivers Community. However, it should be noted that roadway shoulders along SR-198 are generally between 4 - 8 feet."<sup>16</sup>

In Tulare County, buses are the primary mode of public transportation. Fixed Route and Dial-A-Ride services are provided by Visalia Transit, Tulare Intermodal Express (TIME), Porterville Transit, Dinuba Transit, and Tulare County Area Transit (TCaT). The City of Woodlake also operates a Dial-a-Ride only service.

In 2016, Visalia Transit began the V-LINE- bus service between Visalia (from the transit center and Visalia Municipal Airport) to various locations in Fresno County (the Fresno Yosemite International Airport, California State University, Fresno, and Courthouse Park). Intercounty connections are also provided by Dinuba Transit (to Reedley) and TCaT (to Delano and Kingsburg).

Amtrak, California's only operating interregional passenger rail service, doesn't directly serve Tulare County. The closest Amtrak stations are in the Cities of Hanford and Corcoran in Kings County. However, Amtrak does coordinate with Visalia Transit to provide a feeder bus linking Visalia from the city's transit center with the Hanford Station in Kings County. Greyhound and Orange Belt Stages also operate in Tulare County.

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<sup>16</sup> "Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020" (TIS) report. Pages 12-13. Prepared by VRPA Technologies, Inc., (included in Appendix "E" of this Draft EIR).

Public transportation in Tulare County also takes the form of shared-ride companies, carpools, and vanpools. Fixed route transit is generally used in the more populated urban areas while demand responsive transit and blended paratransit are often used in rural areas and communities.

Several regional programs and service exist in Tulare County. All transit providers participate in the T-Pass, which provides unlimited monthly fixed route rides, College of Sequoias Student Pass, which provided unlimited fixed route rides for students with their paid student fees, and the Greenline call center.

Mass transportation has the capability to reduce a large number of single vehicle occupancy trips and reduce emissions. All fixed-route providing public transit agencies in Tulare County have fleets of Compressed Natural Gas (CNG) vehicles and CNG fueling stations. Porterville and Visalia have begun procurement of electric buses that are scheduled to operational in 2018.

Goals for all transit agencies are to integrate transit into the growth and development of their cities and communities. As developments and road designs occur, transit shall be integrated when possible. High and medium density neighborhoods, commercial, medical, educational, and employment areas can all benefit from transit. Arterials and transit friendly corridors should be identified in cities and communities to serve the anticipated population growth to become transit users or transit dependent. Transit Plans and General Plans shall determine the feasibility and steps to implement express bus service and bus rapid transit, where demands exist or will exist in the future.”<sup>17</sup>

“Social service transportation in Tulare County is being guided in a direction consistent with the Social Service Improvement Act of 1979 (AB 120). The law was enacted to promote the consolidation of such transportation services. The Act was established to improve efficient social service transportation by:

- Combining purchasing of necessary equipment
- Ensuring adequate training of vehicle drivers for reduced insurance rates
- Centralized dispatching of vehicles
- Centralized maintenance of vehicles
- Centralized administration
- Identification and consolidation of all existing sources of funding.

In Tulare County, social service transportation is provided by the following: local transit agencies, demand responsive operators and city/county special programs, Veterans’ programs, mental health organizations, programs for senior, and more. TCAG reaches out to transportation providers identified in the Coordinated Public Transit – Human Services Transportation Plan and ensures

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<sup>17</sup> Op. Cit. B-51 and B-52.

that calls for projects are communicated with social service providers. Many of these programs are funded and subsidized through state and federal grants.”<sup>18</sup>

“Public transportation provides an economical and efficient alternative for getting people to work, school and other chosen destinations. In Tulare County, buses are the primary mode of public transportation. Public transportation also takes the form of shared ride taxi, automobile and vanpools; dial-a-ride, and specialized handicapped accessible services. In Tulare County, social service transportation is provided by the following: local transit agencies, demand responsive operators and city/county special programs for senior citizens, mental health organizations and disabled citizens programs. These programs are funded and subsidized through State and federal grants, Local Transportation Funds (LTF), State Transit Assistance Funds (STAF), and local transportation sales tax revenues.”<sup>19</sup>

“Tulare County has two major regional highways, State Highway [State Route] 99 and 198. State Highway [State Route] 99 connects Tulare County to Fresno and Sacramento to the north and Bakersfield to the south. State Highway [State Route] 198 connects from U.S. Highway 101 on the west and continues eastward to Tulare County, passing through the City of Visalia and into Sequoia National Park. The highway system in the County also includes State highways, County-maintained roads, and local streets within each of the eight cities.”<sup>20</sup>

“Tulare County’s transportation system is composed of several State Routes, including three freeways, multiple highways, as well as numerous county and city routes. The county’s public transit system also includes two common carriers (Greyhound and Orange Belt Stages), the AMTRAK Service Link, other local agency transit and Para transit services, general aviation, limited passenger air service and freight rail service.”<sup>21</sup>

“Travel within Tulare County is a function of the size and spatial distribution of its population, economic activity, and the relationship to other major activity centers within the Central Valley (such as Fresno and Bakersfield) as well as more distant urban centers such as Los Angeles, Sacramento, and the Bay Area. In addition, there is considerable travel between the northwest portions of Tulare County and southern Fresno County and travel to/from Kings County to the west. Due to the interrelationship between urban and rural activities (employment, housing, services, etc.) and the low average density/ intensity of land uses, the private automobile is the dominant mode of travel for residents in Tulare County.”<sup>22</sup>

“Public transportation provides an economical and efficient alternative for getting people to work, school and other chosen destinations. In Tulare County, buses are the primary mode of public transportation. Public transportation also takes the form of shared ride taxi, automobile and vanpools; dial-a-ride, and specialized handicapped accessible services. In Tulare County, social service transportation is provided by the following: local transit agencies, demand responsive

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<sup>18</sup> Op. Cit. B-52 and B-53.

<sup>19</sup> Tulare County General Plan 2030 Update Background Report. Page 1-14.

<sup>20</sup> Ibid. 13-2.

<sup>21</sup> Op. Cit. 5-4.

<sup>22</sup> Op. Cit. 5-4.

operators and city/county special programs for senior citizens, mental health organizations and disabled citizens programs. These programs are funded and subsidized through State and federal grants, Local Transportation Funds (LTF), State Transit Assistance Funds (STAF), and local transportation sales tax revenues.”<sup>23</sup>

### Airport

“There are nine public use airports in Tulare County. These include six publicly owned and operated facilities (Porterville Municipal, Sequoia Field, Tulare Municipal [Mefford Field], Visalia Municipal, Woodlake, and Harmon Field [currently closed]) and three privately owned and operated airports (Alta Airport [currently closed], Thunderhawk Field, and Eckert Field). Badger Field is under consideration for Federal Aviation Administration (FAA) recertification as a restricted private airfield (as of August 2006).”<sup>24</sup>

### Design for Emergency Access

According to § 21060.3 and § 15359 of the CEQA Guidelines, an “Emergency” means a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. “Emergency” includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage. A Proposed Project could potentially generate impacts through inadequate design for emergency access.

### Alternative Transportation/Tulare County Area Transit (TCaT)

“Tulare County Area Transit (TCaT) Route 30 (Northeast County Route) operates between the Three Rivers Memorial Building and the Visalia Transit Center in downtown Visalia. Route 30 provides 4 roundtrips to the Visalia Transit Center on weekdays and 1 roundtrip on the weekend, all at 4-hour intervals. At the Visalia Transit Center, transfers can be made to connect to remainder of Visalia, as well as the City of Tulare, and the smaller cities and communities in the County served by the TCaT fixed route transit system. Visalia transit vehicles are wheelchair accessible and all full-size buses include bike racks.

The Sequoia Shuttle, which operates from May to September, offers approximately five (5) daily trips to the Sequoia National Park. The shuttle departs from various convenient locations throughout Visalia, Exeter, and Three Rivers, Ca.”<sup>25</sup>

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<sup>23</sup> Op. Cit. 1-14.

<sup>24</sup> Op. Cit. 13-2.

<sup>25</sup> “Three Rivers Hampton Inn & Suites Traffic Impact Study. June 2020” (TIS) report. Pages 13. Prepared by VRPA Technologies, Inc., (included in Appendix “E” of this Draft EIR).

### Traffic Impact Study Requirement

As it was anticipated that the proposed Project would generate more than 100 peak hour trips, it was determined that a traffic impact study was required. “The following criterion is a starting point in determining when a TIS is needed. When a project:

1. Generates over 100 peak hour trips assigned to a State highway facility
2. Generates 50 to 100 peak hour trips assigned to a State highway facility – and, affected State highway facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (LOS “C” or “D”).
3. Generates 1 to 49 peak hour trips assigned to a State highway facility – the following are examples that may require a full TIS or some lesser analysis<sup>4</sup>:
  - a. Affected State highway facilities experiencing significant delay; unstable or forced traffic flow conditions (LOS “E” or “F”).
  - b. The potential risk for a traffic incident is significantly increased (i.e., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points, etc.).
  - c. Change in local circulation networks that impact a State highway facility (i.e., direct access to State highway facility, a non-standard highway geometric design, etc.).”<sup>26</sup>

## **REGULATORY SETTING**

### ***Federal Agencies & Regulations***

None that apply to the proposed Project.

### ***State Agencies & Regulations***

#### Caltrans: Transportation Concept Reports

Caltrans has prepared a number concept reports for State Routes, Interstate Routes, and U.S. Routes. Tulare County is located in Caltrans District 6. As identified in the TIS, “Caltrans’ SR-198 Transportation Concept Report (TCR) identifies the 2040 concept as LOS “D”.<sup>27</sup> “Given the LOS standards of the various agencies in the Project area, the goal of the Project is to provide LOS results that meet the minimum LOS “C” for Caltrans facilities and LOS “D” for County facilities for all intersections and segments. However, due to the location of the Kaweah River and topographical challenges, Caltrans’ SR-198 Transportation Concept Report (TCR) identifies the 2040 concept as LOS “D”. This target level of service is consistent with the Tulare County General Plan minimum LOS standard of “D”. Caltrans District 6 staff confirmed by email on September

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<sup>26</sup> Guide for the Preparation of Traffic Impact Studies. California Department of Transportation., December 2002. Page 2.  
[http://www.dot.ca.gov/hq/tpp/offices/ocp/igr\\_ceqa\\_files/tisguide.pdf](http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf)

<sup>27</sup> “Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020” (TIS) report. Pages E-2. Prepared by VRPA Technologies, Inc., (included in Appendix “E” of this Draft EIR). Page E-2.

6, 2016 that “reference to the 2040 concept with a LOS D means that Caltrans will accept LOS “D” on this segment of SR 198 in 2040. This TIS, therefore, will utilize a minimum LOS standard of “D” for the County and Caltrans on SR 198 in the Three Rivers Urban Development Boundary (UDB).”<sup>28</sup> Results of the analysis show that the proposed Project will not exceed the minimum LOS standard of “D” as shown in Tables 2-1 and 3-2 [in the TIS].”<sup>29</sup> Additional elaboration is included at the discussion of Item 17 a) of this Chapter

#### Caltrans Guide for the Preparation of Traffic Impact Studies

“The California Department of Transportation (Caltrans) has developed this "Guide for the Preparation of Traffic Impact Studies" in response to a survey of cities and counties in California. The purpose of that survey was to improve the Caltrans local development review process (also known as the Intergovernmental Review/California Environmental Quality Act or IGR/CEQA process). The survey indicated that approximately 30 percent of the respondents were not aware of what Caltrans required in a traffic impact study (TIS).”<sup>30</sup> As identified on page one of the Traffic Study for the Project, the scope of the study is based on the guidelines contained in Caltrans’ Guide for the Preparation of Traffic Impact Studies.

#### ***Local Policy & Regulations***

##### Tulare County Transportation Control Measures (TCM)

“Transportation Control Measures (TCM) are designed to reduce vehicle miles traveled, vehicle idling, and/or traffic congestion in order to reduce vehicle emissions. Currently, Tulare County is a nonattainment region under the Federal Clean Air Act (CAA) and the California Clean Air Act (CCAA). Both of these acts require implementation of TCMs. These TCMs for Tulare County are as follows:

- Rideshare Programs;
- Park and Ride Lots;
- Alternate Work Schedules;
- Bicycle Facilities;
- Public Transit;
- Traffic Flow Improvement; and
- Passenger Rail and Support Facilities.”<sup>31</sup>

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<sup>28</sup> Ibid. 5.

<sup>29</sup> Op. Cit. 24.

<sup>30</sup> Guide for the Preparation of Traffic Impact Studies, California Department of Transportation, December 2002. Page ii.

<sup>31</sup> Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report. Page 3.2-2.



Tulare County Association of Governments (TCAG)

“The circulation system in Tulare County plays a significant role in the economy by moving goods and people. A rural region, Tulare County is dependent on local highways, streets, roads, and railways to meet basic transportation needs. Goods movement is specifically dependent on road conditions and capacity.”<sup>32</sup> “TCAG’s outreach for the 2018 Regional Transportation Plan included, for the first time, the establishment of a Regional Transportation Plan Roundtable. The RTP Roundtable membership includes 27 positions from varied sectors of the region, including, but not limited to, representatives of Affordable Housing, Disabled Access, Agriculture, Public Transportation, Goods Movement, Building and Development...”<sup>33</sup> “Major generators of goods movement in the region include agriculture, but increasingly, a diversified range of raw materials and products are also generating trips on the network and rail system. In an agriculturally based economy, much of the goods movement would be “seasonal”; in a diversified economy, the flow of goods is year round. The impacts from heavy duty trucks are disproportionately higher within the San Joaquin Valley. High truck volumes such as those found in Tulare County cause higher maintenance costs due to reduced pavement life. Level-of-service (LOS) is also reduced due to increased truck proportions. Safety is reduced due to conflicts with passenger vehicles as well as pavement failures. Other types of economic losses in the form of damaged produce occur as a result of congestion, diminished air quality and pavement failure. All of these factors, as well as others, lead to a strong case of increased funding for maintenance and rehabilitation, as well as geometric and capacity improvements to accommodate truck operations.”<sup>34</sup>

The specific RTP policies that apply to the proposed Project are as follows:

**“COMPREHENSIVE**

**GOAL: PROVIDE AN EFFICIENT, INTEGRATED, MULTI-MODAL TRANSPORTATION SYSTEM FOR THE MOVEMENT OF PEOPLE AND GOODS THAT ENHANCES THE PHYSICAL, ECONOMIC, AND SOCIAL ENVIRONMENT IN THE TULARE COUNTY REGION.**

**Objective:** Encourage and support a connected and multi-modal regional circulation network that is convenient, safe, and efficient.

**Policies:**

1. Encourage jurisdictions in Tulare County to consider bicycle lanes, public transit, transit-oriented and mixed-use development, pedestrian networks, rail and other complete streets development during updates of general plans and other local planning processes.

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<sup>32</sup> 2018 Regional Transportation Plan & Sustainable Communities Strategy, Tulare County Association of Governments (TCAG). Page B-1. Accessed January 2020 at: <http://www.tularecog.org/RTPSCS/ActionElement.pdf>.

<sup>33</sup> Ibid. A-3. Accessed January 2020 at: <http://www.tularecog.org/RTPSCS/PolicyElement.pdf>

<sup>34</sup> Ibid. B-65. Accessed January 2020 at: <http://www.tularecog.org/RTPSCS/PolicyElement.pdf>

2. Implement a Complete Streets Program whereby agencies will prepare plans to accommodate all transportation users, including pedestrians, bicyclists, transit riders, and motor vehicle operators and riders, and utilize existing revenue and other funding sources to coordinate with local agencies to implement those plans as aggressively as feasible.
3. Provide for continued coordination and evaluation of the planned circulation system among cities and the county.
4. Make existing road and bridge maintenance a high priority.”<sup>35</sup>

### ***“GOODS MOVEMENT***

GOAL: PROVIDE A TRANSPORTATION SYSTEM THAT EFFICIENTLY AND EFFECTIVELY TRANSPORTS GOODS TO, FROM, WITHIN, AND THROUGH TULARE COUNTY.

Objective: Encourage the interaction of truck, rail, and air freight transportation.

Policies:

1. Work with Caltrans and adjacent regions in the development of intermodal corridors.
2. Include comprehensive goods movement planning in the RTP.
3. Implement the San Joaquin Valley Goods Movement Plan.

GOAL: IMPROVE GOODS MOVEMENT WITHIN THE REGION TO INCREASE ECONOMIC VITALITY, MEET THE GROWING NEEDS OF FREIGHT AND PASSENGER SERVICES, AND IMPROVE TRAFFIC SAFETY, AIR QUALITY, AND OVERALL MOBILITY.

Objective: Support an efficient truck transportation system.

Policy:

1. Give special consideration to transportation projects that improve air quality and the operational efficiency of goods movement.
2. Explore the possibility of a zero emission freight corridor on SR 99 utilizing a catenary hybrid-electric system through a Valley-wide feasibility study.”<sup>36</sup>

### ***“REGIONAL ROADS AND CORRIDORS***

GOAL: PRESERVE AND ENHANCE REGIONAL TRANSPORTATION ROADS AND CORRIDORS.

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<sup>35</sup> Ibid. A-3 and A-4. At: <http://www.tularecog.org/RTPSCS/PolicyElement.pdf>

<sup>36</sup> Op. Cit. A-10 and A-11.

Objective: Coordinate local and regional planning of new development that minimizes and/or mitigates impacts along regional corridors.

Policy:

1. Support development that identifies and implements transportation network improvements to maintain or improve the existing transportation system condition and efficiency.

Objective: Evaluate and consider current and future congestion conditions on the regional road network when investing in the transportation system.

Policies:

1. Support improvements of critical segments and interchanges along the State Highway System.
2. Encourage frontage roads along state highways, where appropriate.
3. Support improvements on regional roads to include safe accessibility for active modes of transportation.

Objective: Consider safety, efficiency, and connectivity when investing in the regional road network.

Policies:

1. Improve safety and capacity of vital east-west corridors.
2. Encourage restriction of direct access along regionally significant corridors by limiting the spacing of signalized intersections to 1/2-mile intervals and interchanges to one mile

#### Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed below.

**TC-1.13 Land Dedication for Roadways and Other Travel Modes** - As required by the adopted County Improvement Standards, the County shall require, where warranted, an irrevocable offer of dedication to the right-of-way for roadways and other travel modes, as part of the development review process.

**TC-1.14 Roadway Facilities** - As part of the development review process, new development shall be conditioned to fund, through impact fees, tonnage fees, and/or other mechanism, the construction and maintenance of roadway facilities impacted by the project. As projects or locations warrant, construction or payment of pro-rata fees for planned road facilities may also be required as a condition of approval.

**TC-1.15 Traffic Impact Study** - The County shall require an analysis of traffic impacts for land development projects that may generate increased traffic on County roads. Typically, applicants of projects generating over 100 peak hour trips per day or where LOS “D” or worse occurs, will be required to prepare and submit this study. The traffic impact study will include impacts from all vehicles, including truck traffic.

**TC-1.16 County Level Of Service (LOS) Standards** - The County shall strive to develop and manage its roadway system (both segments and intersections) to meet a LOS of “D” or better in accordance with the LOS definitions established by the Highway Capacity Manual.

**HS-1.9 Emergency Access** - The County shall require, where feasible, road networks (public and private) to provide for safe and ready access for emergency equipment and provide alternate routes for evacuation.

#### Three Rivers Community Plan 2018 Update

The Three Rivers Community Plan 2018 Update contains Objectives/Tactics<sup>37</sup> that may be applicable to this proposed Project. It is noted that the entirety of an Objective/Tactic may not apply to the proposed Project. Some Objectives/Tactics contain some elements that would apply and others that may not or are not feasible due to physical constraints or jurisdiction by a non-Tulare County entity (e.g., Caltrans) where the County has no jurisdiction and does not have the authority to make policy decisions. Following are some Objectives/Tactics that may apply to the proposed Project: **Objective 1:** Design and implement a multi - modal transportation system that will serve projected future travel demand, minimize congestion, and address future growth in Three Rivers; **Objective 4:** Ensure the provision of adequate off- street parking for all land uses; **Objective 10:** Support the use of Transportation Demand Management (TDM) strategies to reduce dependence on the single - occupant vehicle, increase the ability of the existing transportation system to carry more people, and enhance mobility along congested corridors.

## IMPACT EVALUATION

### Would the project:

- a) **Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?**

Project Impact Analysis:

***Less Than Significant Impact***

As noted earlier, the proposed Project seeks to develop a 105-room hotel to be located off of State Route (SR) 198 (Sierra Drive), approximately 1,100 feet north of Old 3 Rivers Road in

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<sup>37</sup> Three Rivers Community Plan 2018 Update. Pages 320-321, 322, and 325. Accessed at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>

the Three Rivers Community. As indicated in the TIS, “The Project will have one (1) driveway along SR 198, approximately 1,100 feet to the north of Old 3 Rivers Road.”<sup>38</sup>

Caltrans provide guidance regarding the contents of a TIS, stating that at a minimum, the TIS should include the boundaries of the Traffic Impact Study; a Traffic Analysis Screening; Traffic Data (including trip generation, traffic counts, peak hours (a.m. and p.m.), and travel forecasting (i.e., transportation/traffic modeling); Traffic Impact Analysis Methodologies; and Mitigation Measures.<sup>39</sup> Consultant VRPA Technologies, Inc. (VRPA) prepared the TIS for the proposed Project consistent with Caltrans guidelines as shown in the TIS (included in Appendix “E” of this Draft EIR).

As indicated in the TIS, the intersections that were analyzed for the proposed Project were SR 198/and Project Driveway; and SR 198 and Old Three Rives Road.<sup>40</sup> In addition, the TIS analyzed the LOS (level of service) for the following traffic scenarios:

- Existing (i.e. existing conditions, also known as the baseline)
- Existing Plus Project (baseline + Project)
- Near-Term Plus Project (Year 2022 + Project)
- Cumulative Year 2042 Without Project (baseline forecasted to Year 2042)
- Cumulative Year 2042 Plus Project<sup>41</sup> (baseline + Project forecasted to Year 2042)<sup>42</sup>

### ***Methodology***

As indicated in the TIS, a specific methodology determined by affected agencies (for example, Caltrans’ guidance). As such, the TIS notes, “When preparing a TIS, guidelines set by affected agencies are followed. In analyzing street and intersection capacities the Level of Service (LOS) methodologies are applied. LOS standards are applied by transportation agencies to quantitatively assess a street and highway system’s performance. In addition, safety concerns are analyzed to determine the need for appropriate mitigation resulting from increased traffic near sensitive uses and other evaluations such as the need for signalized intersections or other improvements.”<sup>43</sup>

### ***Intersection Analysis***

“Intersection LOS analysis was conducted using the Synchro 10 software program. Synchro 10 supports the Highway Capacity Manual (HCM) 6th Edition methodologies and is an acceptable program by Tulare County and Caltrans staff for assessment of traffic impacts.

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<sup>38</sup> “Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020” (TIS) report. Page 1. Prepared by VRPA Technologies, Inc., (included in Appendix “E” of this Draft EIR).

<sup>39</sup> Page 4-6. [https://nacto.org/wp-content/uploads/2015/04/guide\\_preparation\\_traffic\\_impact\\_studies\\_caltrans.pdf](https://nacto.org/wp-content/uploads/2015/04/guide_preparation_traffic_impact_studies_caltrans.pdf)

<sup>40</sup> “Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020” (TIS) report. Page 8. Prepared by VRPA Technologies, Inc., (included in Appendix “E” of this Draft EIR).

<sup>41</sup> Ibid.

<sup>42</sup> Op. Cit.

<sup>43</sup> Op. Cit. 4.

Levels of Service can be determined for both signalized and unsignalized intersections. The existing study intersections are currently unsignalized.

Tables 1-1 [in the TIS] indicates the ranges in the amounts of average delay for a vehicle at unsignalized intersections for the various levels of service ranging from LOS “A” to “F”.

Intersection turning movement counts and roadway geometrics used to develop LOS calculations were obtained from field review findings and count data provided from the traffic count sources identified in Section 2.1. [in the TIS].

When an unsignalized intersection does not meet acceptable LOS standards, the investigation of the need for a traffic signal shall be evaluated. The California Manual on Uniform Traffic Control Devices (California MUTCD) introduces standards for determining the need for traffic signals. The California MUTCD indicates that the satisfaction of one or more traffic signal warrants does not in itself require the installation of a traffic signal. In addition to the warrant analysis, an engineering study of the current or expected traffic conditions should be conducted to determine whether the installation of a traffic signal is justified. The California MUTCD Peak Hour Warrant (Warrant 3) will be used, as necessary, to determine if a traffic signal is warranted at the unsignalized intersection that falls below current LOS standards.”<sup>44</sup>

### ***Policies to Maintain Level of Service***

Earlier, this section contains a discussion regarding level of service (LOS). LOS is categorized by two parameters, *uninterrupted flow* and *interrupted flow*. *Uninterrupted flow* facilities have no fixed elements, such as traffic signals, that cause interruptions in traffic flow (e.g., freeways, highways, and controlled access, some rural roads). *Interrupted flow* facilities have fixed elements that cause an interruption in the flow of traffic such as stop signs and signalized intersections. “An important goal is to maintain acceptable levels of service along the highway, street, and road network. To accomplish this, Tulare County and Caltrans adopt minimum levels of service in an attempt to control congestion that may result as new development occurs.

Tulare County’s 2030 General Plan, policy number TC-1.16, identifies a minimum LOS standard of D on the County roadway system (both segments and intersections).

Based on guidance from Caltrans, the LOS for operating State highway facilities is based on Measures of Effectiveness (MOE) identified in the Highway Capacity Manual (HCM). Caltrans endeavors to maintain a target LOS at the transition between LOS “C” and LOS “D” on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than this target LOS, the existing MOE should be maintained. In general, the region-wide goal for an acceptable LOS on all freeways, roadways segments, and intersections is “D”. For undeveloped or not densely developed locations, the goal may be to achieve LOS “C”.

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<sup>44</sup> Op. Cit.

Given the LOS standards of the various agencies in the Project area, the goal of the Project is to provide LOS results that meet the minimum LOS “C” for Caltrans facilities and LOS “D” for County facilities for all intersections and segments. However, due to the location of the Kaweah River and topographical challenges, Caltrans’ SR-198 Transportation Concept Report (TCR) identifies the 2040 concept as LOS “D”. This target level of service is consistent with the Tulare County General Plan minimum LOS standard of “D”. Caltrans District 6 staff confirmed by email on September 6, 2016 that “reference to the 2040 concept with a LOS D means that Caltrans will accept LOS “D” on this segment of SR 198 in 2040”. This TIS, therefore, will utilize a minimum LOS standard of “D” for the County and Caltrans on SR 198 in the Three Rivers Urban Development Boundary (UDB).”<sup>45</sup>

### ***Existing Traffic Counts and Roadway Geometrics***

“The first step toward assessing Project traffic impacts is to assess existing traffic conditions. Typically, existing peak hour counts are collected in the study area for purposes of evaluating existing conditions. However, the present COVID-19 pandemic has altered travel patterns in the State of California, especially with the closure of the Sequoia-Kings Canyon National Park. As a result, existing traffic counts would be skewed and wouldn’t reflect typical travel patterns in the study area. 2018 Traffic counts in the study area were used to evaluate existing traffic conditions in this traffic analysis. Intersection turning movement counts conducted for the Saturday and Sunday peak hour periods on February 3, 2018 and February 4, 2018, were used and are provided in Appendix B [of the TIS].

Due to the Project’s proximity to Sequoia National Park, a seasonal adjustment factor was applied to the traffic counts as described above. The region sees significantly larger volumes of traffic during the summer months due to tourists/visitors of Sequoia National Park. In consultation with Caltrans staff, a seasonal growth factor of 1.76 was applied to the existing traffic counts to account for the increase in traffic in Three Rivers during the summer months. In addition, a growth rate of 1.3% per year was applied to the counts to estimate Year 2020 traffic volumes in the study area. Historical growth in Tulare County is approximately 1.3% based on population trends as forecasted in the Tulare County General Plan 2030 Update.”<sup>46</sup>

### ***Existing Functional Roadway Classification System***

The Three Rivers Community is not the typical, valley-floor, topographical roadway network. As such, the TIS provides a discussion of the existing functional roadway system found in Three Rivers. The TIS states, “Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the type of service they are intended to provide. Fundamental to this process is the recognition that individual streets and highways do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads.

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<sup>45</sup> Op. Cit. 4-5.

<sup>46</sup> Op. Cit. 6.

The following are general descriptions of the roadway types shown in the Three Rivers Community:

- State Freeways and Highways – There is one state facility serving the Three Rivers Community Area, State Highway 198. The segment of State Highway 198 (Sierra Drive), which passes through the Planning Area, is classified as a principal arterial.
- Collectors – Five (5) roads within the Three Rivers Community area are currently designated as county collector roads. Those roads include, North Fork Drive, Dinely Drive, Kaweah Drive, South Fork Drive, Mineral King Road. The primary function of collector roads is to collect and distribute traffic between local streets and the arterial roadway system. They generally provide access and movement between residential, commercial, and industrial areas.
- Local Streets – Roadways which provide access to individual homes and businesses. Local streets have one lane in each direction. Local streets connect single family homes and other uses to the arterial-collector network. All of the roadways in the Three Rivers Community that are not listed above would be classified as local streets.”<sup>47</sup>

### ***Affected Streets and Highways***

“Major street and highway intersections and segments in the Three Rivers Community were analyzed to determine levels of service utilizing HCM-based methodologies described previously. The study intersections and street and highway segments included in this TIS are listed below.

#### **Intersections**

- SR 198 (Sierra Drive) and Project Driveway
- SR 198 (Sierra Drive) and Old 3 Rivers Road

The existing lane geometry at study area intersections are shown in Figure 2-1. Existing study intersections are currently unsignalized. Figure 2-2 shows existing traffic volumes for the Saturday and Sunday Middy and PM peak hours in the study area.”<sup>48</sup>

### ***Intersecting Capacity Analysis***

“All intersection LOS analyses were estimated using the Synchro 10 software program. Various roadway geometrics, traffic volumes, and properties (peak hour factors, storage pocket length, etc.) were input into the Synchro 10 software program in order to accurately determine the travel delay and LOS for each Study scenario. The intersection LOS and delays reported represent the HCM 6<sup>th</sup> Edition outputs. Synchro assumptions, listed below, show the various Synchro inputs and methodologies used in the analysis.

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<sup>47</sup> Op. Cit. 7-8.

<sup>48</sup> Op. Cit. 8.



➤ Traffic Conditions

- The peak hour factor (PHF) used for Existing, Existing Plus Project, and Near-Term Plus Project conditions was determined from the existing counts. The HCM peak hour default value of 0.92 was used for the Cumulative Year 2042 scenarios unless the existing PHF is above 0.92.
- Heavy vehicle percentages were applied as follows and are based on the HCM default, traffic counts, or Caltrans' parameters:
  - State Highway 198 – 9% (Caltrans' TCR shows 9% truck trips in the study area except between Mineral King Road and Sequoia Park, which is 6%)
  - All other roadways – 3%.

Results of the analysis show that all of the study intersections are currently operating at acceptable levels of service during the Saturday and Sunday peak hours. Table 2-1 [in the TIS, **Table 3.17-1** in this Draft EIR] shows the intersection LOS for the existing conditions. Synchro 10 (HCM 6<sup>th</sup> Edition) Worksheets are provided in Appendix C [of the TIS].”<sup>49</sup>

Table 3.17-1 Existing Intersection Operations						
Intersection	Control	Target LOS	Peak Hour		Existing	
					Delay	LOS
SR 198/Sierra Drive - Project Driveway	One-Way Stop Sign	D	Saturday	Midday	12.2	B
				PM	9.8	A
			Sunday	Midday	12.9	B
				PM	11.4	B
SR 198/Sierra Drive - Old Three Rivers Road	One-Way Stop Sign	D	Saturday	Midday	14.3	B
				PM	13.5	B
			Sunday	Midday	14.8	B
				PM	12.3	B
DELAY is measured in seconds LOS = Level of Service For one-way controlled intersections, delay results show the delay for the worst movement.						

### Queuing Analysis

A concern raise throughout public meetings held during development of the Three Rivers Community Plan 2018 Update, was a queuing (essentially ) and duration of waiting to turn unto, out of, or across SR 198 and how queuing/waiting would be impacted over time due to development. In regards to the proposed Project, VRPA conducted a queuing analysis. As shown in the TIS, “Table 2-2 [in the TIS, **Table 3.17-2** in this Draft EIR] provides a queue length summary for study intersections for the Existing scenario. Traffic queue lengths at an intersection or along a roadway segment assist in the determination of a roadways overall

<sup>49</sup> Op. Cit.

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performance. Excessive queuing at an intersection increases vehicle delay and reduces capacity. The queuing analyses is based upon methodology presented in Chapter 400 of Caltrans' Highway Design Manual (HDM), which is included in Appendix D [of the TIS]. The queue results shown in Table 2-2 [in the TIS, **Table 3.17-2** in this Draft EIR] represent the approximate queue lengths for the respective lane movements.”<sup>50</sup>

<b>Table 3.17-2 Existing Queuing Operations</b>						
<b>Intersection</b>	<b>Existing Queue Storage Length (ft.)</b>		<b>Saturday</b>		<b>Sunday</b>	
			<b>Midday Queue</b>	<b>PM Queue</b>	<b>Midday Queue</b>	<b>PM Queue</b>
SR 198/Sierra Drive - Project Driveway	WB Approach	--	1	1	2	2
SR 198/Sierra Drive - Old Three Rivers Road	WB Approach	325	44	22	37	23
<i>DELAY is measured in seconds LOS = Level of Service For one-way controlled intersections, delay results show the delay for the worst movement.</i>						

### ***Trip Generation***

“To assess the impacts that the Project may have on the surrounding street and highway segments and intersections, the first step is to determine Project trip generation. Project trip generation was determined using trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition). Trips associated with the Project were derived from the Hotel (310) Land Use in the ITE Trip Generation Manual.

The considerations described above led to the recommended trip generation for both Saturday and Sunday Midday and PM peak hours shown in Table 3-1 [in the TIS, **Table 3.17-3** in this Draft EIR]. The peak hour trips for Saturday and Sunday identified in Table 3-1 [in the TIS, **Table 3.17-3** in this Draft EIR] below were applied to the Midday and PM peak hour time periods.”<sup>51</sup>

Table 3.17-3 Project Trip 105 Room Hampton Inn & Suites Hotel													
Saturday Daily Trip Ends	ADT	Saturday Peak Hour of Generator					Sunday Daily Trip Ends	ADT	Sunday Peak Hour of Generator				
Rate	Volume	Rate	In:Out Split	Volume			Rate	Volume	Rate	In:Out Split	Volume		
				In	Out	Total					In	Out	Total
8.19	860	0.72	56:44	43	33	76	5.95	625	0.56	46:54	27	32	59
Total Trip Generation	860			43	33	76		625			27	32	59

<sup>50</sup> Op. Cit. 11.

<sup>51</sup> Op. Cit. 14

### ***Trip Distribution and Project Traffic***

“Project trip distribution is shown in Figure 3-1 [in the TIS, **Figure 3.17-1** in this Draft EIR] and is based upon engineering judgement, prevailing traffic patterns in the study area, complementary land uses, major routes, population centers, and a review of data available in the Tulare County General Plan. The Project will have one (1) driveway along SR 198 (Sierra Drive), approximately 1,100 feet to the north of Old 3 Rivers Road.”<sup>52</sup> “Project traffic as shown in Table 3-1 [in the TIS, **Table 3.17-3** in this Draft EIR] was distributed to the roadway system using the trip distribution percentages shown in Figure 3-1 [in the TIS, **Figure 3.17-1** in this Draft EIR]. A graphical representation of the resulting noon and PM peak hour Project trips used is shown in Figure 3-2 [in the TIS, **Figure 3.17-2** in this Draft EIR].”<sup>53</sup>

### ***Existing Plus Project Traffic Conditions***

“An Existing Plus Project Scenario was analyzed to include existing traffic plus traffic generated by development of the Project. The resulting traffic is shown in Figure 3-3 [in the TIS, **Figure 3.17-3** in this Draft EIR].”<sup>54</sup>

### ***Approved/Pending Project Traffic***

“Traffic impact analyses typically require the analysis of approved or pending developments that have not yet been built in the vicinity of the Project in addition to the proposed Project. The approved or pending developments identified for use in this traffic analysis included a proposed 200-room hotel located along Old 3 Rivers Road, approximately 700 feet to the east of SR 198 (Sierra Drive). Trip generation and distribution information for the development was based on information found in its corresponding TIS report. Trip generation and distribution information is provided in Appendix D [of the TIS]. The peak hour trips for the approved or pending project traffic was applied to the Near-Term and Cumulative Year 2042 traffic conditions discussed later in the report.”<sup>55</sup>

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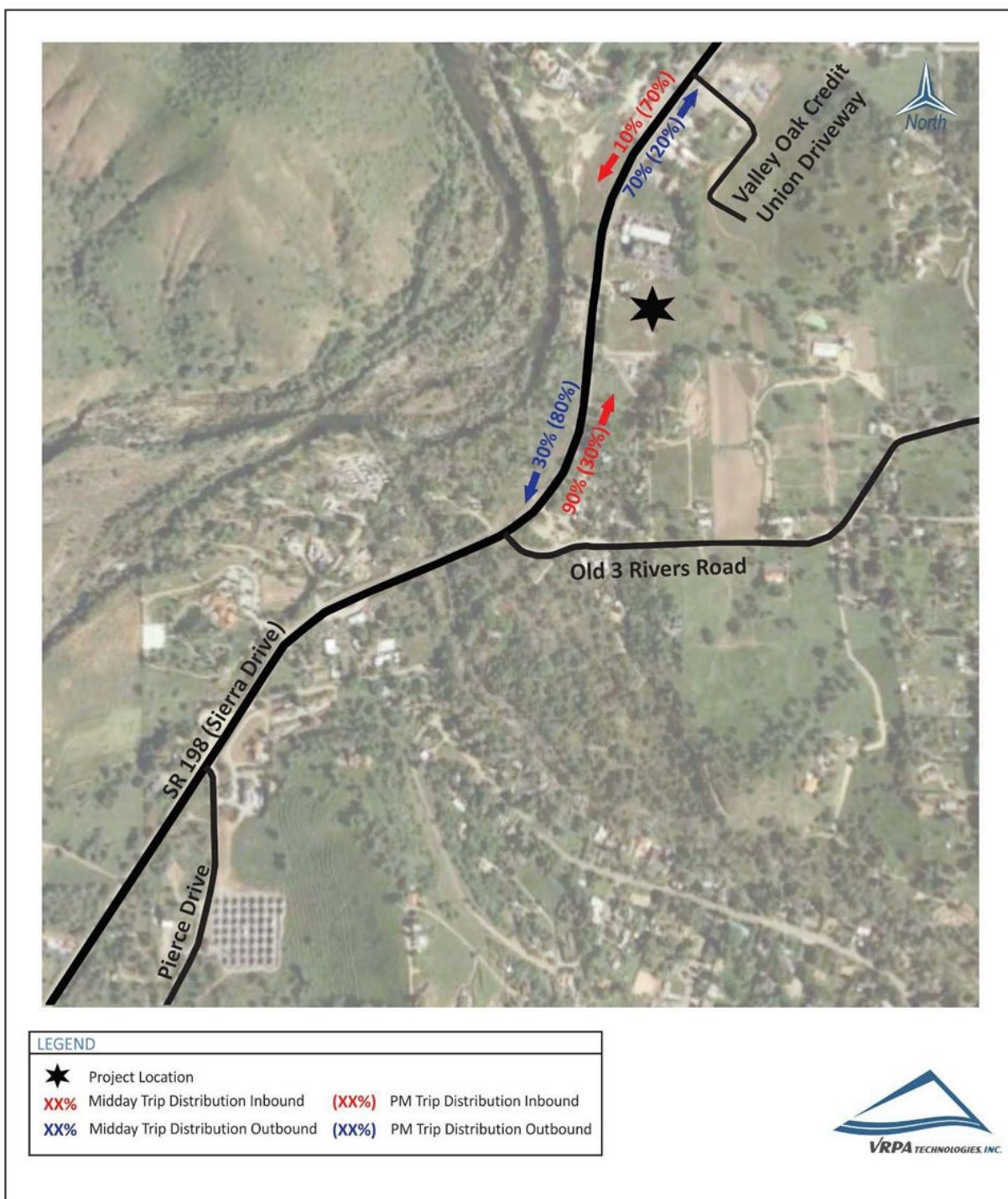
<sup>52</sup> Op. Cit. 14.

<sup>53</sup> Op. Cit.

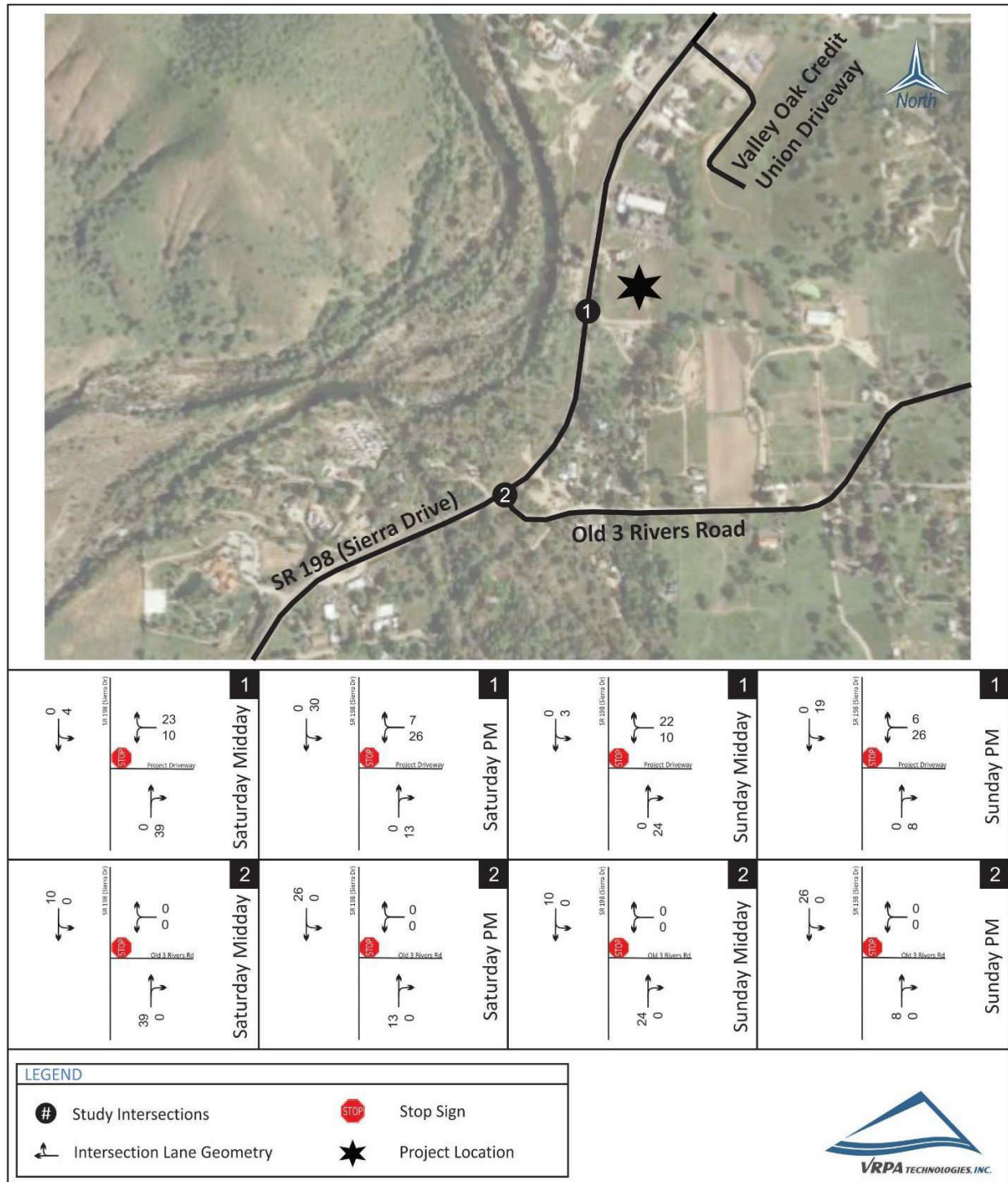
<sup>54</sup> Op. Cit. 17.

<sup>55</sup> Op. Cit.

**Figure 3.17-1  
Project Trip Distribution**

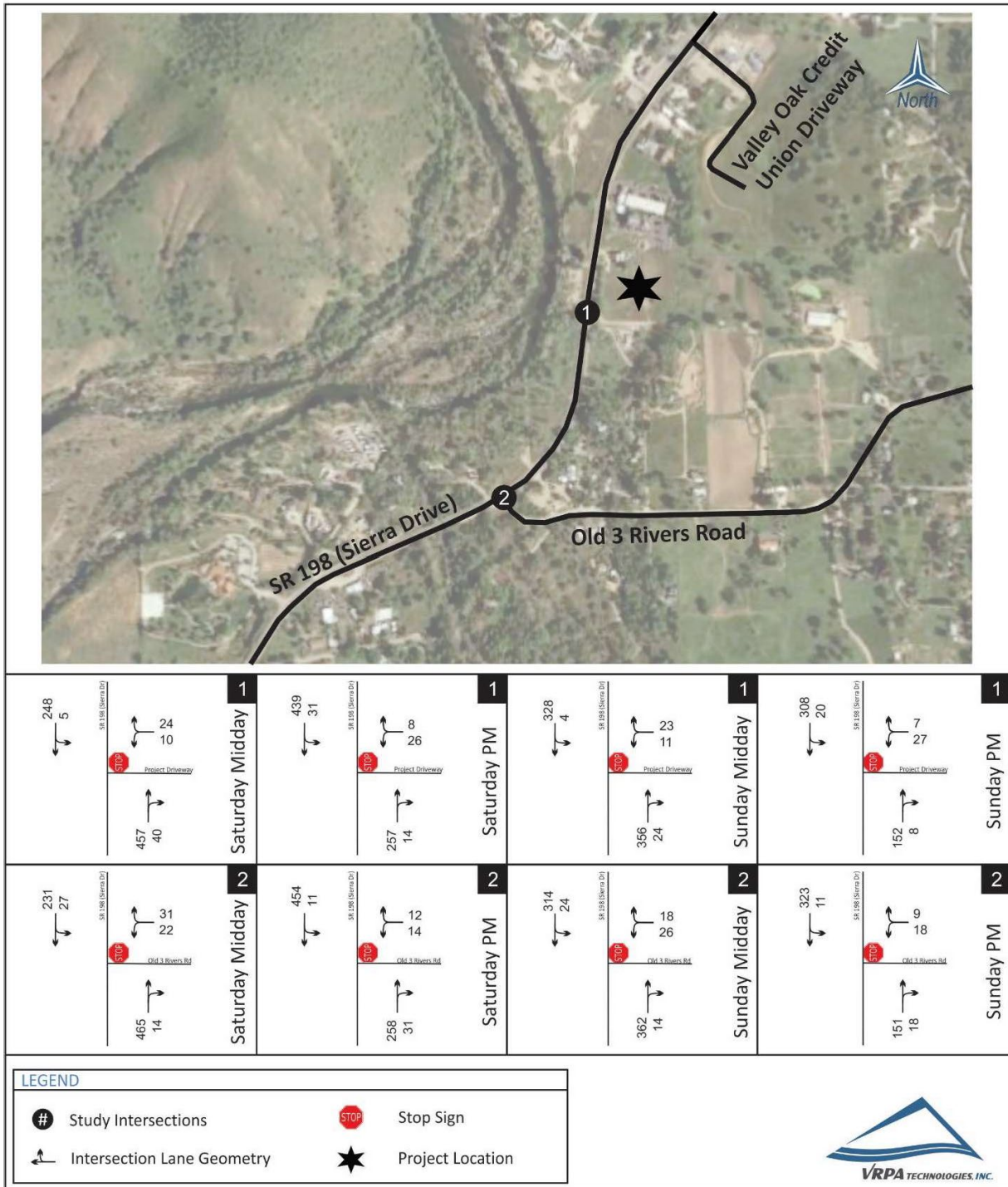


**Figure 3.17-2**  
**Peak Hour Project Traffic**





**Figure 3.17-3  
 Existing Plus Project Peak Hour Traffic**



***Near-Term Plus Project Traffic Conditions***

“Traffic conditions with the Project in the Year 2022 were estimated by applying a growth rate of 1.3% per year to the existing traffic volumes. Historical growth in Tulare County is approximately 1.3% based on population trends as forecasted in the Tulare County General Plan 2030 Update. In consultation with Tulare County RMA and Caltrans staff it was determined that a growth rate of 1.3% was consistent with the overall growth in the study area and should be used to evaluate Near-Term conditions. The resulting traffic is shown in Figure 3-4 [in the TIS, **Figure 3.17-4** in this Draft EIR].”<sup>56</sup>

***Cumulative Year 2042 Without Project Traffic Conditions***

“The impacts of the Project were analyzed considering future traffic conditions in the year 2042. The levels of traffic expected in 2042 relate to the cumulative effect of traffic increases resulting from the implementation of the General Plans of local agencies, including Tulare County. Traffic conditions without the Project in the Year 2042 were estimated by applying a 1.3% per year growth factor to existing roadway segment volumes in the study area (ambient growth). The resulting traffic volumes were compared and evaluated against cumulative development in the area and adjusted as necessary. The resulting traffic is shown in Figure 3-5. [in the TIS, **Figure 3.17-5** in the Draft EIR]”<sup>57</sup>

***Cumulative Year 2042 Plus Project Traffic Conditions***

“The addition of Project trips, as shown in Figure 3-2 [in the TIS, **Figure 3.17-6** in the Draft EIR] (Section 3.3 [in the TIS]), were added to Cumulative Year 2042 Without Project traffic volumes. This leads to the Cumulative Year 2042 Plus Project Peak Hour Traffic Volumes shown in Figure 3.6 [In the TIS, **Figure 3.17-6** in this Draft EIR].”<sup>58</sup>

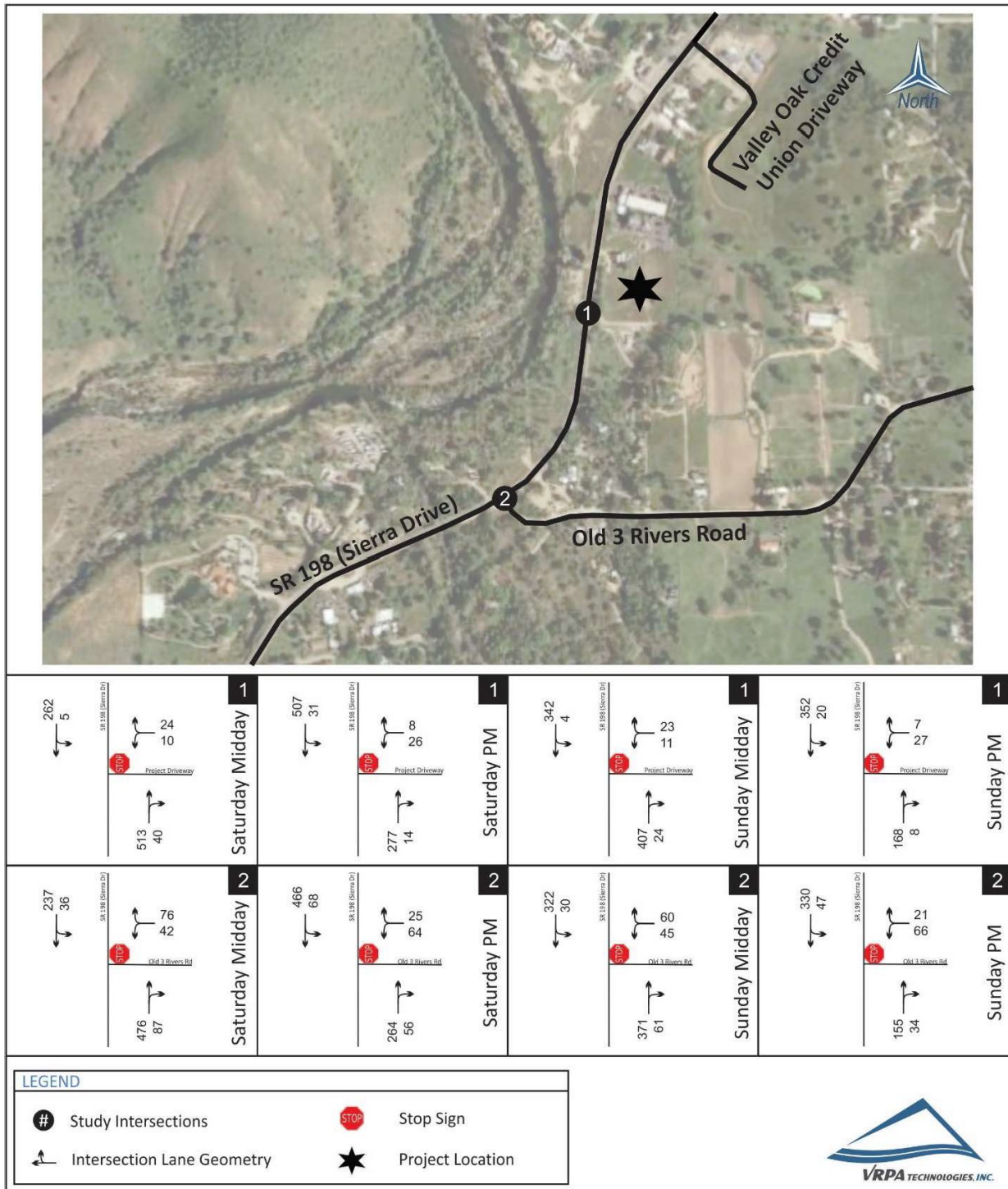
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<sup>56</sup> Op. Cit.

<sup>57</sup> Op. Cit.

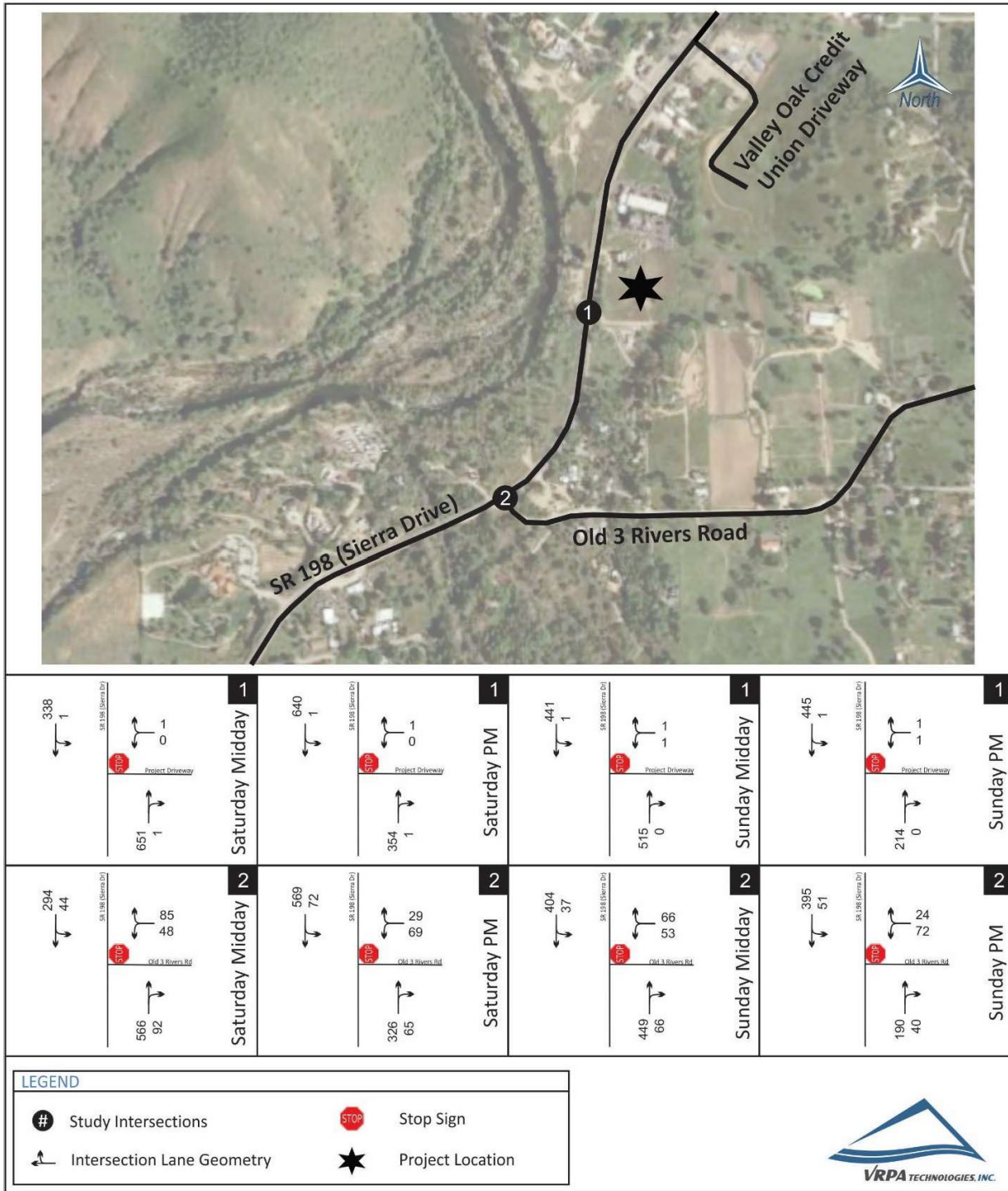
<sup>58</sup> Op. Cit.

**Figure 3.17-4**  
**Near Term Peak Hour Traffic**

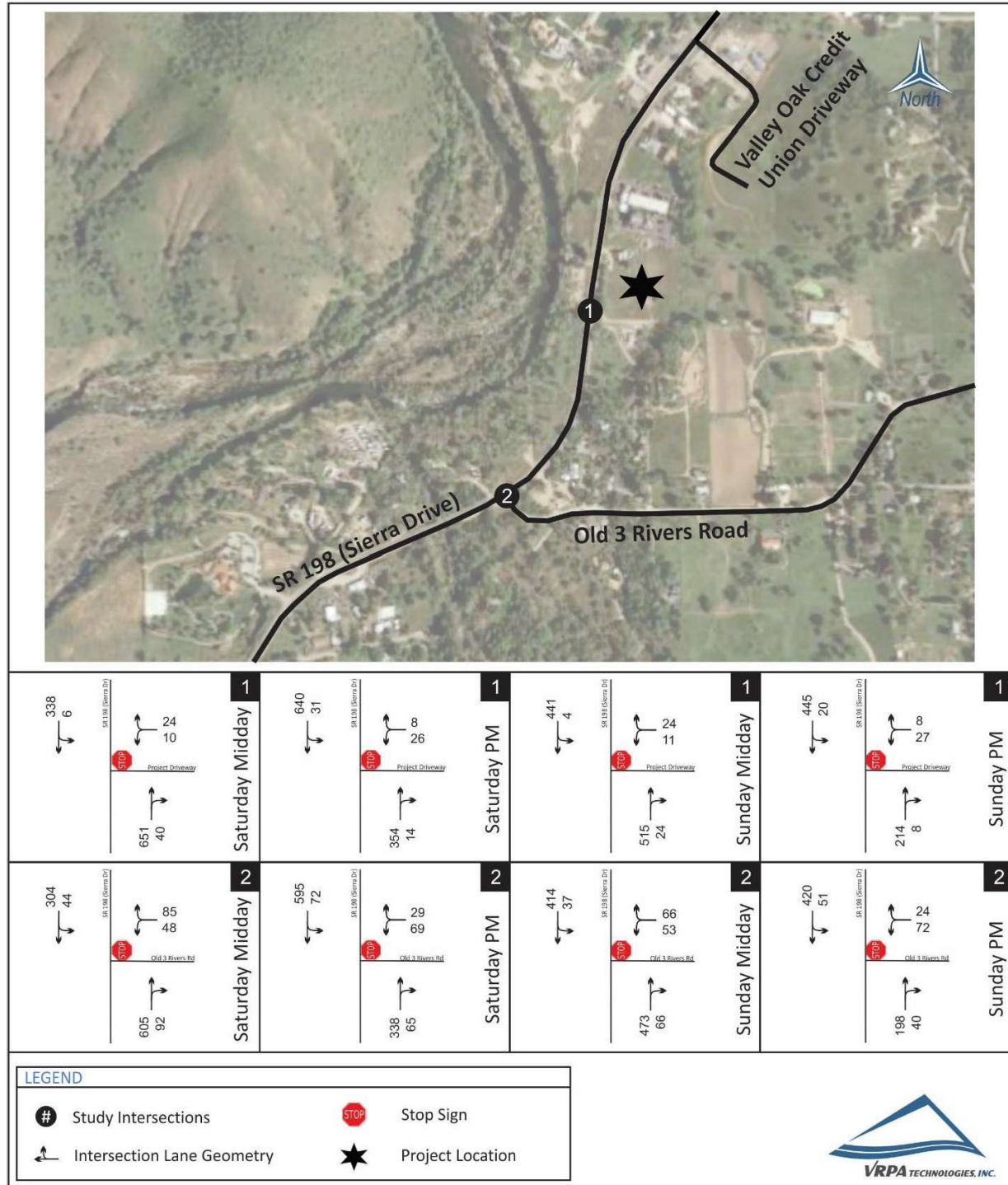




**Figure 3.17-5**  
**Cumulative Year 2042 Without Project Peak Hour Traffic**



**Figure 3.17-6**  
**Cumulative Year 2042 Without Project Peak Hour Traffic**



## ***Impacts***

### Intersection Capacity Analysis

“Table 3-2 [in the TIS, **Table 3.17-4** in this Draft EIR] shows the projected delay for all scenarios at study area intersections. Results of the analysis show that levels of service at the SR 198 (Sierra Drive) and Project Driveway and SR 198 (Sierra Drive) and Old 3 Rivers Road intersections will not exceed target LOS ‘D’ for all the study scenarios. Therefore, no mitigation measures are required to achieve acceptable levels of service. It should be noted that the Project Driveway along SR 198 (Sierra Drive) must meet Tulare County and Caltrans standards.”<sup>59</sup>

### Queuing Analysis

Table 3-3 2 [in the TIS, **Table 3.17-5** in this Draft EIR] provides a queue length summary for turning movements at the Project Driveway and Old 3 Rivers Road. Queuing analysis for unsignalized intersections was completed using Section 400 of Caltrans’ Highway Design Manual. Results of the analysis show that the queue lengths along Old 3 Rivers Road are not projected to encroach upon the most easterly driveway to SR 198 (Sierra Drive).<sup>60</sup>

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<sup>59</sup> Op. Cit. 22.

<sup>60</sup> Op. Cit.

Draft Environmental Impact Report  
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**Table 17.3-4  
Intersection Operations**

Intersection	Control	Target LOS	Peak Hour		Existing Plus Project		Near-Term Plus Project		Cumulative Year 2042 Without Project		Cumulative Year 2042 Plus Project	
					Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 198/Sierra Drive - Project Driveway	One-Way Stop Sign	D	Saturday	Midday	13.1	B	13.8	B	13.0	B	16.5	C
				PM	16.0	C	17.8	C	10.5	C	22.4	C
			Sunday	Midday	12.9	B	13.7	B	15.6	B	15.4	C
				PM	13.5	B	14.5	B	11.8	B	14.6	B
SR 198/Sierra Drive - Old 3 Rivers Road	One-Way Stop Sign	D	Saturday	Midday	15.0	C	20.5	C	22.8	C	24.8	C
				PM	14.0	B	27.6	D	31.1	D	33.9	D
			Sunday	Midday	15.4	C	18.1	C	21.2	C	22.4	C
				PM	12.7	B	18.1	C	18.9	C	19.9	C
Delay is measured in seconds LOS = Level of Service For one-way controlled intersections												

**Table 17-5  
Queuing Operations**

Intersection	Existing Queue Storage Length (In feet)		Existing Plus Project				Near-Term Year Plus Project			
			Saturday		Sunday		Saturday		Sunday	
			Midday Queue	PM Queue	Midday Queue	PM Queue	Midday Queue	PM Queue	Midday Queue	PM Queue
SR 198 (Sierra Drive)/Project Driveway	WB Approach	--	28	28	28	28	28	28	28	28
SR 198 (Sierra Drive)/Old 3 Rivers Road	WB Approach	325	44	22	37	23	98	75	88	73
Intersection	Existing Queue Storage Length (In feet)		Cumulative Year 2042 Without Project				Cumulative Year 2042 Plus Project			
			Saturday		Sunday		Saturday		Sunday	
			Midday Queue	PM Queue	Midday Queue	PM Queue	Midday Queue	PM Queue	Midday Queue	PM Queue
SR 198 (Sierra Drive)/Project Driveway	WB Approach	--	1	1	3	3	28	28	29	29
SR 198 (Sierra Drive)/Old 3 Rivers Road	WB Approach	325	111	82	98	80	111	82	98	80

Based on the analysis contained in the TIS, qualified expert consultant VRPA determined that the proposed Project would result in a less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. As noted in the TIS, “An important goal is to maintain acceptable levels of service along the highway, street, and road network. To accomplish this, Tulare County RMA and Caltrans adopt minimum levels of service in an attempt to control congestion that may result as new development occurs. Tulare County’s 2030 General Plan, policy number TC-1.16, identifies a minimum LOS standard of “D” on the County roadway system (both segments and intersections). Caltrans’ SR-198 Transportation Concept Report (TCR) identifies the 2040 concept as LOS “D”.

Results of the analysis show that the proposed Project will not exceed the minimum LOS standard of “D” as shown in Tables 2-1 and 3-2.

The Project does not conflict with any applicable adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Tulare County Area Transit (TCaT) Route 30 (Northeast County Route) operates between the Three Rivers Memorial Building and the Visalia Transit Center in downtown Visalia. Route 30 provides 4 roundtrips to the Visalia Transit Center on weekdays and 1 roundtrip on the weekend, all at 4-hour intervals. Implementation of the Project will not hinder the operation of Route 30 in the Three Rivers Community.

Caltrans’ SR 198 TCR indicated that bicycles are permitted along the SR 198 corridor in the Three Rivers Community. The proposed Project will not prohibit the use of bicycles along SR 198. The SR 198 TCR also indicates that pedestrian facilities are nonexistent in the Three Rivers community. The Project will comply with Tulare County General Plan goals, which include Bicycle/Pedestrian Trail System (TC-5.1) and Consideration of Non-Motorized Modes in Planning and Development (TC-5.2).

Therefore, the Project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. Therefore, no mitigation is needed.”<sup>61</sup> As such, the proposed Project would result in a ***Less Than Significant Project-Specific Impact***.

Mitigation:

***None Required.***

Conclusion:

***Less Than Significant Impact***

Potential Project-specific impacts related to this Checklist item are ***Less Than Significant***.

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<sup>61</sup> Pages 24-25.

Cumulative Impact Analysis:

***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County and the Three Rivers Community planning area. This cumulative analysis is based on the information provided in the TIS, Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, Tulare County General Plan 2030 Update RDEIR, the TCAG 2018 Regional Transportation Plan, and the Three Rivers Community Plan 2018 Update. The nature of the proposed Project is to accommodate transient tourist/visitors in the area of Three Rivers. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. Therefore, the proposed Project will result in a ***Less Than Significant Project and Cumulative Impact***.

Mitigation:

***None Required.***

Conclusion:

***Less Than Significant Impact***

Potential Project-specific and cumulative impacts related to this Checklist item are ***Less Than Significant***.

**b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

Project Impact Analysis:

***Less Than Significant Impact***

Based on the analysis contained in the TIS, qualified expert consultant VRPA determined that the proposed Project would result in a less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. As noted in the TIS, “Based on the analysis contained in the TIS, qualified expert consultant VRPA determined that the proposed Project would result in a less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. As noted in the TIS, “In the fall of 2013, Senate Bill 743 (SB 743) was passed by the legislature and signed into law by the governor. For California, this legislation will eventually change the way that transportation studies are conducted for environmental documents. Delay-based metrics such as roadway capacity and level of service will no longer be the performance measures used for the determination of the transportation impacts of projects in studies conducted under CEQA. Instead, new performance measures such as vehicle miles travelled (VMT) or other similar measures will be used.

July 1, 2020 is the statewide implementation date and agencies may opt-in use of new metrics prior to that date. Therefore, the traffic analysis currently follows current practice regarding state and local guidance as of the date of preparation.

Tourism is the largest and most important industry in the Three Rivers area, as the town is situated near Sequoia National Forest, which receives over 1.2 million annual visitors, and Kings Canyon National Park, which receives nearly 700,000 annual visitors. The industries and businesses surrounding Three Rivers are almost all related to visitors passing through, en

route to the Sequoia National Forest and Kings Canyon National Park. The Three Rivers Community and surrounding area features a multitude of boutique lodging facilities, restaurants, and small retail shops to support the area's small population and transient travelers.

The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable accommodations or stay in properties located outside the market area. Seeking accommodations outside of the desired market area increases VMT since travelers would be forced to travel longer distances to secure accommodations. The development of the Project would reduce the unaccommodated demand, thus reducing VMT in the market area. Therefore, no mitigation is needed.”<sup>62</sup> Therefore, the proposed Project would result a ***Less Than Significant Project-Specific Impact***.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the TIS, Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, Tulare County General Plan 2030 Update RDEIR, the TCAG 2018 Regional Transportation Plan, and the Three Rivers Community Plan 2018 Update. The nature of the proposed Project is to accommodate transient tourist/visitors in the area of Three Rivers. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. Therefore, the proposed Project will result in a ***Less Than Significant Project and Cumulative Impact***.

Mitigation: ***None Required.***

Conclusion: ***Less Than Significant Impact***

the proposed Project will result in a ***Less Than Significant Project and Cumulative Impact***.

- c) **Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

Project Impact Analysis: ***Less Than Significant No Impact***

Based on the analysis contained in the TIS, qualified expert consultant VRPA determined that the proposed Project would result in a less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. As noted in the TIS, “The Project would not result in hazards due to design features, since all proposed improvements (Project Driveway) would be built to County design standards. Access to the proposed Project will be provided at

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<sup>62</sup> Op. Cit., 25-26.



one (1) driveway along SR 198 (Sierra Drive), which is an existing driveway within Tulare County jurisdiction. Internal traffic and parking operations will be designed in accordance with Tulare County design standards. The proposed Project seeks to utilize a plot of relatively undeveloped land for a hotel with approximately 105 rooms in a rural area surrounded by rural/agricultural residences. The Project would not increase the use of farm equipment on streets and roads in the Three Rivers Community. As a result, the Project will not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Therefore, no mitigation is needed.”<sup>63</sup> As such, a ***Less Than Significant Project-Specific impact*** would occur as a result of the proposed Project.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the TIS, Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, Tulare County General Plan 2030 Update RDEIR, and the TCAG 2018 Regional Transportation Plan. and the Three Rivers Community Plan 2018 Update. The nature of the proposed Project is to accommodate transient tourist/visitors in the area of Three Rivers. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. Therefore, the proposed Project will result in a ***Less Than Significant Project and Cumulative Impact***.

Mitigation: ***None Required.***

Conclusion: ***No Impact***

The proposed Project will result in a ***Less Than Significant Project and Cumulative Impact***

**d) Result in inadequate emergency access?**

Project Impact Analysis: ***Less Than Significant Impact***

The proposed Project will utilize a dedicated entry/exit point for ease of access/egress. On-site circulation patterns do not involve high speeds, sharp curves, or dangerous intersections. Based on the analysis contained in the TIS, qualified expert consultant VRPA determined that the proposed Project would result in a less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. As noted in the TIS, “The Project would not result in any degradation of emergency access within the community. Congestion at an intersection or along a roadway can adversely impact emergency access. Results of the traffic analysis shows that all of the study intersections and roadway segments will meet Tulare County’s and Caltrans’ LOS “D” criteria through the year 2042. As a result, the Project will

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<sup>63</sup> Op. Cit.



not result in inadequate emergency access. Therefore, no mitigation is needed.”<sup>64</sup> As such, a ***Less Than Significant Project-specific Impact*** related to this Checklist Item will occur.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the TIS, Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, Tulare County General Plan 2030 Update RDEIR, the TCAG 2018 Regional Transportation Plan, and the Three Rivers Community Plan 2018 Update.

As noted earlier, no significant design changes that would result in a hazard are proposed. As such, ***Less Than Significant and Project-Specific Cumulative Impacts*** related to this Checklist Item will occur.

Mitigation: ***None Required.***

Conclusion: ***Less Than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific or Cumulative Impacts*** related to this Checklist Item will occur.

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<sup>64</sup> Op. Cit.

## ACRONYMS

AB	Assembly Bill
ACS	American Community Survey
CEQA	California Environmental Quality Act
CAA	Federal Clean Air Act
CCAA	California Clean Air Act
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineer
LOS	Level of Service
LTF	Local Transportation Funds
MOE	Measures of Effectiveness
MUTD	California Manual on Uniform Traffic
STAF	State Transit Assistance Fund
TCM	Transportation Control Measures
TCR	Transportation Concept Report
TCaT	Tulare County Area Transit
TIME	Tulare Intermodal Express
TIS	Traffic Impact Study
VRPA	VRPA Technologies, Inc.

## REFERENCES

Guide for the Preparation of Traffic Impact Studies, California Department of Transportation (Caltrans), December 2002. Accessed January 2021 at: [https://nacto.org/wp-content/uploads/2015/04/guide\\_preparation\\_traffic\\_impact\\_studies\\_caltrans.pdf](https://nacto.org/wp-content/uploads/2015/04/guide_preparation_traffic_impact_studies_caltrans.pdf)

2010 Tulare County Regional Bicycle Transportation Plan, Tulare County Association of Governments (TCAG)

Tulare County Association of Governments 2018 Regional Transportation Plan and Sustainable Communities Strategy which can be accessed at: <http://www.tularecog.org/wp-content/uploads/2015/06/Final-2014-Regional-Transportation-Plan-Sustainable-Communities-Strategy-FULL-DOCUMENT.pdf>, Accessed November, 2017.

Tulare County Association of Governments “*2018 Regional Transportation Plan and Sustainable Communities Strategy*.” Action Element Page B-48. Accessed at: <http://www.tularecog.org/RTPSCS/ActionElement.pdf>.

Tulare County Association of Governments “*2018 Regional Transportation Plan and Sustainable Communities Strategy*.” Figure 5-3 Farm to Market Routes. Accessed at: <http://www.tularecog.org/RTPSCS/GoodsMovementChapter.pdf>

## CEQA Guidelines

Tulare County General Plan 2030 Update, August 2012. Website accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents.html>.

Tulare County General Plan 2030 Update, Background Report, February 2010. Accessed at: <http://generalplan.co.tulare.ca.us/documents.html> then locate “Background Report February 2010”, select “February 2010 Background Report”.

Tulare County General Plan 2030 Update, Recirculated Draft Environmental Impact Report (RDEIR), February 2010. Accessed at: <http://generalplan.co.tulare.ca.us/documents.html> then locate “Recirculated Draft Environmental Impact Report February 2010 Draft”, select “Recirculated DEIR”.

*“Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020” (TIS) report.* Prepared by VRPA Technologies, Inc., (included in Appendix “E” of this Draft EIR).

# Tribal Cultural Resources

## Chapter 3.18

### SUMMARY OF FINDINGS

The proposed Three Rivers-Hampton Inn & Suites (Project) will result in ***Less Than Significant Impacts*** to Tribal Cultural Resources with mitigation. A “*Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers*” (CRIR or Report) was prepared by ECORP Consulting, Inc. (Consultant) in June 2020 and is included as Appendix “C” of this DEIR. This report is used as the basis for determining that this Program will result in ***Less Than Significant Impacts***.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

Several CEQA statutes and guidelines address requirements for cultural resources, including historic and archaeological resources. If a proposed Project may cause a substantial adverse effect on the significance of a historical resource, then the Project may be considered to have a significant effect on the environment, and the impacts must be evaluated under CEQA (Section 21084.1). The definition of “historical resources” is included in Section 15064.5 of CEQA Guidelines, and includes both historical and archaeological resources.<sup>1</sup> “Substantial adverse change” is defined as “physical demolition, destruction, relocation, or alteration of the resource...”<sup>2</sup>

Section 15064.5 also provides guidelines when there is a probable likelihood of Native American remains existing in the Project site.<sup>3</sup> Provisions for the accidental discovery of historical or unique archaeological resources encountered during construction include a recommendation for evaluation by a qualified archaeologist, with follow up as necessary.

Public Resources Code Section 5097.5 prohibits excavation or removal of any “vertebrate paleontological site...or any other archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands.”<sup>4</sup>

This section of the Draft Program/Project Environmental Impact Report (DEIR) for the Project meets CEQA requirements by addressing potential impacts to cultural resources on the proposed Project site. The “Environmental Setting” section provides a description of tribal cultural resources in the region, with special emphasis on the proposed Project site and vicinity. The

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<sup>1</sup> CEQA Sections 15060 to 15065.

<sup>2</sup> Ibid.

<sup>3</sup> Op. Cit.

<sup>4</sup> CEQA Section 5097.5

“Regulatory Setting” section provides a description of applicable State and local regulatory policies. Results of cultural resources reports from CHRIS are included. A description of potential impacts is provided, along with feasible mitigation measures to reduce the impacts to less than significant.

#### CEQA Thresholds of Significance

- Would the Project cause a substantial adverse change in the significance of a tribal cultural resource that is listed in a state or local register of historical resources
- Would the Project cause a substantial adverse change in the significance of a tribal cultural resource that has been determined by a local agency to be significant pursuant to criteria set forth in the Public Resources Code

### **ENVIRONMENTAL SETTING**

As described in the Report, “The Project Area is located in a rural residential and commercial center in the unincorporated community of Three Rivers along Sierra Drive/Highway 198. This area is in the foothills of the Sierra Nevada at the edge of the San Joaquin Valley. Three Rivers is in the Kaweah River canyon, the gateway to the entrance to Sequoia and Kings Canyon National Parks. The Project Area is along the southern bank of the Kaweah River, which is 200 feet west, and is approximately five miles northwest of Kaweah Lake. Highway 198 separates the Project Area land from the Kaweah River. Elevations range from 755 to 765 feet above mean sea level”<sup>5</sup>

#### Records Search Results

Consultant undertook a records search with the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS) at California State University, Bakersfield on May 18, 2020 (SSJVIC, included in the Report). As indicated in the Report, “The purpose of the records search was to determine the extent of previous surveys within a 0.5-mile (800-meter) radius of the proposed Project location, and whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area.”<sup>6</sup>

“In addition to the official records and maps for archaeological sites and surveys in Tulare County, the following historic references were also reviewed: Historic Property Data File for Tulare County (OHP 2012); The National Register Information System (NPS 2020b); Office of Historic Preservation, California Historical Landmarks (OHP 2020); California Historical Landmarks (OHP 1996 and updates); California Points of Historical Interest (OHP 1992 and updates); Directory of Properties in the Historical Resources Inventory (1999); Caltrans Local Bridge Survey (Caltrans 2019); Caltrans State Bridge Survey (Caltrans 2018); and Historic Spots in California (Kyle 2002). Other references examined include a Real Quest Property Search and

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<sup>5</sup> “Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers” (CRIR or Report). Page 4. June 2020. Prepared by ECORP Consulting, Inc. and included in Attachment “C” of this Draft EIR.

<sup>6</sup> Ibid. 12-13.

historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM] 2020).”<sup>7</sup> Historic maps reviewed include: 1870 BLM GLO Plat map for Township 17 South Range 28 East; 1885 BLM GLO Plat map for Township 17 South Range 28 East; 1892 Tulare County, California Map (published by Thos. H. Thompson, page 046, Sequoia National Park 3, Kaweah); 1957 USGS Kaweah, California topographic quadrangle map (15-minute scale); 1986 USGS Kaweah, California topographic quadrangle map (1:62,500 scale); and 1986 photo revised 1994 USGS Kaweah, California topographic quadrangle map (1:24,000 scale).<sup>8</sup> Historic aerial photos taken in 1955, 1989, 2005, 2009, 2010, and 2012 were also reviewed for any indications of property usage and built environment.<sup>9</sup>

### Native American Consultation

The Native American Heritage Commission (NAHC) maintains a contact list of Native American Tribes as having traditional lands located within the County’s jurisdiction. A search of the Sacred Lands Inventory on file with the Native American Heritage Commission (NAHC) was requested by Consultant and resulted in negative results (i.e., no sacred lands were identified in the Project site) in a letter received from the NAHC on May 13, 2020 (see Attachment “C”). Pursuant to AB 52 Tulare County RMA staff contacted five Native American Tribes (see Attachment “C”) by certified mail on October 1, 2020 regarding the proposed Project. The County has received response from one Tribe. The Tribes will have an opportunity to comment on the Draft EIR upon its release. Upon written request, any Tribe seeking a confidential copy of the Cultural Resource Inventory Report will be allowed that opportunity. Due to the nature of confidential information contained in the Report, it will not be readily available to the public; however, Tulare County will allow access to the Report within legal limitations.

## **REGULATORY SETTING**

### ***Federal Agencies & Regulations***

#### The National Historic Preservation Act

“The Advisory Council on Historic Preservation (ACHP) is an independent federal agency with the primary mission to encourage historic preservation in the government and across the nation. The National Historic Preservation Act (NHPA), which established the ACHP in 1966, directs federal agencies to act as responsible stewards when their actions affect historic properties. The ACHP is given the legal responsibility to assist federal agencies in their efforts and to ensure they consider preservation during project planning. The ACHP serves as the federal policy advisor to the President and Congress; recommends administrative and legislative improvements for protecting the nation’s diverse heritage; and reviews federal programs and policies to promote effectiveness, coordination, and consistency with national preservation policies. A key ACHP function is overseeing the federal historic preservation review process established by Section 106

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<sup>7</sup> Op. Cit. 13.

<sup>8</sup> Op. Cit.

<sup>9</sup> Op. Cit.

of the NHPA. Section 106 requires federal agencies to consider the effects of projects, carried out by them or subject to their assistance or approval, on historic properties and provide the ACHP an opportunity to comment on these projects prior to a final decision on them.”<sup>10</sup>

### ***State Agencies & Regulations***

#### **California State Office of Historic Preservation (OHP)**

“The California State Office of Historic Preservation (OHP) is responsible for administering federally and state mandated historic preservation programs to further the identification, evaluation, registration and protection of California's irreplaceable archaeological and historical resources under the direction of the State Historic Preservation Officer (SHPO), a gubernatorial appointee, and the State Historical Resources Commission.”<sup>11</sup>

“OHP's responsibilities include: Identifying, evaluating, and registering historic properties; Ensuring compliance with federal and state regulatory obligations; Encouraging the adoption of economic incentives programs designed to benefit property owners; Encouraging economic revitalization by promoting a historic preservation ethic through preservation education and public awareness and, most significantly, by demonstrating leadership and stewardship for historic preservation in California.”<sup>12</sup>

A historical resource may be eligible for inclusion in the California Register of Historical Resources (CRHR) if it:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important to our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.<sup>13</sup>

As mentioned in the CRIR, the use of both federal and state regulatory requirements apply to the proposed Project. “To meet the regulatory requirements of this Project, this cultural resources investigation was conducted pursuant to the provisions for the treatment of cultural resources contained within Section 106 of the National Historic Preservation Act (NHPA) and in CEQA (Public Resources Code [PRC] § 21000 et seq.) The goal of NHPA and CEQA is to develop and maintain a high-quality environment that serves to identify the significant environmental effects of the actions of a proposed project and to either avoid or mitigate those significant effects where

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<sup>10</sup> Advisory Council on Historic Preservation. [https://www.achp.gov/sites/default/files/documents/2019-10/AboutTheACHPFactSheet2019\\_100319.pdf](https://www.achp.gov/sites/default/files/documents/2019-10/AboutTheACHPFactSheet2019_100319.pdf)

<sup>11</sup> State of California. Office of Historic Preservation. Mission and Responsibilities. [http://ohp.parks.ca.gov/?page\\_id=1066](http://ohp.parks.ca.gov/?page_id=1066)

<sup>12</sup> Ibid.

<sup>13</sup> California Office of Historic Preservation, 2017. California Register of Historical Places. [http://www.ohp.parks.ca.gov/?page\\_id=21238](http://www.ohp.parks.ca.gov/?page_id=21238)

feasible. CEQA pertains to all proposed projects that require State or local government agency approval, including the enactment of zoning ordinances, the issuance of conditional use permits, and the approval of development project maps. The NHPA pertains to projects that entail some degree of federal funding or permit approval.

The NHPA and CEQA (Title 54 U.S. Code [USC] Section 100101 et seq. and Title 14, California Code of Regulations [CCR], Article 5, § 15064.5) apply to cultural resources of the historical and pre-contact periods. Any project with an effect that may cause a substantial adverse change in the significance of a cultural resource, either directly or indirectly, is a project that may have a significant effect on the environment. As a result, such a project would require avoidance or mitigation of impacts to those affected resources. Significant cultural resources must meet at least one of four criteria that define eligibility for listing on either the California Register of Historical Resources (CRHR) (PRC § 5024.1, Title 14 CCR, § 4852) or the National Register of Historic Places (NRHP) (36 Code of Federal Regulations [CFR] 60.4). Cultural resources eligible for listing on the NRHP are considered Historic Properties under 36 CFR Part 800 and are automatically eligible for the CRHR. Resources listed on or eligible for inclusion in the CRHR are considered Historical Resources under CEQA.

Tribal Cultural Resources are defined in Section 21074 of the California PRC as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either included in or determined to be eligible for inclusion in the CRHR, or are included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or are a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. Section 1(b)(4) of Assembly Bill (AB) 52 established that only California Native American tribes, as defined in Section 21073 of the California PRC, are experts in the identification of Tribal Cultural Resources and impacts thereto. Because ECORP does not meet the definition of a California Native American tribe, this report only addresses information for which ECORP is qualified to identify and evaluate, and that which is needed to inform the cultural resources section of CEQA documents. This report, therefore, does not identify or evaluate Tribal Cultural Resources. Should California Native American tribes ascribe additional importance to or interpretation of archaeological resources described herein, or provide information about non-archeological Tribal Cultural Resources, that information is documented separately in the AB 52 tribal consultation record between the tribe(s) and lead agency, and summarized in the Tribal Cultural Resources section of the CEQA document, if applicable.”<sup>14</sup>

#### Tribal Consultation Requirements: AB 52 (Gatto, 2014)

The Public Resources Code has established that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead

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<sup>14</sup> “Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers” (CRIR or Report). Page 3. June 2020. Prepared by ECORP Consulting, Inc. and included in Attachment “C” of this Draft EIR.



agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. (Pub. Resources Code, § 21080.3.1.) If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact.<sup>15</sup>

#### Native American Heritage Commission

“The Native American Heritage Commission (NAHC), created in statute in 1976, is a nine-member body, appointed by the Governor, to identify and catalog cultural resources (i.e., places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands) in California. The Commission is charged with the duty of preserving and ensuring accessibility of sacred sites and burials, the disposition of Native American human remains and burial items, maintain an inventory of Native American sacred sites located on public lands, and review current administrative and statutory protections related to these sacred sites.”<sup>16</sup>

#### CEQA Guidelines: Archaeological Resources

Section 15064.5(c) of CEQA Guidelines provides specific guidance on the treatment of archaeological resources as noted below.<sup>17</sup>

- (1) When a Project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subdivision (a).
- (2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.
- (3) If an archaeological site does not meet the criteria defined in subdivision (a) but does meet the definition of a unique archeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c–f) do not apply to surveys and site evaluation activities intended to determine whether the Project location contains unique archaeological resources.
- (4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the Project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted

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<sup>15</sup> Office of Planning and Research. Discussion Draft Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA (May 2015). Page 3. [http://opr.ca.gov/docs/DRAFT\\_AB\\_52\\_Technical\\_Advisory.pdf](http://opr.ca.gov/docs/DRAFT_AB_52_Technical_Advisory.pdf)

<sup>16</sup> Native American Heritage Commission. Welcome. <http://nahc.ca.gov/>

<sup>17</sup> California Natural Resources Agency. 15064.5. Determining the Significance of Impacts to Archeological and Historical Resources, Section 15064.5(c). <http://resources.ca.gov/ceqa/guidelines/art5.html>

in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

CEQA Guidelines: Human Remains

Public Resources Code Sections 5097.94 and 5097.98 provide guidance on the disposition of Native American burials (human remains), and fall within the jurisdiction of the Native American Heritage Commission:<sup>18</sup>

- (d) When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the Project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any Items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:
  - (3) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
  - (4) The requirements of CEQA and the Coastal Act.
- (e) In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:
  - (1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
    - (C) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and
    - (D) If the coroner determines the remains to be Native American:
      - 4. The coroner shall contact the Native American Heritage Commission within 24 hours.
      - 5. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
      - 6. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or
  - (3) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with

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<sup>18</sup> Ibid.

- appropriate dignity on the property in a location not subject to further subsurface disturbance.
- (C) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
  - (D) The descendant identified fails to make a recommendation; or
  - (C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.
- (f) As part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place.

### ***Local Policy & Regulations***

#### **Tulare County General Plan 2030 Update**

The General Plan has a number of policies that apply to Projects within Tulare County. General Plan policies that relate to the proposed Project are listed as follows:<sup>19</sup>

**ERM-6.1 Evaluation of Cultural and Archaeological Resources** - The County shall participate in and support efforts to identify its significant cultural and archaeological resources using appropriate State and Federal standards.

**ERM-6.2 Protection of Resources with Potential State or Federal Designations** - The County shall protect cultural and archaeological sites with demonstrated potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources. Such sites may be of Statewide or local significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, or other values as determined by a qualified archaeological professional.

**ERM-6.3 Alteration of Sites with Identified Cultural Resources** - When planning any development or alteration of a site with identified cultural or archaeological resources,

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<sup>19</sup> Tulare County, 2012. Tulare County General Plan 2030 Update. Pages 8-18 to 8-19  
<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>

consideration should be given to ways of protecting the resources. Development can be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and Mitigation Measures proposed for any impacts the development may have on the resource.

**ERM-6.4 Mitigation** - If preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records.

**ERM-6.8** - Solicit Input from Local Native Americans - The County shall continue to solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

**ERM-6.9 Confidentiality of Archaeological Sites** - The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

**ERM-6.10 Grading Cultural Resources Sites** - The County shall ensure all grading activities conform to the County's Grading Ordinance and California Code of Regulations, Title 20, § 2501 et. seq.

## IMPACT EVALUATION

**Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**

- a) **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?**

Project Impact Analysis:

***Less Than Significant Impact with Mitigation***

Consultant used a variety of accepted methodologies to research/investigate the proposed Project's location in determining presence of Tribal Cultural Resources. As noted in the CRIR, Consultant provided evidence of its personnel's qualifications<sup>20</sup>; a search of records by the Southern San Joaquin Valley Information Center of the California Historical Resources Information System<sup>21</sup>; RealQuest Property Search and historic General Land Office (GLO)

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<sup>20</sup> "Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers" (CRIR or Report). Page 12. June 2020. Prepared by ECORP Consulting, Inc. and included in Attachment "C" of this Initial Study.

<sup>21</sup> Ibid. 12.

land patent records (Bureau of Land Management [BLM]);<sup>22</sup> aerial photos taken in 1955, 1989, 2005, 2009, 2010, and 2012 were also reviewed for any indications of property usage and built environment;<sup>23</sup> Sacred Lands File Search (SLF) by the California Native America Heritage commission (NAHC)<sup>24</sup>; contacted the Tulare County Historical society<sup>25</sup> and; an intensive pedestrian survey under the guidance of the Secretary of the Interior's Standards for the Identification of Historic Properties (NPS 1983).

To summarize the findings contained in the CRIR, Consultant concluded, “No cultural resources were identified on the property as a result of the records search and field survey. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA will be affected by the proposed Project.”<sup>26</sup> However, the CRIR conclusions cannot eliminate the possibility of subsurface cultural resources, to wit; “Due to the presence of alluvium along the Kaweah River, and given the likelihood of pre-contact archaeological sites located along perennial waterways, the potential exists for buried pre-contact archaeological sites in the Project Area. This potential is considered to be high, as the Kaweah River exhibits significant sinuosity that reflects a meandering channel over time, which has the potential to bury archaeological sites that were once along the river’s edge.”<sup>27</sup> To that end, consultant provides recommendation in the event of post-review discovery (see item 5 cultural Resources).

Therefore, as an abundance of caution, in the unlikely event that subsurface resources are located, **Mitigation Measures CUL-1 subsets (a) through (c)** as specified at Item 5 Cultural Resources would be implemented thereby reducing the potential level of impact to this resource as less than significant for resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or to a resource consider significant to a California Native American tribe. Therefore, the Project would result in a less than significant impact to this resource.

Cumulative Impact Analysis: *Less Than Significant Impact with Mitigation*

Mitigation Measure(s): *CUL-1 subsets (a) through (c) as specified at Item 5 Cultural Resources*

As noted above, surface resources are not present on the proposed Project location. In the event subsurface resources are encountered, **Mitigation Measures CUL-1 subsets (a) through (c)** would apply to minimize any impact to less than significant. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

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<sup>22</sup> Op. Cit. 13.

<sup>23</sup> Op. Cit.

<sup>24</sup> Op. Cit.

<sup>25</sup> Op. Cit. 14.

<sup>26</sup> Op. Cit. 21

<sup>27</sup> Op. Cit.

Conclusion:

***Less Than Significant Impact With Mitigation***

With implementation of **Mitigation Measures CUL-1 subsets (a) through (c)**, potential Project-specific and cumulative impacts related to this Checklist Item will be reduced to a level of ***Less Than Significant With Mitigation***.

- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe?**

Project Impact Analysis:

***Less Than Significant Impact with Mitigation***

Consultant used a variety of accepted methodologies to research/investigate the proposed Project's location in determining presence of Tribal Cultural Resources. As noted in the CRIR, Consultant provided evidence of its personnel's qualifications<sup>28</sup>; a search of records by the Southern San Joaquin Valley Information Center of the California Historical Resources Information System<sup>29</sup>; Real Quest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM]);<sup>30</sup> aerial photos taken in 1955, 1989, 2005, 2009, 2010, and 2012 were also reviewed for any indications of property usage and built environment;<sup>31</sup> Sacred Lands File Search (SLF) by the California Native America Heritage commission (NAHC)<sup>32</sup>; contacted the Tulare County Historical society<sup>33</sup> and; an intensive pedestrian survey under the guidance of the Secretary of the Interior's Standards for the Identification of Historic Properties (NPS 1983).

To summarize the findings contained in the CRIR, Consultant concluded, "No cultural resources were identified on the property as a result of the records search and field survey. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA will be affected by the proposed Project."<sup>34</sup> However, the CRIR conclusions cannot eliminate the possibility of subsurface cultural resources, to wit; "Due to the presence of alluvium along the Kaweah River, and given the likelihood of pre-contact archaeological sites located along perennial waterways, the potential exists for buried pre-contact archaeological sites in the Project Area. This potential is considered to be high, as the Kaweah River exhibits significant sinuosity that reflects a meandering channel over time, which has the potential to bury archaeological sites that were once along the river's edge."<sup>35</sup> To that end,

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<sup>28</sup> "Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers" (CRIR or Report). Page 12. June 2020. Prepared by ECORP Consulting, Inc. and included in Attachment "C" of this Initial Study.

<sup>29</sup> Ibid. 12.

<sup>30</sup> Op. Cit. 13.

<sup>31</sup> Op. Cit.

<sup>32</sup> Op. Cit.

<sup>33</sup> Op. Cit. 14.

<sup>34</sup> Op. Cit. 21

<sup>35</sup> Op. Cit.

consultant provides recommendation in the event of post-review discovery (see item 5 cultural Resources).

Therefore, as an abundance of caution, in the unlikely event that subsurface resources are located, **Mitigation Measures CUL-1 subsets (a) through (c)** as specified at Item 5 Cultural Resources would be implemented thereby reducing the potential level of impact to this resource as less than significant for resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or to a resource consider significant to a California Native American tribe. Therefore, the Project would result in a less than significant impact to this resource.

Cumulative Impact Analysis: *Less Than Significant Impact*

Mitigation Measure(s): *CUL-1 subsets (a) through (c) as specified at Item 5 Cultural Resources*

As noted above, surface resources are not present on the proposed Project location. In the event subsurface resources are encountered, **Mitigation Measures CUL-1 subsets (a) through (c)** would apply to minimize any impact to less than significant. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

Conclusion: *Less Than Significant Impact*

With implementation of **Mitigation Measures CUL-1 subsets (a) through (c)**, potential Project-specific and cumulative impacts related to this Checklist Item will be reduced to a level of *Less Than Significant With Mitigation*.

## DEFINITIONS/ACRONYMS

### Definitions

Historical Resources - For the purposes of CEQA, a "historical resource" is a resource listed in, or determined to be eligible for listing in, the CR (Title 14 CCR §15064.5(a)(1)-(3)). Historical resources may include, but are not limited to, "any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC §5020.1(j)).<sup>36</sup>

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<sup>36</sup> "Cultural Resources Assessment, Proposed Planning Study Area for the Three Rivers Community Plan 2018 Update, Tulare County, California". Page 1. Prepared by Sierra Valley Cultural Planning (and included in Appendix "C" of the Three Rivers Community Plan 2018 Update EIR).

**Significant Resource** – The California Public Resources Code identifies a resource as “significant” when it meets all of the following criteria: The survey has been or will be included in the State Historic Resources Inventory; the survey and the survey documentation were prepared in accordance with office procedures and requirements; the resource is evaluated and determined by the office to have a significance rating of Category 1 to 5 on DPR Form 523; if the survey is five or more years old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historical resources which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the significance of the resource.<sup>37</sup>

### Acronyms

CHRIS	California Historic Resources Information System
CRHR	California Register of Historical Resources
HABS/HAER	Historic American Building Survey/Historic American Engineering Record
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act of 1966
OHP	California State Office of Historic Preservation
RMA	Resource Management Agency (Tulare County)
SHPO	State Historic Preservation Officers

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<sup>37</sup> California Legislative Information, 2017. Public Resources Code – PRC 5024.1. [https://leginfo.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=PRC&sectionNum=5024.1](https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=5024.1).



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# Utilities and Service Systems

## Chapter 3.19

### SUMMARY OF FINDINGS

The proposed Three Rivers-Hampton Inn & Suites (Project) will result in *No Impact* related to Utilities and Service Systems. Therefore, no mitigation measures are required. A detailed review of potential impacts is provided in the following analysis.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Utilities and Service Systems. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2, “An EIR shall identify and focus on the significant effects of the proposed project on the environment. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected. For example, the EIR should evaluate any potentially significant direct, indirect, or cumulative environmental impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas), including both short-term and long-term conditions, as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

The “Environmental Setting” section provides a description of the Utilities and Service Systems setting in the County. The “Regulatory Setting” section provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information

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<sup>1</sup> California Natural Resource Agency. CEQA Statutes and Guidelines, Item (a) of 15126.2 CONSIDERATION AND DISCUSSION OF SIGNIFICANT ENVIRONMENTAL IMPACTS. Accessed December 2020 at: [https://resources.ca.gov/-/media/CNRA-Website/Files/Programs-and-Projects/CEQA/CEQA-Homepage/2019\\_CEQA\\_Statutes\\_and\\_Guidelines.pdf](https://resources.ca.gov/-/media/CNRA-Website/Files/Programs-and-Projects/CEQA/CEQA-Homepage/2019_CEQA_Statutes_and_Guidelines.pdf)

contained in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR) incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

### Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist Item questions. The following are potential thresholds for significance.

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste

## **ENVIRONMENTAL SETTING**

“Tulare County and special districts provide many important services to County residents and businesses in unincorporated communities and hamlets such as water, wastewater, storm drainage, solid waste removal, utilities, communications, fire protection, law enforcement, and a number of other community facilities and services (schools, community centers, etc.).”<sup>2</sup>

“Water districts supply water to communities and hamlets throughout the County. Most communities and some hamlets have wastewater treatment systems; however, several communities including Three Rivers, Plainview, Alpaugh, and Ducor rely on individual septic systems. Storm drainage facilities are generally constructed and maintained in conjunction with transportation improvements or new subdivisions in communities. Solid waste collection in the County is divided into service areas, as determined by the Board of Supervisors, with one license for each area. Southern California Edison provides electric service to the south and central areas of Tulare County while PG&E provides electric service in the north. The [Southern California] Gas Company is the primary provider of natural gas throughout the County.”<sup>3</sup>

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<sup>2</sup> Tulare County General Plan Update 2030. Page 14-3.

<sup>3</sup> Ibid. 14-3.

## Three Rivers

Three Rivers is an unincorporated, foothill community lying approximately 30 miles east/north east of Visalia, California. Situated within the Kaweah River watershed against a backdrop of the Great Western Divide of the Sierra Nevada mountain range, the community enjoys “Gateway” status due to its positioning at the entrance to Sequoia National Park. Its low elevation (~1000 - 2000’) and latitude accord the community a Mediterranean climate with dry, hot summers and generally cool, rainy winters.<sup>4</sup>

The Three Rivers Urban Development Boundary (UDB) encompasses a commercial “downtown” area and extends into the rural and largely un-developed North, South, and East Forks of the Kaweah watershed before giving way to the federally-administered lands of the Bureau of Land Management and National Park Service. Three Rivers is an unincorporated, census-designated place within Tulare County.<sup>5</sup>

## Services

“Tulare County and special districts provide many important services to County residents and businesses in unincorporated communities and hamlets such as water, wastewater, storm drainage, solid waste removal, utilities, communications, fire protection, law enforcement, and a number of other community facilities and services (schools, community centers, etc.).”<sup>6</sup>

Water districts supply water to communities and hamlets throughout the County. Most communities and some hamlets have wastewater treatment systems; however, several communities including Three Rivers, rely on individual septic systems. Storm drainage facilities are generally constructed and maintained in conjunction with transportation improvements or new subdivisions in communities.<sup>7</sup>

Three Rivers is served by the Three Rivers Community Services District (CSD), a locally elected governmental agency comprised of a five member Board of Directors whose mission is to serve the water quality and septic needs of the Three Rivers District.<sup>8</sup> Services provided by the Three Rivers Community Services District include: monitoring of the river and well water in the area including reporting to the California Water Quality Board; providing low cost drinking water testing, reviewing and commenting to County agencies on septic systems and special use permits; investigating and taking appropriate action on complaints regarding septic, groundwater, surface water and drinking water problems; providing homeowners with information about how a septic

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<sup>4</sup> National Park Service, 2016. Climate at Sequoia and Kings Canyon National Parks. <https://home.nps.gov/seki/learn/education/climate.htm>

<sup>5</sup> Tulare County, 2010. General Plan 2030 Update Background Report. <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>; US Census Bureau, 2017. Three Rivers CDP, California. [https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml#](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml#)

<sup>6</sup> Tulare County General Plan, 2010. P. 14-3. <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>

<sup>7</sup> Ibid.

<sup>8</sup> Three Rivers Community Services District, 2017. <http://www.3riverscsd.com/index.php>

system operates including a homeowner's guide; and actively working with State and Local agencies to achieve compliance with state and local ordinances.<sup>9</sup>

#### Sewer/On-Site Wastewater Treatment

Currently, there is no sewer system within Three Rivers UDB. Wastewater disposal occurs through the use of septic systems.

“Assembly Bill 885 (Statutes of 2000) required the State Water Resources Control Board (State Board) to adopt standards or regulations for the permitting and operation of Onsite Wastewater Treatment Systems (OWTS) by January 1, 2004. A draft policy was released in 2005, but was not adopted because of opposition by public agencies and other interest groups. In 2011, Heal the Ocean Santa Barbara and Heal the Bay Santa Monica filed a lawsuit against the State Board for failure to act. This action resulted in adoption of the statewide policy in June 2012, entitled Water Quality Control Policy for Siting, Design, Operation and Maintenance of OWTS (The Policy). This Policy became effective in May 2013, and for the first time, established a statewide, risk-based tiered approach for the regulation and management of OWTS installations. The State Board adopted policy changes regarding siting, design, operation, and maintenance of OWTS that will impact local land owners. In 2000, state legislation directed the State Board to adopt statewide standards for the permitting and operation of septic systems.

In May 2013, the State Board approved statewide policy, and subsequently each Regional Water Quality Control Board (Regional Board) updated Basin Plans to reflect the policy. The statewide policy is designed to allow for the installation of OWTS, while being protective of groundwater resources throughout California (Tier 1 Criteria). The Policy does not take into consideration local soil or groundwater conditions. To address this concern, counties may develop and submit a Local Agency Management Program (LAMP) to the Regional Board that proposes alternative design standards for new and replacement systems (Tier 2).

Existing onsite wastewater treatment systems that are properly functioning, and do not meet the conditions of failing systems or otherwise require corrective action fall into Tier 0 and are waived of discharge requirements if they meet the following requirements:

- Have a projected flow of 10,000 gallons per day or less;
- Receive only domestic wastewater from residential or commercial buildings, or high-strength wastewater from commercial food service buildings that do not exceed 900 mg/L BOD and has a properly sized and functioning oil/grease interceptor (a.k.a, grease trap);
- Continue to comply with any previously imposed permitting conditions;
- Do not require supplemental treatment under Tier 3;
- Do not require corrective action under Tier 4;
- Do not consist of a cesspool as a means of wastewater disposal.

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<sup>9</sup> Ibid.

Any existing system will remain in Tier 0 so long as it conforms with the above requirements. Any systems not deemed to be in compliance with these standards may be denied coverage by the Regional Water Board or local agency and further corrective action may be required (State Water Resources Control Board, 2013).

New onsite wastewater treatment systems in the Three River Community will be subject to Tier 1- Low Risk New or Replacement OWTS requirements. The Three Rivers Community is not located near any bodies of water deemed "impaired" by the SWRCB, therefore Tier 3 regulations will not apply. New and Replacement OWTS sites require a qualified professional to perform site evaluations for soil depth, highest anticipated groundwater levels within the dispersal field, percolation tests, and proper permits through the respective permitting agencies. A licensed General Engineering Contractor (Class A), General Building Contractor (Class B), Sanitation System Contractor (Specialty Class C-42), or Plumbing Contractor (Specialty Class C-36) shall install all new and replacement systems in accordance with California Business and Professions Code Sections 7056, 7057, and 7058 and Article 3, Division 8, Title 16 of the California Code of Regulations. A property owner may also install his/her own OWTS if the as-built diagram and the installation are inspected and approved by the Regional Water Board or the responsible local agency, while the OWTS is exposed for inspection (prior to covering with soil) (State Water Resources Control Board, 2013).

Tier 1 Low Risk New or Replacement OWTS also requires the following:

- 5 feet minimum setback from parcel property lines and structures;
- 100 feet minimum setback from water wells and monitoring wells;
- 100 feet minimum setback from any unstable land mass or areas subject to earth slides;
- 100 feet minimum setback from springs and flowing surface water bodies;
- 200 feet minimum setback from vernal pools, wetlands, and the high water mark of lakes and reservoirs;
- 150 feet minimum setback from public water wells where the depth of effluent dispersal system does not exceed 10 feet;
- Percolation test results shall not exhibit a flow rate greater than one minute per inch (1 MPI) or slower than one hundred twenty minutes per inch (120 MPI) in the effluent disposal area;
- Natural ground slope in all areas used for effluent disposal shall not exceed 25 percent;
- Expected influent flow not to exceed 3,500 gallons per day;
- Minimum twelve inches (12") soil cover on all gravity dispersal systems;
- Minimum six inches (6") soil cover on all pressure distribution systems;
- 100% replacement area available for future use;
- Dispersal systems shall not exceed 10 feet as measured from the ground surface to the bottom of the trench.

A New or Replacement OWTS under Tier 1 shall not exceed the allowable density values for a single-family dwelling unit. These density values are summarized in Table 31 [in the Three Rivers Community Plan 2018 update, **Table 3.19-1** in this DEIR] Allowable Average Densities per Subdivision under Tier 1 below.

<b>Table 3.19-1</b>	
<b>Allowable Average Densities Per Subdivision Under Tier 1</b>	
Average Annual Rainfall (Inched/year)	Allowable Density (Single Family Dwelling Unit)
0-15	2.5
>15-20	2
>20-25	1.5
>25-35	1
>35-40	0.75
>40	0.5
<i>Water Quality Policy for Siting, Design, Operations, and Maintenance of Onsite Water Treatment Systems, May 13, 2013 – State Water Resources Control Board</i>	

Three Rivers receives between 17 inches and 21 inches of average annual rainfall, depending on specific site location. Site specific analyses will need to be conducted prior to determining allowable density for each system location.

During the site evaluation for each new or replacement system, a percolation test and highest anticipated depth to groundwater must be conducted. Based on the determined percolation rate, the minimum depth of groundwater below the bottom of the leaching trench, and the native soil depth immediately below the leaching trench, shall not be less than described in Table 32- Tier 1 Minimum Depths to Groundwater and Minimum Soil Depth from the Bottom of the Dispersal System below. Table 32 [in the Three Rivers Community Plan 2018 update, **Table 3.19-2** in this DEIR] - Tier 1 Minimum Depths to Groundwater and Minimum Soil Depth from the Bottom of the Dispersal System below.

<b>Table 3.19-2</b>	
<b>Tier 1 Minimum Depths to Ground Water and Minimum Soil Depth</b>	
Percolation Rate (minutes/inch (MPI))	Minimum Depth (feet)
1.0	Requires Tier 2 Local Agency Management Plan
>1.0 and 5.0	20
>5.0 and 30	8
>30 and 120	5
>120	Requires Tier 2 Local Agency Management Plan
<i>Water Quality Policy for Siting, Design, Operations, and Maintenance of Onsite Water Treatment Systems, May 13, 2013 – State Water Resources Control Board</i>	

Onsite Wastewater Treatment Systems that do not meet the Tier 1 regulations as described above and in the Policy provided by SWRCB shall be required to implement Tier 2 requirements, which involves a management program submitted by a local agency. The OWTS must be installed and

managed per the requirements of the approved management program. The Local Agency Management Programs may include standards that differ from Tier 1 requirements. Local Agency Management Programs must be developed individually on a site by site basis and approved by the Regional Water Board or other authorized local agency.”<sup>10</sup>

## Water

See Chapter 3.10 Hydrology and Water Quality for discussion regarding water supply and quality for the Three Rivers planning area. Following are key points discussed in Chapter 3.10.

### Drinking Water

“Drinking water (in Three Rivers) is supplied largely by wells in fractured granitic bedrock. Groundwater recharge results from precipitation and groundwater seepage along the Kaweah River tributaries. Recharge is greatest in the upper watersheds where supply exceeds demand. Recharge is reduced in the lower watersheds... Residential areas exist primarily in the lower watersheds and many homes are located adjacent to the river tributaries where groundwater recharge from the river exceeds water supply demand.

Average daily water use per residence is 310 gallons per day (gpd) but varies by season with a winter demand of 195 gpd and a summer demand of 480 gpd.

Groundwater in wells is a blend of high quality surface water and variable quality groundwater flowing through rock fractures. Water quality varies from high quality water with a very low mineral content to a few wells with notable elevated dissolved mineral, sulfur or hydrogen sulfide. Wells which produce groundwater with high levels of dissolved minerals, sulfur or hydrogen sulfide are related to the underlying bedrock type, typically metamorphic rock.”<sup>11</sup>

### Adequacy of Supply

“The Southern Sierra Regional Water Management Group (RWMG) is aware that “very little groundwater information is available and accessible for resource planning in the Region where fractured bedrock aquifers serve remote, disadvantaged communities through individual wells and septic tanks.” The regional water management group (RWMG) notes that:

*Towns such as Three Rivers exemplify the need for more information regarding both groundwater and surface water resources...Groundwater supplies fluctuate seasonally, but amounts and extents are unknown. The area’s water quality also fluctuates seasonally, but locally, drinking water must be boiled to be drinkable. Because they, like most other communities in the SSIRWM region, rely on fractured-rock groundwater, it is critical to*

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<sup>10</sup> Tulare County. Three Rivers Community Plan 2018 Update. Pages 146-148. Accessed January 2021 at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>

<sup>11</sup> Tulare County. Three Rivers Community Plan 2018 Update Draft EIR. Appendix “G”. DWR, 2016, “Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California.” Page 1. Prepared by California Department of Water Resources (DWR). Accessed January 2021 at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan/three-rivers-community-plan-update/three-rivers-community-plan-update-deir-appendices-modified/>



*conduct this study in order to plan for and sustainable manage their groundwater supplies. The SSRWMG will complete an update to its current IRWMP but lacks funds to conduct fractured-rock groundwater studies in key areas to better understand and thereby manage this resource. ... It is unknown if developing a regional groundwater management plan is appropriate for this Region, but additional information and support for the IRWMP will advance groundwater management efforts. SSRWMG recognizes that, at this time, it is not feasible to construct a full groundwater management plan for the entire Region. Thus, the focus of data gathering should be localized compared to the size of the Region because of potentially prohibitive costs and most of the Region does not have traditional groundwater management basins. Additional information and data would benefit not only Three Rivers or other suitable town and groundwater users, but will also serve as a starting point for other geographically similar watersheds and communities to begin to understand and manage the limited groundwater supplies.”<sup>12</sup>*

### Individual Water Supply Systems

“Private domestic systems are small systems used for residential use owned by an individual. Most of the single family homes with an individual water supply have a single well and storage tank. These water systems are generally untreated as there are no requirements to meet State or federal drinking water standards when used for a single family residence. Treatment, if it occurs, is only because of poor water quality or personal preference. Use is for potable water supplies and landscape irrigation. The number of private water wells has been estimated earlier in this report [in Table 22 of the DWR report included in Appendix “G” of the Three Rivers Community Plan 2018 Update Draft EIR; Table 3.10-2 in this Draft EIR].”<sup>13</sup>

### Public Drinking Water Supply Systems

“A public water supply is any water system that has at least 15 service connections or regularly supplies at least 25 individuals (EPA). Typically, water would be supplied by wells and/or surface water sources. These systems may require treatment and regular testing of the potable water supply and must meet safe drinking water standards set by the EPA and State of California. Small public systems serving broad areas are often cost prohibitive for low density communities such as Three Rivers.

Twenty-three private water systems in the watersheds of the Three Rivers area are classified as public drinking-water supplies. Seven of these provide water for residential use, and the remainder consists of small public or commercial properties, such as the Three Rivers Library, motels, restaurants, and service stations. The residential water systems are typically small, having 19–105 service connections, and serve a population of 19–300. There are several small commercial properties similar to those found in the study area, but which are not classified as public drinking-water systems. No information was collected for those systems. They normally provide potable water for use by employees and customers, and may provide landscape irrigation water. Water sources for the water systems come primarily from wells drilled into fractured bedrock (77 percent), with some systems relying on spring water (3 percent) and others on intakes from the Kaweah River (21 percent).

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<sup>12</sup> Ibid. 3.

<sup>13</sup> Ibid. 21.

Eleven of the 23 private systems have more than one source of supply. Often this is a new well replacing an older well, but some systems have some combination of one or more wells, springs, and intake from the Kaweah River.

There are an additional eight public drinking water systems that are located within the Kaweah River Watershed of Sequoia National Park. While most of these are located in the upper reaches of the Kaweah Watershed, the Ash Mountain entrance to the park is located within the local watersheds of the Three Rivers area. Water sources for the water systems come primarily from surface water intakes on the Kaweah River (53 percent), wells drilled into fractured bedrock (33 percent), and spring water (13 percent). The water is primarily for potable use for tourists and park employees with some limited landscaping use.

Four of the eight systems have more than one source of supply. This is commonly a combination of one or more wells, springs, and intakes from the Kaweah River.”<sup>14</sup>

<b>Table 3.19-3</b> <b>Number of Wells in the Watersheds of the Three Rivers Area</b> <b>[Table 3.10-2 of Chapter 3.10]</b>					
<b>Kaweah River Tributary</b>	<b>Watershed</b>	<b>Number of Residences</b>	<b>Number of Wells by Well Log Count</b>	<b>Number of Wells Estimated by Number of Parcels</b>	<b>% of Total Residences or Wells</b>
North Fork	North Fork Kaweah	4	1	3	0.3
	Lower North Fork Kaweah River	147	79	101	11.5
	Lake Kaweah	247	129	170	19.5
Middle Fork	Marble Fork Kaweah River	16	4	11	1.3
	North Side Lake Kaweah	494	138	339	38.8
East Fork	East Fork Kaweah River	8	2	5	0.6
	Lower East Fork Kaweah River	11	4	8	0.9
South Fork	South Fork Kaweah River	41	40	28	3.2
	Lower South Fork Kaweah River	305	42	209	24.0
	Total:	1,273	439	874	100.0
	From 2010 Census:	1,331			
<i>Source: DWR. (2016). Tables. Table 22. Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California. State of California Department of Water Resources.</i>					

## REGULATORY SETTING

### *Federal Agencies & Regulations*

#### [U.S. Environmental Protection Agency](#) (U.S. EPA) - Federal Regulation Title 40, Part 503

In 1993, the [U.S. Environmental Protection Agency](#) (U.S. EPA) promulgated Standards for the Use or Disposal of Sewage Sludge (Code of Federal Regulations Title 40, Part 503), which establish pollutant limitations, operational standards for pathogen and vector attraction reduction,

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<sup>14</sup> Op. Cit. 22.

management practices, and other provisions intended to protect public health and the environment from any reasonably anticipated adverse conditions from potential waste constituents and pathogenic organisms.

This part establishes standards, which consist of general requirements, pollutant limits, management practices, and operational standards, for the final use or disposal of sewage sludge generated during the treatment of domestic sewage in a treatment works. Standards are included in this part for sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are pathogen and alternative vector attraction reduction requirements for sewage sludge applied to the land or placed on a surface disposal site.

In addition, the standards in this part include the frequency of monitoring and recordkeeping requirements when sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are reporting requirements for Class I sludge management facilities, publicly owned treatment works (POTWs) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more.<sup>15</sup>

#### [Resource Conservation and Recovery Act \(RCRA\)](#)<sup>16</sup>

Congress passed RCRA on October 21, 1976 to address the increasing problems the nation faced from our growing volume of municipal and industrial waste. RCRA, which amended the Solid Waste Disposal Act of 1965, set national goals for:

- Protecting human health and the environment from the potential hazards of waste disposal.
- Conserving energy and natural resources.
- Reducing the amount of waste generated.
- Ensuring that wastes are managed in an environmentally-sound manner
- To achieve these goals, RCRA established three distinct, yet interrelated, programs:
  - ✓ The [solid waste program](#), under RCRA Subtitle D, encourages states to develop comprehensive plans to manage nonhazardous industrial solid waste and municipal solid waste, sets criteria for municipal solid waste landfills and other solid waste disposal facilities, and prohibits the open dumping of solid waste.
  - ✓ The [hazardous waste program](#), under RCRA Subtitle C, establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal — in effect, from “cradle to grave.”
  - ✓ The underground storage tank (UST) program, under RCRA Subtitle I, regulates [underground storage tanks](#) containing hazardous substances and petroleum products. RCRA banned all open dumping of waste, encouraged [source reduction](#) and [recycling](#),

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<sup>15</sup> Title 40: Protection of Environment Part 503: Standards for the Use of Disposal of Sewage Sludge, <http://www.ecfr.gov/cgi-bin/text-idx?SID=faac2040ebd49d57cc2786437545c8cf&node=40:30.0.1.2.42.1.13.1&rgn=div8>

<sup>16</sup> United States Environmental Protection Agency, <http://www.epa.gov/epawaste/laws-regs/rcrahistory.htm>

and promoted the [safe disposal of municipal waste](#). RCRA also mandated strict controls over the [treatment, storage, and disposal of hazardous waste](#).

#### Federal Emergency Management Agency (FEMA)

“Through FEMA's flood hazard mapping program, Risk Mapping, Assessment and Planning (MAP), FEMA identifies flood hazards, assesses flood risks and partners with states and communities to provide accurate flood hazard and risk data to guide them to mitigation actions. Flood hazard mapping is an important part of the National Flood Insurance Program (NFIP), as it is the basis of the NFIP regulations and flood insurance requirements. FEMA maintains and updates data through Flood Insurance Rate Maps (FIRMs) and risk assessments. FIRMs include statistical information such as data for river flow, storm tides, hydrologic/hydraulic analyses and rainfall and topographic surveys. FEMA uses the best available technical data to create the flood hazard maps that outline your community's flood risk areas.”<sup>17</sup> The Three Rivers UDB includes lands that are within a 100-year flood zone.<sup>18</sup>

#### ***State Agencies & Regulations***

##### The Integrated Waste Management Act (Assembly Bill 939)

In 1989 the California legislature passed the Integrated Waste Management Act of 1989, known as AB 939. The bill mandates a reduction of waste being disposed: jurisdictions were required to meet diversion goals of 25% by 1995 and 50% by the year 2000. AB 939 also established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance.

##### The Regional Water Quality Control Board – Biosolids

In California, the beneficial reuse of treated municipal sewage sludge (*a.k.a.*, biosolids) generally must comply with the California Water Code in addition to meeting the requirements specified in Part 503 in Title 40 of the Code of Federal Regulations.

In July 2004, the State Water Resources Control Board adopted [Water Quality Order No. 2004-12-DWQ](#) (General Order), and certified a supporting statewide [Programmatic Environmental Impact Report](#) (PEIR)

The General Order incorporates the minimum standards established by the Part 503 Rule and expands upon them to fulfill obligations to the California Water Code. However, since California does not have delegated authority to implement the Part 503 Rule, the General Order does not replace the Part 503 Rule. The General Order also does not preempt or supersede the authority of local agencies to prohibit, restrict, or control the use of biosolids subject to their jurisdiction, as allowed by law.

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<sup>17</sup> FEMA. 2017. <http://www.fema.gov/national-flood-insurance-program-flood-hazard-mapping>

<sup>18</sup> FEMA. 2017. FEMA's National Flood Hazard Layer (Official).  
<http://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30&extent=-118.9092593534277,36.450390221420996,-118.86771730020395,36.46178094654359>

Persons interested in seeking coverage under the General Order should contact the appropriate Regional Water Quality Control Board. Only applicants who submit a complete *Notice of Intent* (NOI), appropriate application fee, and are issued a Notice of Applicability by the executive officer of the appropriate Regional Water Quality Control Board are authorized to land apply biosolids at an agricultural, horticultural, silvicultural, or land reclamation site as a soil amendment under the General Order.

#### State Water Resources Control Board, Divisions of Drinking Water and Clean Water

Recycled water regulations are administered by both Central RWQCB and the California State Water Resources Control Board (SWRCB). The regulations governing recycled water are found in a combination of sources, including the Health and Safety Code, Water Code, and Titles 22 and 17 of the California Code of Regulations (CCR). Issues related to the treatment and distribution of recycled water are generally under the permitting authority of RWQCB and the Clean Water Division of the SWRCB.

#### CalRecycle

CalRecycle (formerly the California Integrated Waste Management Board) governs solid waste regulations on the state level, delegating local permitting, enforcement, and inspection responsibilities to Local Enforcement Agencies (LEA). Regulations authored by CalRecycle (Title 14) were integrated with related regulations adopted by the State Water Resources Control Board (SWRCB) pertaining to landfills (Title 23, Chapter 15) to form CCR Title 27.

#### California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies, in addition to authorizing video franchises. In 1911, the CPUC was established by Constitutional Amendment as the Railroad Commission. In 1912, the Legislature passed the Public Utilities Act, expanding the Commission's regulatory authority to include natural gas, electric, telephone, and water companies as well as railroads and marine transportation companies. In 1946, the Commission was renamed the California Public Utilities Commission. It is tasked with ensuring safe, reliable utility service is available to consumers, setting retail energy rates, and protecting against fraud.

### ***Local Policy & Regulations***

#### Tulare County General Plan Policies

As the proposed Project will not utilize any new or expanded water, wastewater treatment or storm water drainage, natural gas, or telecommunications facilities, the applicable Tulare County General Plan 2030 Update policies for this resource are limited to the following for this resource item:

**PFS-4.2 Site Improvements** - The County shall ensure that new development in UDBs, UABs, Community Plans, Hamlet Plans, Planned Communities, Corridor Areas, and Area Plans includes adequate stormwater drainage systems. This includes adequate capture, transport, and detention/retention of stormwater.

**PFS-4.3 Development Requirements** - The County shall encourage project designs that minimize drainage concentrations and impervious coverage, avoid floodplain areas, and where feasible, provide a natural watercourse appearance.

**PFS-4.4 Stormwater Retention Facilities** - The County shall require on-site detention/retention facilities and velocity reducers when necessary to maintain existing (pre-development) storm flows and velocities in natural drainage systems. The County shall encourage the multi-purpose design of these facilities to aid in active groundwater recharge.

**PFS-4.5 Detention/Retention Basins Design** - The County shall require that stormwater detention/retention basins be visually unobtrusive and provide a secondary use, such as recreation, when feasible.

**PFS-4.7 NPDES Enforcement** - The County shall continue to monitor and enforce provisions to control non-point source water pollution contained in the U.S. Environmental Protection Agency National Pollution Discharge Elimination System (NPDES) program.

**PFS-5.3 Solid Waste Reduction** - The County shall promote the maximum feasible use of solid waste reduction, recycling, and composting of waste, strive to reduce commercial and industrial waste on an annual basis, and pursue financing mechanisms for solid waste reduction programs.

**PFS-5.4 County Usage of Recycled Materials and Products** - The County shall encourage all industries and government agencies in the County to use recycled materials and products where economically feasible.

**PFS-5.5 Private Use of Recycled Products** - The County shall work with recycling contractors to encourage businesses to use recycled products and encourage consumers to purchase recycled products.

**PFS-5.6 Ensure Capacity** - The County shall require evidence that there is adequate capacity within the solid waste system for the processing, recycling, transmission, and disposal of solid waste prior to approving new development.

**PFS-5.7 Provisions for Solid Waste Storage, Handling, and Collection** - The County - shall ensure all new development adequately provides for solid waste storage, screening, handling, and collection prior to issuing building permits.

**PFS-5.8 Hazardous Waste Disposal Capabilities** - The County shall require the proper disposal and recycling of hazardous materials in accordance with the County's Hazardous Waste Management Plan.

## IMPACT EVALUATION

### Would the project:

- a) **Relocation or construction of new facilities which could cause significant environmental effects?**

Project Impact Analysis: *No Impact*

The State Water Resources Control Board requires any new construction project greater than one acre to complete a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP would be prepared for the proposed Project by a qualified engineer or erosion control specialist as a condition of approval and would be submitted to the County for review and approval before being implemented during construction. The SWPPP would be designed to reduce potential impacts related to erosion and surface water quality during construction activities and throughout the life of the proposed Project. It would include proposed Project information and best management practices (BMP). The BMPs would include dewatering procedures, stormwater runoff quality control measures, concrete waste management, watering for dust control, and construction of perimeter silt fences, as needed. Implementation of the SWPPP will minimize the potential for the proposed Project to substantially alter the existing drainage pattern in a manner that will result in substantial erosion or siltation onsite or offsite. There will be no discharge to any surface or groundwater sources which may impact water quality standards. As such, the proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Thus, the proposed Project would have *No Impact* to this resource.

Cumulative Impact Analysis: *No Impact*

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan Update, General Plan 2030 Update Background Report and/or Tulare County 2030 General Plan Update Recirculated Draft Environmental Impact Report (RDEIR).

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will result in *No Project-specific and Cumulative Impacts* due to relocation or construction of new facilities.

Mitigation Measure(s): *None Required.*

Conclusion: *No Impact*

As noted earlier, *No Impacts* related to this Checklist Item will occur.

**b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?**

Project Impact Analysis:

*No Impact*

The proposed Project site is located in the Kaweah Watershed. The Department of Water Resources (DWR) has estimated that the nine (9) watersheds within the Kaweah Watershed cover 82,636 acres. As noted in the Hydrology and Water Quality Chapter, the tributaries supplying the Kaweah Watershed consists of 67,789 acres of the estimated 82,636 acres of the nine local watershed of the Three Rivers planning area. It was also mentioned in the Section 3.10 Hydrology and Water Quality, the “*Abbreviated Water Supply Evaluation to support the Three Rivers Community Plan EIR Memorandum*” (Memorandum) concludes that there is sufficient water supply to meet the approximately 940 acre-feet annually of future water demand at full build-out of the Three Rivers Community Plan, including residential, commercial, and industrial demand of the estimated 50,000 acre-feet of annual average groundwater recharge in the watershed. The proposed Project applicant’s engineer (Ald General Engineering) estimates that it will use approximately 15.37 acre feet of water per year (or approximately 5,009,625 gallons per year or 13,725 gallons per day<sup>19</sup>). Of the 940 acre-feet annual future water demand estimated in the Memorandum, the proposed Project would consume approximately 0.0163% of the 940 acre-feet (or about 0.0003%) of the estimated annual 50,000 acre-feet of the groundwater recharge in the watershed. It is noted that Ald General Engineering also provided as estimate for a parcel directly west of the proposed Project site of 3,450 gallons per day of water usage (or 1,259,250 gallons per year or 3.86 acre-feet per year). Combined, this would result in approximately 19.23 acre-feet per year (or approximately 0.0204%) of the estimate 940 acre-feet of annual future demand of the entire Three Rivers Community Plan planning area. As such, the proposed Project (including a hypothetical use north of the proposed Project site) would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Thus, the proposed Project would have no impact on this resource.

Cumulative Impact Analysis:

*No Impact*

The geographic area of this cumulative analysis is in the foothill region of Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR).

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the analysis contained in the “*Abbreviated Water Supply Evaluation to support the Three Rivers Community Plan EIR Memorandum*” (see Section 3.10 Hydrology and Water

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<sup>19</sup> “Hampton Inn & Suites Report of Waste Discharge Technical Report Wastewater Treatment System for the Proposed Hampton Inn & Suites 40758 Sierra Drive, Three Rivers, California.” (Waste Discharge Technical Report) September 2020. Page 4. Prepared by Ald General Engineering, Inc. and included in Attachment “D” of this Draft EIR.



Quality), and the estimate provided by Ald General Engineering (see above), the proposed Project will result in ***No Cumulative Impact*** related to this Checklist Item.

Mitigation Measure(s): *None*

Conclusion: *No Impact*

The proposed Project will result in ***No Impact*** related to this Checklist Item.

**c) Determined by the wastewater treatment provider that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?**

Project Impact Analysis: *No Impact*

The proposed Project is a hotel and as mentioned in Item a), the Project will have a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP would be prepared for the proposed Project by a qualified engineer or erosion control specialist as a condition of approval and would be submitted to the County for review and approval before being implemented during construction. The SWPPP would be designed to reduce potential impacts related to erosion and surface water quality during construction activities and throughout the life of the proposed Project. It would include proposed Project information and best management practices (BMP). Please refer to Item a) in Section 3.10 Hydrology and Water Quality for more details. The proposed Project would have ***No Impact*** on this resource item.

Cumulative Impact Analysis: *No Impact*

The geographic area of this cumulative analysis is in the foothill region of Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR).

As noted earlier, as there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will result in ***No Impact*** related to this Checklist item.

Mitigation Measure(s): *None*

Conclusion: *No Impact*

**d) Generate solid waste in excess of State or local standards?**

Project Impact Analysis: *Less Than Significant Impact*

Tulare County operates two active landfills: the Visalia landfill (located northwest of Visalia) and the Teapot Dome Landfill (located southwest of Porterville).<sup>20</sup> The County landfills receive approximately 300,000 tons of waste per year, which is equivalent to about 5 lbs. per person per day or one ton per county resident per year.<sup>21</sup> The Three Rivers planning area will utilize one of these facilities to accommodate the community's solid waste disposal needs.

The proposed Project is a hotel. As such, the Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and it will comply with federal, state, and local management and reduction statutes and regulations related to solid waste as applicable.

The proposed Project will result in *Less Than Significant Cumulative Impacts* to this Checklist item.

Cumulative Impact Analysis: *Less Than Significant Impact*

The geographic area of this cumulative analysis is in the foothill region of Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR).

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will result in *Less Than Significant Cumulative Impacts* related to this Checklist Item.

Mitigation Measure(s): *None Required.*

Conclusion: *Less Than Significant Impact*

The proposed Project will result in *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item.

**e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Project Impact Analysis: *Less Than Significant*

As stated in Item d), the proposed Project is a hotel. As such, the Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and it will comply with federal, state, and local management and reduction statutes and regulations related to solid waste as applicable. *Less Than Significant Project-specific Impacts* related to this Checklist item will occur.

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<sup>20</sup> Tulare County, Solid Waste 2021. About Us. Accessed January 2021 at: <http://tularecounty.ca.gov/solidwaste/index.cfm/about-us/>

<sup>21</sup> Ibid.

Cumulative Impact Analysis:

***Less Than Significant Impact***

The geographic area of this cumulative analysis is in the foothill region of Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, Tulare County General Plan 2030 Update Background Report, and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR).

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will result in ***Less Than Significant Cumulative Impacts*** related to this Checklist item.

Mitigation Measure(s):

***None Required.***

Conclusion:

***Less Than Significant Impact***

As noted earlier, ***Less Than Significant Project-specific or Cumulative Impacts*** related to this Checklist item will occur.

## DEFINITIONS AND ACRONYMS

### Definitions

**Base Flood** - a flood having a one percent chance of being equaled or exceeded in any given year.<sup>22</sup>

**Flood Plain** - Any land area susceptible to being inundated by floodwaters from any source.<sup>23</sup>

**Intermediate Regional Flood** - A flood - flow which, on the average, is equaled or exceeded once in 100 years, although the flood may occur in any year. A flood of this size is also referred to as a One-Percent Flood Event.<sup>24</sup>

**Special Flood Hazard Area** - An area having special flood, mudflow or flood-related erosion hazards and shown on a Flood Hazard Boundary Map (FHBM) or a Flood Insurance Rate Map (FIRM) Zone A, AO, A1-A30, AE, A99, AH, AR, AR/A, AR/AE, AR/AH, AR/AO, AR/A1-A30, V1-V30, VE or V. For the purpose of determining Community Rating System (CRS) premium discounts, all AR and A99 zones are treated as non-SFHAs.<sup>25</sup>

**Standard Project Flood** - A term used by the U.S. Army Corps of Engineers to designate a flood that may be expected from the most severe combination of meteorological and hydrological conditions that is considered reasonably characteristic of the geographical area in which the drainage basin is located, excluding extremely rare combinations. The peak flow for a standard project flood is generally 40 to 60 percent of the probable maximum flood for the same location.<sup>26</sup>

### Abbreviations

CVRWQCB	Central Valley Regional Water Quality Control Board
FIRM	Flood Insurance Rate Map
LAFCO	Local Agency Formation Commission
MWEL	Model Water Efficient Landscape Ordinance
NFIP	National Flood Insurance Program
OWTS	Onsite Wastewater Treatment Systems
RWQCB	Regional Water Quality Control Board
SFHA	Special Flood Hazard Area
SRRE	Source Reduction and Recycling Elements

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<sup>22</sup> FEMA. 2017. Definitions. Accessed January 2021 at: <https://www.fema.gov/national-flood-insurance-program/definitions#F>

<sup>23</sup> Ibid.

<sup>24</sup> State of California Natural Resources Agency. 1980. California Flood Management: An Evolution of Flood Damage Prevention Programs. Page 27. [http://www.water.ca.gov/waterdata/library/docs/historic/Bulletins/Bulletin\\_199/Bulletin\\_199\\_1980.pdf](http://www.water.ca.gov/waterdata/library/docs/historic/Bulletins/Bulletin_199/Bulletin_199_1980.pdf)

<sup>25</sup> FEMA. 2017. Definitions. <https://www.fema.gov/national-flood-insurance-program/definitions#F>

<sup>26</sup> FEMA. 2013. Page 165. Appendices. [https://www.fema.gov/media-library-data/20130726-1649-20490-1059/fema\\_102\\_chapter\\_appendices.pdf](https://www.fema.gov/media-library-data/20130726-1649-20490-1059/fema_102_chapter_appendices.pdf)

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# Wildfire

## Chapter 3.20

### SUMMARY OF FINDINGS

The proposed Project will result in **No Impact** related to Wildfire. A detailed review of potential impacts is provided in the following analysis.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

As contained in the Proposed Updates to the CEQA Guidelines (finalized in November 2018), “Senate Bill 1241 (Kehoe, 2012) requires the Office of Planning and Research, the Natural Resources Agency, and CalFire to develop “amendments to the initial study checklist of the [CEQA Guidelines] for the inclusion of questions related to fire hazard impacts for projects located on lands classified as state responsibility areas, as defined in section 4102, and on lands classified as very high fire hazard severity zones, as defined in subdivision (i) of section 51177 of the Government Code.” (Pub. Resources Code, § 21083.01 (emphasis added).)”<sup>1</sup>

At section 15126.2, the CEQA Guidelines state, “(a) The Significant Environmental Effects of the Proposed Project. An EIR shall identify and focus on the significant effects of the proposed project on the environment. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected. For example, the EIR should evaluate any potentially significant direct, indirect, or cumulative environmental impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas), including both short-term and long-term conditions, as identified

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<sup>1</sup> Governor’s Office of Planning and Research. Proposed Updates to the CEQA Guidelines. Final. November 2017. Page 36. Accessed February 2021 at: [http://opr.ca.gov/docs/20171127\\_Comprehensive\\_CEQA\\_Guidelines\\_Package\\_Nov\\_2017.pdf](http://opr.ca.gov/docs/20171127_Comprehensive_CEQA_Guidelines_Package_Nov_2017.pdf)

in authoritative hazard maps, risk assessments or in land use plans, addressing such hazards areas.”<sup>2</sup>

To provide an explanation on why it determined that analyzing potential impacts resulting from wildfire, the California Natural Resources Agency (“Natural Resources Agency” or “Agency”) provided a document titled the “*Final Statement of Reasons For Regulation Action Amendments to the State CEQA Guidelines*” (“Final Statement of Reasons”). The amendments address legislative changes to the California Environmental Quality Act (CEQA), clarify certain portions of the existing CEQA Guidelines, and update the CEQA Guidelines to be consistent with recent court decisions. As noted in the Final Statement of Reasons, “The CEQA Guidelines are unique among administrative regulations. They provide a carefully organized, step-by-step guide to the environmental review process. As a result, rather than turning to the statute and case law, many agency staff and planners look to the CEQA Guidelines as a comprehensive source of information regarding CEQA’s requirements.”<sup>3</sup>

In the Final Statement of Reasons document, specifically at “12. CEQA Requires Analysis of the Potential Impacts Associated with Wildfire”, the Agency writes, “Some comments suggested that the Agency should not include questions in Appendix G related to wildfire. In part, those comments suggested that the California Supreme Court’s decision in *CBIA v. BAAQMD* (2015) 62 Cal.4th 369 precludes the analysis of such hazards on proposed projects. The Agency disagrees. In that decision, the Court held that “agencies subject to CEQA *generally* are not required to analyze the impact of existing environmental conditions on a project’s future users or residents.” (*Id.* at p. 377 (emphasis added).) The Court’s opinion also included a significant caveat: “[w]hen a proposed project risks exacerbating those environmental hazards or conditions that already exist an agency must analyze the potential impact of such hazards on future residents or users.” (*Id.*, at p. 377.)

In this context, an effect that a project “risks exacerbating” is similar to an “indirect” effect. Describing “indirect effects,” the CEQA Guidelines state: “If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect physical change in the environment.” (CEQA Guidelines, § 15064, (d)(2).) Just as with indirect effects, a lead agency should confine its analysis of exacerbating effects to those that are reasonably foreseeable. (*Id.* at subdivision (d)(3).)

In the context of wildfire, it is clear that development may exacerbate wildfire risks. OPR’s General Plan Guidelines, for example, includes an extensive discussion of the interaction between development and wildfire risk areas, including the “wildland-urban interface.” While wildfire risk already exists in such areas, bringing development to those areas makes the risk worse, and not just for fire risk. Recent research explains:

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<sup>2</sup> Governor’s Office of Planning and Research Final Adopted Text for Revisions to the CEQA Guidelines. 2018 Page 30. Accessed February 2021 at: [http://resources.ca.gov/ceqa/docs/2018\\_CEQA\\_FINAL\\_TEXT\\_122818.pdf](http://resources.ca.gov/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf)

<sup>3</sup> California Natural Resources Agency Final Statement of Reasons For Regulation Action Amendments to the State CEQA Guideline OAL Notice File No. Z-2018-0116-12. November 2018. Page 2. Accessed February 2021 at: [http://resources.ca.gov/ceqa/docs/2018\\_CEQA\\_Final\\_Statement\\_of%20Reasons\\_111218.pdf](http://resources.ca.gov/ceqa/docs/2018_CEQA_Final_Statement_of%20Reasons_111218.pdf).



The close proximity of houses and wildland vegetation does more than increase fire risk. As houses are built in the WUI, native vegetation is lost and fragmented; landscaping introduces nonnative species and soils are disturbed, causing nonnatives to spread; pets kill large quantities of wildlife; and zoonotic disease, such as Lyme disease, are transmitted.

(Radeloff, et al., “Rapid growth of the US wildland-urban interface raises wildfire risk,” *PROC NATL ACAD SCI USA* (March 27, 2018) 115 (13) 3314-3319 [citations omitted].) Not all development types are likely to create the same risks, however:

The recognition that homes are vulnerable to wildfire in the wildland-urban interface (WUI) has been established for decades... Analysis of hundreds of homes that burned in southern California the last decade showed that housing arrangement and location strongly influence fire risk, particularly through housing density and spacing, location along the perimeter of development, slope, and fire history. Although high-density structure-to-structure loss can occur, structures in areas with low-to-intermediate housing density were most likely to burn, potentially due to intermingling with wildland vegetation or difficulty of firefighter access. Fire frequency also tends to be highest at low to intermediate housing density, at least in regions where humans are the primary cause of ignitions.

(Syphard AD, Bar Massada A, Butsic V, Keeley JE (2013) “Land Use Planning and Wildfire: Development Policies Influence Future Probability of Housing Loss.” *PLoS ONE* 8(8): e71708. <https://doi.org/10.1371/journal.pone.0071708> [citations omitted].) In other words, low-density, leapfrog development may create higher fire risk than high-density, infill development.

Notably, Senate Bill 1241 (Kehoe, 2012) specifically required the Agency to update Appendix G with questions related to wildfire risk. One could view wildfire as a specific legislatively-created exception to the general rule the Court described in the CBIA decision, though the Court did not specifically analyze its provisions. In any event, the Agency drafted the questions in the new wildfire section to focus on the effects of new projects in creating or exacerbating wildfire risks.”<sup>4</sup>

Thereafter, the CEQA Checklist was updated to include questions related to fire hazard impacts for projects located in or near state responsibility areas or lands classified as very high fire hazard severity zones. The Wildfire section addresses factors that could expose people or structures to fire or post-fire flooding or landslides, risk or impair emergency response, or require installation of infrastructure that could exacerbate fire risk.

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<sup>4</sup> Ibid. 86 and 87.

### CEQA Thresholds of Significance

- Impair an adopted emergency response plan or emergency evacuation plan.
- Exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes

### **ENVIRONMENTAL SETTING**

**Nature:** “A wildfire is an uncontrolled fire spreading through vegetative fuels. Wildfires can be caused by human activities (such as arson or campfires) or by natural events (such as lightning). Wildfires often occur in forests or other areas with ample vegetation. Wildfires differ from other fires due to their large size, the speed at which the fires can spread, and the ability of the fire to change direction unexpectedly and to jump gaps, such as roads, rivers, and fire breaks. In areas where structures and other human development meet or intermingle with wildland or vegetative fuels (referred to as the wildland urban interface or WUI), wildfires can cause significant property damage and present extreme threats to public health and safety. The following three factors contribute significantly to wildfire behavior and can be used to identify wildfire hazard areas.

**Topography:** As slope increases, the rate of wildfire spread increases. South-facing slopes are also subject to more solar radiation, making them drier and thereby intensifying wildfire behavior. However, ridgetops may mark the end of wildfire spread because fire spreads more slowly or may even be unable to spread downhill.

**Fuel:** The type and condition of vegetation plays a significant role in the occurrence and spread of wildfires. Certain types of plants are more susceptible to burning or will burn with greater intensity, and non-native plants may be more susceptible to burning than native species. Dense or overgrown vegetation increases the amount of fuel load. The ratio of living to dead plant matter is also important. The risk of fire increases significantly during periods of prolonged drought, as the moisture content of both living and dead plant matter decreases; or when a disease or infestation has caused widespread damage. The fuel’s continuity, both horizontally and vertically, is also an important factor.

**Weather:** The most variable factor affecting the behavior of wildfires is weather. Temperature, humidity, wind, and lightning can affect chances for ignition and spread of fire. Extreme weather, such as high temperatures and low humidity, can lead to extreme wildfire activity. By contrast, cooling and higher humidity often signal reduced wildfire occurrence and easier containment. Years of precipitation followed by warmer years tend to encourage more

widespread fires and longer burn periods. Also, since the mid-1980s, earlier snowmelt and associated warming due to global climate change has been associated with longer and more severe wildfire seasons in the western U.S.

Wildfires can have serious effects on the local environment, beyond the removal of vegetation. Soil exposed to intense heat may lose its capability to absorb moisture and support life. Exposed soils erode quickly and enhance siltation of rivers and streams, thereby enhancing flood potential, harming aquatic life, and degrading water quality. Lands stripped of vegetation are also subject to increased debris flow hazards, as described above. Wildfires can also greatly affect the air quality of the surrounding area.

History: Historical information between 1910 and 2014 indicates that 610 wildfires occurred in the County which burned approximately 1,328,000 acres during this 104-year time period. The following causes represent approximately 95% of the 610 recorded wildfires (approximately 1.3 million acres), and are included as follows: miscellaneous 36% (532,800 acres); lightning 27% (309,000 acres); unknown or unidentified 14% (97,000 acres); arson 8% (63,300 acres); equipment use 5% (43,500 acres); smoking 3% (53,400 acres); and campfires 2% (184,600 acres). The remaining causes which include escaped prescribed burns, debris, vehicles, structures, power-lines, railroads and playing with fire account for the remaining 5% (44,400 acres) of the recorded wildfires. Appendix C [of the Tulare County 2017 Multi-Jurisdictional Local Hazard Mitigation Plan (MJLHMP)] lists documented fires over 1000 acres that have burned in the County since 1985.

Location: Public Resources Code 4201-4204 and Government Code 51175-89 directed CAL FIRE to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones are referred to as fire hazard severity zones and represented as very high, high and moderate. Specifically, the maps were created using data and models describing development patterns, potential fuels over a 30- to 50-year time horizon, expected fire behavior and expected burn probabilities. The maps are divided into local responsibility areas and State responsibility areas.

Local responsibility areas generally include incorporated cities, cultivated agriculture lands and portions of the desert. Local responsibility area fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to the local government. The fire hazard severity zones for the area of local responsibility in the County are shown on Figure B-4 (Appendix B, Hazard Figures [in the MJLHMP]). Fire severity zones are depicted for the Cities of Porterville and Woodlake in Figures B-13 and B-20 (Appendix B, Hazard Figures MJLHMP).

State responsibility area is a legal term defining the area where the State has financial responsibility for wildfire protection. Incorporated cities and Federal ownership are not included. The prevention and suppression of fires in all areas that are not State responsibility areas are primarily the responsibility of local or Federal agencies.

The portion of the County that transitions from the valley floor into the foothills and mountains is characterized by high to very high threat of wildfire; this includes the cities of Porterville and Woodlake, the jurisdiction of Tulare County Office of Education (TCOE), the Tule River Tribe Reservation and areas of the County unincorporated. Steeper terrain in these areas increases the threat of wildfire. The western portion of the County has little or no threat of wildfire. The risk of wildfire increases where human access exists in high fire hazard severity zones, such as the Sierra Nevada Mountains and foothills, because of a greater chance for human carelessness and because of historic and current fire management practices.

Impact of Climate Change: Climate and weather have long been acknowledged as playing key roles in wildfire activity, and global warming is expected to exacerbate fire impacts on natural and urban ecosystems. Predicting future fire regimes requires an understanding of how temperature and precipitation interact to control fire activity.<sup>7</sup> Since 2012, record drought and record temperatures, have weakened trees throughout California, resulting in millions of acres of failing forestland that then become vulnerable to disease and infestation. Infestations, such as those caused by native bark beetles, have caused tree mortality of epidemic proportions. The scale of tree mortality in California contributes to significantly increased wildfire risks, and presents life safety risks due to falling trees that can injure or kill people. The immediate consequence of tree mortality on California forestlands increases the potential for wildfires, further spread of forest insect tree damage, threats to critical public safety infrastructure from falling trees, reduced forest carbon stocks, loss of commercial timber values to landowners, and diminished wildlife habitat. Due to these increased risks, the County proclaimed states of emergency for tree mortality.

In addition, and in response to the millions of dead trees, a State of Emergency Proclamation was issued by the Governor. A Tree Mortality Task Force, comprised of State and Federal agencies led by CAL FIRE, Cal OES and the Governor's office has identified six counties as high hazard zones due to dead and dying trees and the hazards, this tree mortality presents. The 10 counties include: Amadore, Calaveras, El Dorado, Fresno, Kern, Madera, Mariposa, Placer, Tulare, and Tuolumne. Both the State's and the County's Tree Mortality Task Forces are structured as a Multi-Agency Coordination Group and meet monthly to exchange information and updates among stakeholders. Participants are encouraged to discuss needs and concerns, and leverage each other's subject matter expertise and resources to further response efforts.

Extent: CAL FIRE has classified 22% of the County as high wildfire hazard areas and an additional 27% as very high wildfire hazard areas. These areas are primarily in the foothills and mountain regions in the eastern portion of the County and to a large extent on National Forest or National Park land. Figure B- [in the MJLHMP] depicts the fire severity rating for areas of the County.

Probability of Future Events: Based on historical events, on average, slightly more than on wildfire of over 1000 acres burns within the County each year. Therefore, it is highly likely that

a wildfire event will occur within the calendar year impacting the County. Wildfire events have a greater than 1 in 1-year (100%) chance of occurring.”<sup>5</sup>

As noted earlier, the proposed Project is a 3-story hotel which will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.) and outdoor swimming pool/cabana building. Consistent with Tulare County parking requirements, the proposed Project includes 108 standard parking stalls, (6 of which will be handicap stalls). Utilities include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration). The proposed Project is anticipated to have 12 employees, 70 customers, 1 delivery, and 1 shipment per day, for a total of 168 daily vehicle trips.

The proposed Project site is located in unincorporated community of Three Rivers in Tulare County (County), California, approximately thirty miles east of Visalia, the County Seat. The nearest city is Woodlake located approximately 15 miles west of the Project site. The community is approximately five miles south of the entrance of Sequoia National Park. It lies in a natural valley area created by the convergence of the North, Middle, and South Forks of the Kaweah River near the western edge of the Sierra Nevada Mountains.<sup>6</sup> “The Project area is located in the Sierra foothills on the western slope of the Sierra Nevada range at elevations between 700 and 3,000 feet. Geophysical factors including elevation, slope, hydrogeology and climate... This area is typified by undulating terrain that varies from relatively flat riparian valleys immediately adjacent to the North, South, and Middle Forks of the Kaweah River... Elevations along the State Highway 198 corridor range from approximately 772 feet at Lake Kaweah to a high elevation of 2400 feet east of the entrance to the Sequoia National Park.”<sup>7</sup>

## REGULATORY SETTING

### *Federal Agencies & Regulations*

Federal responsibility areas (FRA) include lands administered by the following Federal Agencies: The United States Department of Agriculture Forest Service, The United States Department of the Interior, National Park Service, Fish and Wildlife Service, Bureau of Indian Affairs, and Bureau of Land Management, State Responsibility Area (SRA), Fire Safe Regulations (Title 14- Natural Resources Division 1.5, Department of Forestry Chapter 7, Fire Protection Subchapter 2, SRA Fire Safe Regulations Articles 1-5).. Although located very near areas of federal jurisdiction, and the fact that the proposed Project will not be funded by any federal sources, no federal wildland fire regulations would apply to the proposed Project.

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<sup>5</sup> Tulare County 2017 Multi-Jurisdictional Local Hazard Mitigation Plan (MJLHMP). March 2018. Pages 70-72. Accessed February 2021 at: [http://www.dinuba.org/images/2018/Tulare\\_County\\_MJLHMP-COMP-2018.pdf](http://www.dinuba.org/images/2018/Tulare_County_MJLHMP-COMP-2018.pdf)

<sup>6</sup> Tulare County. Three Rivers Community Plan 2018 Update. Draft Environmental Impact Report. Page. 3.8-2.

<sup>7</sup> Ibid.

## ***State Agencies & Regulations***

### Senate Bill 1241 (Kehoe, 2012)

“Wildfire: Senate Bill 1241 (Kehoe, 2012) required the Office of Planning and Research, the Natural Resources Agency, and CalFire to develop “amendments to the initial study checklist of the [CEQA Guidelines] for the inclusion of questions related to fire hazard impacts for projects located on lands classified as state responsibility areas, as defined in section 4102, and on lands classified as very high fire hazard severity zones, as defined in subdivision (i) of section 51177 of the Government Code.” (Pub. Resources Code, § 21083.01 (emphasis added).) The Agency added several questions addressing this issue. Notably, while SB 1241 required the questions to address specific locations, it did not necessarily limit the analysis to those locations, and so the Agency posed the questions for projects located within “or near” those zones. Lead agencies will be best placed to determine precisely where such analysis is needed outside of the specified zones.”<sup>8</sup>

“The safety elements of local general plans will also describe potential hazards, including: “any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence; liquefaction; and other seismic hazards ..., and other geologic hazards known to the legislative body; flooding; and wildland and urban fires.” (Gov. Code § 65302(g)(1).) Hazards associated with flooding, wildfire and climate change require special consideration. (Id. at subd. (g)(2)-(g)(4).) Lead agencies must “discuss any inconsistencies between the proposed project and applicable general plans” related to a project’s potential environmental impacts in a project’s environmental review. (State CEQA Guidelines § 15125(d).) Local governments may regulate land use to protect public health and welfare pursuant to their police power. (Cal. Const., art. XI, § 7; California Building Industry Assn. v. City of San Jose (2015) 61 Cal. 4th 435, 455 (“so long as a land use restriction or regulation bears a reasonable relationship to the public welfare, the restriction or regulation is constitutionally permissible”).)”<sup>9</sup>

### State Responsibility Area (SRA)

“Wildland fire protection in California is the responsibility of either the State, local government, or the federal government. The State Responsibility Area (SRA) is the area of the state where the State of California is financially responsible for the prevention and suppression of wildfires. Local responsibility areas (LRA) include incorporated cities, cultivated agriculture lands, and portions of the desert. Local responsibility area fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government.

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<sup>8</sup> Tulare County 2017 Multi-Jurisdictional Local Hazard Mitigation Plan (MJLHMP). March 2018. Pages 69-73. Accessed February 2020 at: [http://www.dinuba.org/images/2018/Tulare\\_County\\_MJLHMP-COMP-2018.pdf](http://www.dinuba.org/images/2018/Tulare_County_MJLHMP-COMP-2018.pdf)

<sup>9</sup> Ibid. 38 and 39.

SRA regulations have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in SRA. These measures provide for emergency access; signing and building numbering; private water supply reserves for emergency fire use; and vegetation modification. These regulations do not apply to existing structures, roads, streets and private lanes or facilities. These regulations apply as appropriate to all construction within the SRA approved after January 1, 1991, (see Figure 10) SRA Zones and SRA regulations in (Attachment A-7).<sup>10</sup> California Department of Forestry and Fire Protection (Cal Fire).

“California Department of Forestry and Fire Protection (CAL FIRE) are dedicated to the fire protection and stewardship of over 31 million acres of California's privately-owned wildlands. In addition, the Department provides varied emergency services in 36 of the State's 58 counties via contracts with local governments.”<sup>11</sup>

#### CAL FIRE - Tulare Unit Strategic Fire Plan<sup>12</sup>

As summarized in the 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan (MJLHMP), “The Plan is a local road map to create and maintain defensible landscapes in order to protect vital assets. It seeks to reduce firefighting cost and property loss, increase public and firefighter safety, minimize wildfire risk to communities and contribute to ecosystem health. The Plan identifies pre-suppression projects including opportunities for reducing structural ignitability, and the identification of potential fuel reduction projects and techniques for minimizing those risks. The central goals that are critical to reducing and preventing the impacts of fire revolve around both suppression efforts and fire prevention efforts. The MJLHMP fire hazard analysis and fire related mitigation measures will be provided to Cal Fire to support the Tulare Unit Strategic Fire Plan.”<sup>13</sup>

Cal Fire publishes Fire Hazard Severity Zone Maps for all regions in California, which can be viewed [here](#).<sup>14</sup> The fire hazard measurement used as the basis for these maps includes the speed at which a wildfire moves, the amount of heat the fire produces, and most importantly, the burning fire brands that the fire sends ahead of the flaming front. Lead agencies and project proponents can review the Cal Fire maps to determine whether a given project site will be subject to the new CEQA wildfire impacts analysis.

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<sup>10</sup> Tulare County. Three Rivers Community Plan 2018 Update. Page 68.

<sup>11</sup> Cal Fire. 2012. Accessed February 2021 at: <http://www.fire.ca.gov/about/about.php>.

<sup>12</sup> CAL FIRE. Tulare Unit Strategic Fire Plan. Last Update 26 February 2015. Website: <http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fpppdf1556.pdf>

<sup>13</sup> 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan; Section 3. Page 15. Accessed February 2021 at: [http://www.dinuba.org/images/2018/Tulare\\_County\\_MJLHMP-COMP-2018.pdf](http://www.dinuba.org/images/2018/Tulare_County_MJLHMP-COMP-2018.pdf)

<sup>14</sup> CAL FIRE California Fire Hazard Severity Zone Map Update Project. Accessed February 2021 at: [https://www.fire.ca.gov/fire\\_prevention/fire\\_prevention\\_wildland\\_zones\\_maps](https://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps)

## ***Local Policy & Regulations***

### Tulare County Health and Safety Element

During the update of the Health and Safety Element (H&S Element), the County was compelled to comply with AB 162 (regarding flooding) and SB 5 (flood hazard mapping). Wildfire can directly impact contribute to potential flooding opportunities as vegetation that would otherwise provide soil stability could be removed to the extent that exposed soil is vulnerable to land- or mudslides. Such events could subsequently damage/destroy structures (such as buildings), roadways, telecommunications towers, utility lines, etc., or result in land- or mudslide debris (e.g., vegetation, soil, destroyed structures, etc.) entering watercourses such as streams, rivers, lakes, etc. which could damage/destroy habitat, water quality, bridges, shorelines, etc.

As such, the Health and Safety Element addresses AB 162 and SB 5 by including Policies (Section 10.5 Flood Hazards and 10.6 Wildland Fire Hazards) and Implementation Measures in section 10.10. It also contains the following narrative: “Assembly Bill 162 (AB 162), adopted in 2007, amended Government Code Section 65302(d)(3) and (g)(2)) to require cities and counties to identify information regarding flood hazards upon revision of the jurisdiction's housing element on or after January 1, 2009. The requirements of Government Code Section 65302 (d)(3) and (g)(2)(A) are addressed in this General Plan Update as follows: Figure 10-1 (Flood Hazards and Faults [in the H&S Element]) displays information based on historic and current data regarding flood waters.

Figure 10-1 [in the H&S Element] shows:

- 1) The flood hazard zones (i.e. 100 and 500 Year Flood Zones) from the National Flood Insurance Rate maps published by Federal Emergency Management Agency (FEMA);
- 2) The dam failure inundation maps prepared pursuant to Section 8589.5 that are available from California Emergency Management Agency;
- 3) The California Department of Water Resources (DWR) Awareness Floodplain Mapping Program maps.

Figure 10-2 (Fire Threat [in the H&S Element]) shows:

- 1) Data on areas vulnerable to wildfire; and,
- 2) Urban development boundaries, hamlet development boundaries, and mountain service centers where existing and planned development will occur including structures, roads, utilities, and essential public facilities.

Used in conjunction, Figures 10-1 and 10-2 [in the H&S Element] show areas where FEMA flood zones and fire threats overlap to identify areas vulnerable to flooding after wildfires; The Figures also show where flood hazard zones are within these urban boundaries.”<sup>15</sup>

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<sup>15</sup> Tulare County Health and Safety Element Goals and Policies Report. Page 10-3. Accessed June 2019 at: <http://generalplan.co.tulare.ca.us/documents/GP/002Board%20of%20Supervisors%20Materials/001BOS%20Agenda%20Items%20->



### Tulare County General Plan Policies

The Tulare County General Plan has a number of policies that apply to projects within County of Tulare. General Plan policies that relate to the proposed Project are listed below.

**HS-1.5 Hazard Awareness and Public Education** - The County shall continue to promote awareness and education among residents regarding possible natural hazards, including soil conditions, earthquakes, flooding, fire hazards, and emergency procedures.

**HS-6.1 New Building Fire Hazards** - The County shall ensure that all building permits in urban areas, as well as areas with potential for wildland fires, are reviewed by the County Fire Chief.

**HS-6.2 Development in Fire Hazard Zones** - The County shall ensure that development in extreme or high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards.

**HS-6.4 Encourage Cluster Development** - The County shall encourage cluster developments in areas identified as subject to high or very high fire hazard, to provide for more localized and effective fire protection measures such as consolidations of fuel build-up abatement, firebreak maintenance, firefighting equipment access, and water service provision.

**HS-6.5 Fire Risk Recommendations** - The County shall encourage the County Fire Chief to make recommendations to property owners regarding hazards associated with the use of materials, types of structures, location of structures and subdivisions, road widths, location of fire hydrants, water supply, and other important considerations regarding fire hazard that may be technically feasible but not included in present ordinances or policies.

**HS-6.7 Water Supply System** - The County shall require that water supply systems be adequate to serve the size and configuration of land developments, including satisfying fire flow requirements. Standards as set forth in the subdivision ordinance shall be maintained and improved as necessary.

**HS-6.8 Private Water Supply** - The County shall require separately developed dwellings with individual private water supply to provide an acceptable guaranteed minimum supply of water for fire safety, in addition to the amount required for domestic needs.

**HS-7.1 Coordinate Emergency Response - Services with Government Agencies** - The County shall coordinate emergency response with local, State, and Federal governmental agencies, community organizations, volunteer agencies, and other response partners during emergencies or disasters utilizing SEMS and NIMS.

**HS-7.2 Mutual Aid Agreement** - The County shall participate in established local, State, and Federal mutual aid systems. Where necessary and appropriate, the County shall enter into agreements to ensure the effective provision of emergency services, such as mass care, heavy rescue, hazardous materials, or other specialized function.

## IMPACT EVALUATION

**If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:**

**a) Substantially impair an adopted emergency response plan or emergency evacuation plan?**

Project Impact Analysis:

*No Impact*

As noted earlier, the proposed Project is a 3-story hotel which will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.) and outdoor swimming pool/cabana building. Consistent with Tulare County parking requirements, the proposed Project includes 108 standard parking stalls, (6 of which will be handicap accessible stalls). Utilities include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration). The proposed Project is anticipated to have 12 employees, 70 customers, 1 delivery, and 1 shipment per day, for a total of 168 daily vehicle trips.

The proposed Project is located in an active area of wildland fire occurrence. The proposed Project site has the potential to expose people or structures to an increased risk of loss, injury or death due to wildland fire events. "The Tulare County 2030 General Plan Update includes Three Rivers within a "very high" fire threat area containing fire hazards based on fuels, terrain, weather, and other relevant factors."<sup>16</sup> "Emergency response and/or evacuation plans in the community of Three Rivers allow for the integration and coordinated response among local, state, and federal agencies. Three Rivers is considered a "Gateway" community and borders an international icon, Sequoia Kings Canyon National Park (SEKI). SEKI maintains its own emergency and law enforcement services and maintains mutual aid agreements with the County of Tulare."<sup>17</sup> "Emergency response and evacuation plans based on threats posed by wildland and structural fire issues in the Three Rivers UDB area benefit from the presence of federal, state, and local fire suppression services. The National Park Service (NPS) maintains fire brigades at Ash Mountain and Hammond Station. The Ash Mountain heliport provides emergency services with Helicopter 552 including search and rescue and fire suppression services. Cal Fire and Tulare County maintain fire stations in Three Rivers and

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<sup>16</sup> Tulare County. Tulare County General Plan 2030 Update. Draft Environmental Impact Report. 2018 Page. 3.7-18 and-19.

<sup>17</sup> Ibid. 3.17.

nearby Lemon Cove. An air attack base can provide aerial tanker and air drop support within minutes and is located in nearby Porterville.”<sup>18</sup>

“The County of Tulare and the State of California maintain policies and regulations that seek to minimize the exposure of foothill communities and mountain service centers to wildfire events.

In geographical terms, the Three Rivers UDB largely falls into CalFire’s State Responsibility Area (SRA). CalFire oversight of at-risk locales, such as foothill communities, includes programs and regimens of wildland fire engineering, vegetation management programs, risk analysis, education, enforcement, and land use planning to the end of diminishing and ameliorating the risk posed by wildland fire.

Tulare County, in addition to a comprehensive reactive emergency plan and policy (2013 Emergency Operations Plan; See References Section) also outlines extensive preventative measures to combat the threat of wildland fire as delineated in the Health and Safety Element of the County’s General Plan 2030 Update.

This plan offers a comprehensive approach to preempting wildland fire outbreaks in the Project area. As discussed in Chapter 10, section 10.6 of Health and Safety Element, the County commits to ensuring “[t]hat development in very high or high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards. This shall include promoting the use of fire resistant materials designed to reduce fire vulnerability within high or very high fire hazard areas through use of Article 86-A of the 2001 California Fire Code, SRA Fire Safe Regulations, and other nationally recognized standards, as may be updated periodically. Special consideration shall be given to the use of fire-resistant-materials and fire-resistant-construction in the underside of eaves, balconies, unenclosed roofs and floors, and other similar horizontal surfaces in areas with steep slopes. Ensure new development proposals contain specific fire protection plans, actions, and codes for fire engineering features for structures in Very High Fire Hazard Safety Zones including automatic sprinklers as required by applicable codes.

In its enumeration of fire-safe preventative measures, a summary analysis of the safeguards found in the Health and Safety Element indicates upwards of twenty-five safety policies endorsed by the County’s planning department and enforced by the County’s fire department to the end of minimizing exposure of County residents, visitors, and public and private property to the effects of urban and wildland fires. Included among these safeguards are the encouragement of cluster development, water supply specifications sufficient for fire suppression (public and private), the creation of fire buffers, integration of open space, wildfire risk reduction related to climate change, and fuel breaks.”<sup>19</sup> A complete listing of

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<sup>18</sup> Op. Cit.

<sup>19</sup> Op. Cit. 3.8-19 and -20.

these policies is available in Chapter 10 of the Health and Safety Element located in the Tulare County General Plan 2030 Update.

As such, the proposed Project would result in ***No Impact*** to this resource item.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, and/or the Tulare County 2030 General Plan EIR, and/or the Three Rivers Community Plan 2018 Update and EIR.

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. As such, ***No Project-specific Impact*** or ***Cumulative Impact*** would occur.

Mitigation: ***None Required.***

Conclusion: ***No Impact***

As noted earlier, implementation of the proposed Project will result in ***No Impact*** to this Checklist Item.

**b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

Project Impact Analysis: ***No Impact***

As noted earlier, the proposed Project is a 3-story hotel which will consist of 105 guest rooms with 108 standard parking stalls, and utilities that include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration). The proposed Project is anticipated to have 12 employees, and 70 customers daily. The proposed Project is located in an active area of wildland fire occurrence. The proposed Project site has the potential to expose people or structures to an increased risk of loss, injury or death due to wildland fire events. "The Tulare County 2030 General Plan Update includes Three Rivers within a "very high" fire threat area containing fire hazards based on fuels, terrain, weather, and other relevant factors. As noted in Item a), above, the Project is located in or near state responsibility areas and within lands classified as very high fire hazard severity zones; Due to the nature of the Project, it would not exacerbate wildfire risks nor expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. As such, it would result in ***No Impact*** to this resource item.

Cumulative Impact Analysis: *No Impact*

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, the Tulare County 2030 General Plan EIR, and/or the Three Rivers Community Plan 2018 Update and EIR.

As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. As such, *No Project-specific Impact* or *Cumulative Impact* would occur.

Mitigation: *None Required.*

Conclusion: *No Impact*

As noted earlier, implementation of the proposed Project will result in *No Impact* to this Checklist Item.

**c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

Project Impact Analysis: *No Impact*

As noted earlier, the proposed Project is a 3-story hotel which will consist of 105 guest rooms with 108 standard parking stalls, and utilities that include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration). The proposed Project is anticipated to have 12 employees, and 70 customers daily. The Project applicant will install and maintain associated infrastructure (such as roads, and water sources (for potable and fire suppression uses)) and will directly connect to existing power lines). Fire breaks or connection to other utilities (e.g., natural gas or an existing or new wastewater system). As such, the proposed Project would not exacerbate fire risk or result in temporary or ongoing impacts to the environment. As noted in Checklist Item 19 a), the Project would provide its own infrastructure (e.g., electricity connection to SCE, internal water sources, propane gas, etc.). As such, it would result in *No Impact* to this resource item.

Cumulative Impact Analysis: *No Impact*

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, Tulare County General Plan Background Report the Tulare County 2030 General Plan EIR, and/or Three Rivers Community Plan 2018 Update. As such, *No Project-specific Impact* or *Cumulative Impact* would occur.

Mitigation: *None Required*

Conclusion: *No Impact*

As noted earlier, implementation of the proposed Project will result in *No Impact* to this Checklist Item.

**d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

Project Impact Analysis: *No Impact*

As noted earlier, the proposed Project is a 3-story hotel which will consist of 105 guest rooms with 108 standard parking stalls, and utilities that include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration). The proposed Project is anticipated to have 12 employees, and 70 customers daily. Due to the nature of the Project, it would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The Project is located on the Valley floor in on relatively flat land (i.e., 0-2% slopes), as such it is not located in an area where landslides or post-fire slope instability would occur. As noted in Item 10 c), the site is not crossed by any rivers, streams, canals, or irrigation ditches. As such, it is not at risk of down stream flooding. Also, as noted in Item c), The surface topography of the site is relatively flat. Grading for the site is anticipated to include an engineered grading design approved and permitted by Tulare County. The final grading of the site should control the drainage pattern of the site to a stormwater retention pond. Therefore, the Project would result in *No Impact* to this resource item.

Cumulative Impact Analysis: *No Impact*

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, Tulare County General Plan Background Report, the Tulare County 2030 General Plan EIR, and/or Three Rivers Community Plan 2018 Update. As such, *No Project-specific Impact* or *Cumulative Impact* would occur.

Mitigation: *None Required*

Conclusion: *No Impact*

As noted earlier, implementation of the proposed Project will result in *No Impact* to this Checklist Item.

## DEFINITIONS/ACRONYMS

### Definitions

### Abbreviations and Acronyms

California Natural Resources Agency CAL FIRE	California Natural Resources Agency or Agency California Department of Forestry and Fire Protection
H&S Element	Health and Safety Element
MJLHMP	Multi-Jurisdictional Local Hazard Mitigation Plan
TCOE	Tulare County Office of Education
SB 1241	Senate Bill 1241 (Kehoe, 2012)
WUI	Wildland-Urban Interface

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# Mandatory Findings of Significance

## Chapter 3.21

### SUMMARY OF FINDINGS

None of the conditions stated below under Section 15065(a) (1)-(4) are present due to the impacts from the proposed Project. The impacts to the below resources are therefore ***Less Than Significant with Mitigation.***

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

CEQA Guidelines “Mandatory Findings of Significance” (Section 15065(a)) lists the following potential impacts that need to be addressed by a lead agency:

15065(a): *“A lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur:*

*(1) The project has the potential to: substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory.*

*(2) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.*

*(3) The project has possible environmental effects that are individually limited but cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.*

*(4) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.”*

Under the California Environmental Quality Act (CEQA), an EIR must be prepared when certain specified impacts may result from construction or implementation/operation of a project. An EIR has been prepared for the proposed Project, which fully addresses all of the Mandatory Findings of Significance, as described below.

Under Section 15065(a) of the CEQA Guidelines, a finding of significance is required if a project “has the potential to substantially degrade the quality of the environment.” In practice, this is the same standard as a significant effect on the environment, which is defined in Section 15382 of the CEQA Guidelines as “a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.” This EIR, in its entirety, addresses and discloses potential environmental affects associated with construction and operation of the proposed Project, including direct, indirect, and cumulative impacts related to the following environmental factors:

Aesthetics	Land Use and Planning
Agriculture and Forestry Resources	Mineral Resources
Air Quality	Noise
Biological Resources	Population and Housing
Cultural Resources	Public Services
Energy	Recreation
Geology and Soils	Transportation
Greenhouse Gas Emissions	Tribal Cultural Resources
Hazards and Hazardous Materials	Utilities and Service Systems
Hydrology and Water Quality	Wildfires

As summarized in Project Requirements/Mitigation Measures Section, this EIR discusses potential environmental resource impacts, the level of significance prior to mitigation, project requirements that are otherwise required by law or are incorporated as part of the project description, feasible mitigation measures, and the level of significance after the incorporation of mitigation measures.

This section of the Draft Environmental Impact Report (DEIR) meets CEQA requirements by making Mandatory Findings of Significance relative to impacts of the proposed Project site located in the San Joaquin Valley portion of Tulare County. The “Environmental Setting” section summarizes environmental resources in the region with special emphasis on the proposed Project site and vicinity. The “Regulatory Setting” provides a description of applicable State and local regulatory policies. A description of the potential impacts of the proposed Project is also provided and includes the identification of feasible mitigation to avoid or lessen the impacts.

### Long Term Impacts

As described in Section 15065(a)(2), a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals. This document addresses the short-term and irretrievable commitment of natural resources to ensure that the consumption is justified on a long-term basis.

### Cumulative Impacts

Under Section 15065(a)(1) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to (1) substantially reduce the habitat of a fish or wildlife species; (2) cause a fish or wildlife population to drop below self-sustaining levels; or (3) substantially reduce the number or restrict the range of an endangered, rare, or threatened species. Section 4.3 (Biological Resources) of the EIR fully addresses impacts related to the reduction of the fish or wildlife habitat, the reduction of fish or wildlife populations, and the reduction or restriction of the range of special-status species.

### Impacts to Species

Section 15065(a)(1) of the CEQA Guidelines states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to eliminate important examples of a major period of California history or prehistory. Section 15065(a)(1) amplifies Public Resources Code 21001(c) requiring that major periods of California history are preserved for future generations. It also reflects the provisions of Public Resource Code Section 21084.1 requiring a finding of significance for substantial adverse changes to historical resources. Section 3.4 Biological Resources of this EIR (which is supported by a Biological Evaluation included in Appendix “B” of this document) fully addresses impacts related to Biological resources.

### Impacts to Historical Resources

Section 15064.5 of the CEQA Guidelines establishes standards for determining the significance of impacts to historical resources and archaeological sites that are an historical resource. Sections 3.5 Cultural Resources and 3.18 Tribal Cultural Resources of this EIR (which are supported by a Phase I Cultural Resources Survey included in Appendix “C” of this document) fully addresses impacts related to California history and prehistory, historic resources, archaeological resources, and paleontological resources.

### Impacts on Human Beings

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people will be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings will be represented by all of the designated CEQA issue areas, those that could directly affect human beings include air quality, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, population and housing, public services, transportation/traffic, and utilities, which are addressed in this EIR. Sections 3.3 Air Quality and 3.7 and Greenhouse Gases,

3.10 Hydrology and Water Quality, 3.13 Noise, 3.15, 3.17 Transportation (including traffic) of this EIR. The resource discussions are supported by Air Quality/GHG, Hydrology/Water Quality (Wastewater), and Traffic technical reports included in Appendices “A”, “F”, “D”, and “E”; respectively, of this document and fully addresses impacts related to these respective resources. The EIR contains analyses for the noise, population and housing, public services, and utilities resources which demonstrates that these respective resources will be not by impacted or will be impacted to a less than significant level.

### Thresholds of Significance

The geographical area may be countywide, statewide, or nationwide, depending on the nature of the impact. Thresholds of Significance for impacts to biological resources are addressed in detail in Chapter 3.4 Biological Resources of this document. Thresholds of Significance for impacts to cultural resources, including impacts to historic and prehistoric resources, are addressed in Chapter 3.5 Cultural Resources and Chapter 3.18 Tribal Cultural Resources of this document.

## **ENVIRONMENTAL SETTING**

Tulare County exhibits a diverse ecosystems landscape created through the extensive amount of topographic relief (elevations range from approximately 200 to 14,000 feet above sea level). The County is essentially divided into three eco-regions. The majority of the western portion of the County comprises the Great Valley Section, the majority of the eastern portion of the County is in the Sierra Nevada Section, and a small section between these two sections comprises the Sierra Nevada Foothill Area.”<sup>1</sup>

Three Rivers lies in this foothill area generally at elevations between 700 and 3000 feet. Geophysical factors including elevation, slope, hydrogeology, and climate allow the area a high degree of biodiversity that supports a wealth of flora and fauna. The area is typified by undulating terrain that varies from relatively flat riparian valleys immediately adjacent to the North, South, and Middle forks of the Kaweah River to very rugged, mountainous terrain particularly at the southern end of South Fork Drive and along the East Fork of the Kaweah River.

The proposed Project (a 105-room hotel with ancillary features) would be located east of State Route (SR) 198/Sierra Drive, approximately 1,100 feet north of Old Three Rivers Road in the unincorporated community of Three Rivers. The proposed Project will be located within the Urban Development Boundary (UBD) of the Three Rivers Community Plan area. the surrounding terrain is marked by oak woodland forest and foothills. Three Rivers is located in the northern portion of Tulare County at an elevation of 825 feet above sea level with a total area of 45.4 square miles. Three Rivers is the gateway town for the Ash Mountain Main Entrance to Sequoia-Kings Canyon National Park, home of the Giant Sequoia trees. Three Rivers is located approximately 30 miles east of the City of the City of Visalia, the County Seat, and approximately 52 miles southeast of Fresno, the largest metropolitan area in the region (see **Figure 2-2**). The approximately 2.80-acre

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<sup>1</sup> Tulare County, 2010. General Plan 2030 Update RDEIR. Page 3.11-5. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf>.

site is located entirely on Tulare County APN 068-080-010 and is currently zoned C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone). The use is allowed by-right and is consistent with the current zoning classification. The site is located within the USGS 7.5 Minute Quadrangle in Section 26, Township 17S, Range 28E, M.D.B. & M. The immediate area surrounding the Project site is generally level; there are two nearby hills northeast and east of the site and numerous hills north and west the site (north and west of the Kaweah River). The site is currently vacant, there is an existing hotel (Comfort Inn & Suites) to the north and a former (now unused) restaurant adjacent to and northwest, a vacant lot to the east, a rural residential/commercial development (two large propane aboveground storage tanks) to the south, and a vacant lot to the west. As noted earlier, the site is east of SR 198/Sierra Drive.

#### Native Vegetation and Land Cover Types/Annual Grasslands

“The Project is currently comprised primarily of annual grassland with remnant oak woodland and ruderal roadside areas along the boundaries (Figure 2. Vegetation Community and Land Cover Types/Preliminary Wetland Assessment [in the BA, **Figure 3.4-1** in the Draft EIR]).”<sup>2</sup>

“The annual grassland is dominated by ripgut brome (nonnative, *Bromus diandrus*), rancher’s fireweed (native, *Amsinckia menziesii*), white-stemmed filaree (nonnative, *Erodium brachycarpum*), and yellow star-thistle (non-native, *Centaurea solstitialis*). Other plants found in the annual grassland include contorted primrose (native, *Camissonia strigulosa*), pink spineflower (native, *Chorizanthe membranacea*), cat’s ear (nonnative, *Hypochaeris* species), and ragweed (native, *Ambrosia* species). Scattered interior live oak (native, *Quercus wislizenii*) and elderberry (native, *Sambucus* species) are found within the annual grassland.”<sup>3</sup>

#### Existing Cultural and Historic Resources

“Tulare County’s known and recorded cultural resources were identified through historical records, such as those found in the National Register of Historic Places, the Historic American Building Survey/Historic American Engineering Record (HABS/HAER), the California Register of Historic Resources, California Historical Landmarks, and the Tulare County Historical Society list of historic resources.”<sup>4</sup>

Due to the sensitivity of many prehistoric, ethnohistoric, and historic archaeological sites, locations of these resources are not available to the general public. The Information Center at California State University, Bakersfield houses records associated with reported cultural resources surveys, including the records pertinent to sensitive sites, such as burial grounds, important village sites, and other buried historical resources protected under state and federal laws. For this Draft EIR, qualified consultant ECorp Inc. prepared the “*Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers June 2020.*” (included in Appendix “C” of this Draft EIR) As part of the Report preparation consultant, “Undertook at records search with the Southern San Joaquin Valley

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<sup>2</sup> Op. Cit.

<sup>3</sup> Op. Cit. 15.

<sup>4</sup> Tulare County 2030 Update General Plan Background Report. Page. 9-56.

Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS) at California State University, Bakersfield on May 18, 2020 (SSJVIC, included in the Report).”<sup>5</sup> It is noted that due to the sensitive nature of confidential information contained in the Report, it will not be readily available to the public; however, Tulare County will allow access to the Report within legal limitations. “In addition to the official records and maps for archaeological sites and surveys in Tulare County, the following historic references were also reviewed: Historic Property Data File for Tulare County (OHP 2012); The National Register Information System (NPS 2020b); Office of Historic Preservation, California Historical Landmarks (OHP 2020); California Historical Landmarks (OHP 1996 and updates); California Points of Historical Interest (OHP 1992 and updates); Directory of Properties in the Historical Resources Inventory (1999); Caltrans Local Bridge Survey (Caltrans 2019); Caltrans State Bridge Survey (Caltrans 2018); and Historic Spots in California (Kyle 2002). Other references examined include a RealQuest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM] 2020).” Historic maps reviewed include: 1870 BLM GLO Plat map for Township 17 South Range 28 East; 1885 BLM GLO Plat map for Township 17 South Range 28 East; 1892 Tulare County, California Map (published by Thos. H. Thompson, page 046, Sequoia National Park 3, Kaweah); 1957 USGS Kaweah, California topographic quadrangle map (15-minute scale); 1986 USGS Kaweah, California topographic quadrangle map (1:62,500 scale); and 1986 photo revised 1994 USGS Kaweah, California topographic quadrangle map (1:24,000 scale). Historic aerial photos taken in 1955, 1989, 2005, 2009, 2010, and 2012 were also reviewed for any indications of property usage and built environment”<sup>6</sup>.

## **REGULATORY SETTING**

### ***Federal Agencies & Regulations***

See Chapters 3.4, 3.5, and 3.18 of this document for federal regulations related to biological, cultural, and tribal cultural resources; respectively.

### ***State Agencies & Regulations***

See Chapters 3.4, 3.5, and 3.18 of this document for state regulations related to biological, cultural, and tribal cultural resources; respectively.

### ***Local Policy & Regulations***

See Chapters 3.4, 3.5, and 3.18 of this document for local regulations related to biological, cultural, and tribal cultural resources; respectively.

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<sup>5</sup> “Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers” (CRIR or Report). Page 13. June 2020. Prepared by ECORP Consulting, Inc. and included in Appendix “C” of this Draft EIR

<sup>6</sup> Ibid.

## IMPACT EVALUATION

- a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

### *FINDINGS: IMPACTS TO BIOLOGICAL RESOURCES*

#### Project Impact Analysis: *Less Than Significant Impact with Mitigation*

A biological evaluation of the Project site was conducted by qualified expert consultant ECORP and is included in this DEIR as Appendix “B”. Results of the assessment are based upon database and literature searches, as well as a site visit. The biological evaluation determined that:

#### *3.4 a) Less Than Significant Impact With Mitigation*

“Given the many square miles of agricultural land in the project vicinity that provides similar to higher quality avian nesting habitat, a loss of a small amount of potential nesting habitat for the loggerhead shrike and tricolored blackbird is considered less than significant under CEQA.”<sup>7</sup> Based on this analysis, implementation of **Mitigation Measures BIO-1 through BIO-3** (shown as the mitigation measures contained in the BRA included in Appendix “B” of this DEIR). would reduce potential Project-specific impacts related to this Checklist Item to *Less Than Significant With Mitigation*.

#### *3.4 b) No Impact*

Based upon the lack of riparian habitat, *No Impacts* related to this Checklist Item will occur.

#### *3.4 c) Less Than Significant Impact With Mitigation*

Based on the analysis contained in the Biological Resource Assessment (BRA, included in Appendix “B” of this DEIR), qualified expert consultant ECORP concluded that the proposed Project would result in less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. As noted in the BRA, “Approximately 0.011 acre of aquatic resources is located within the Study Area (Figure 2 [in the BRA]). The following mitigation measures [included in this Draft EIR as **BIO-10 through BIO-14**] are recommended to minimize potential impacts to Waters of the U.S./State if the Project proposes to place fill

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<sup>7</sup> Biological Evaluation (BE) Visalia Concrete/Asphalt Batch Plant Project, Tulare County, California.” Page 7. Prepared by Live Oak Associates (LOA), Inc. September 20, 2018. Included in Appendix “B” of the DEIR.

in these features...”<sup>8</sup> The BRA also indicates, “The seasonal wetland swale identified onsite does not appear to qualify as a “river, stream, or lake”, so a CDFW Section 1602 Lake and Streambed Alteration Agreement is not likely to be necessary.”<sup>9</sup> Therefore, the proposed Project would not result in an adverse effect on federally protected wetlands. **Mitigation Measures BIO-1 through BIO-14** would result in a ***Less Than Significant Project-specific Impact With Mitigation*** related to this Checklist Item.

**3.4 d)** ***Less Than Significant Impact***

As noted in the BRA, “Wildlife have potential to use the Project site for localized wildlife movement. However, Project development would not constitute a significant loss of the available wildlife habitat in the area. No measures are recommended.”<sup>10</sup> Based on the analysis contained in the BRA, qualified expert consultant ECORP concluded that the proposed Project impacts to wildlife movements, movement corridors, and nursery sites are considered less than significant under CEQA. Therefore, a ***Less Than Significant Impact*** related to this Checklist Item will occur.

**3.4 e)** ***Less Than Significant Impact With Mitigation***

As described in the BRA, “There are two isolated small oak trees located within the annual grassland. The oaks that make up the oak woodland mapped in the Study Area are located on the adjacent property with only the dripline overlapping into the Study Area. Although direct impacts to the oak woodland is not anticipated, indirect impacts may occur. If impacts are considered significant, one or more of the following measures should be implemented to reduce the impact to oak woodlands (per the Three Rivers Voluntary Oak Woodland Plan).”<sup>11</sup> Based on the analysis and recommendations contained in the BRA by qualified expert consultant ECORP, implementation of **Mitigation Measures BIO-15 through BIO-18** would reduce impacts to a ***Less Than Significant Project-specific Impact With Mitigation*** related to this Checklist Item. Therefore, the proposed Project will not conflict with any policies or ordinances protecting biological resources.

**3.4 f)** ***No Impact***

There are two habitat conservation plans that apply in Tulare County. The proposed Project does not conflict with these plans. ***No Impacts*** related to this Checklist Item will occur.

Cumulative Impact Analysis: ***No Impact***

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<sup>8</sup> Op. Cit. 37-38.

<sup>9</sup> Op. Cit. 38.

<sup>10</sup> Op. Cit. 41.

<sup>11</sup> Op. Cit.



The geographic area of this cumulative analysis is California. As noted in Chapter 3.4, there are *No Impacts* related to habitat conservation plans, and therefore there are *No Cumulative Impacts* that will conflict with local policies or ordinances.

Mitigation: *None Required.*

Conclusion: *Less Than Significant Impact With Mitigation*

Potential Project-specific and cumulative impacts to biological resources will be *Less Than Significant* with implementation of **Mitigation Measures BIO-1 through BIO-18.**

***FINDINGS: IMPACTS TO EXAMPLES OF THE MAJOR PERIODS OF CALIFORNIA HISTORY OR PREHISTORY***

Project Impact Analysis: *Less Than Significant Impact With Mitigation*

Chapter 3.5, Cultural Resources, and Chapter 3.18 Tribal Cultural Resources; respectively, discuss impacts to historic or prehistoric, and tribal cultural resources in detail. As noted in the Cultural Resources Inventory Report (CRIR or Report, included in this Draft EIR as Confidential “Appendix C”) prepared by qualified expert consultant ECORP, records examined included: Historic Property Data File for Tulare County (OHP 2012); The National Register Information System (NPS 2020b); Office of Historic Preservation, California Historical Landmarks (OHP 2020); California Historical Landmarks (OHP 1996 and updates); California Points of Historical Interest (OHP 1992 and updates); Directory of Properties in the Historical Resources Inventory (1999); Caltrans Local Bridge Survey (Caltrans 2019); Caltrans State Bridge Survey (Caltrans 2018); and Historic Spots in California (Kyle 2002). Other references examined include a RealQuest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM] 2020).”<sup>12</sup> Historic maps reviewed include: 1870 BLM GLO Plat map for Township 17 South Range 28 East; 1885 BLM GLO Plat map for Township 17 South Range 28 East; 1892 Tulare County, California Map (published by Thos. H. Thompson, page 046, Sequoia National Park 3, Kaweah); 1957 USGS Kaweah, California topographic quadrangle map (15-minute scale); 1986 USGS Kaweah, California topographic quadrangle map (1:62,500 scale); and 1986 photo revised 1994 USGS Kaweah, California topographic quadrangle map (1:24,000 scale).<sup>13</sup> Historic aerial photos taken in 1955, 1989, 2005, 2009, 2010, and 2012 were also reviewed for any indications of property usage and built environment.<sup>14</sup>

A records search was also conducted at the Native American Heritage Commission (NAHC) Sacred Lands File (included in Confidential Appendix “C” as Attachment A of the CRIR). As noted in the CRIC, “A search of the Sacred Lands File by the NAHC failed to indicate the

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<sup>12</sup> Op. Cit. 13.

<sup>13</sup> Op. Cit.

<sup>14</sup> Op. Cit.

presence of Native American cultural resources in the Project Area. A record of all correspondence is provided in Attachment B [of the CRIR].”<sup>15</sup>

As an abundance of caution, in the unlikely event that subsurface resources or if any previously unknown human remains were encountered during ground disturbing activities, **Mitigation Measures CUL-1 and CUL-2** subsets a – c, as recommended in the CRIR (at pages 22-23), would be implemented thereby reducing the potential level of impact to this resource as less than significant for resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or to a resource consider significant to a California Native American tribe. Based on the analysis contained in the CRIR, qualified expert consultant ECORP concluded that the proposed Project would result in a less than significant impact with mitigation. Tulare County RMA agrees with and supports the assessment and conclusion. Chapter 3.5 includes compliance with Section 7050.5 of the California Health and Safety Code (and CEQA Guidelines Section 15064.5) and CEQA Guidelines Section 15064.5 if human remains are discovered during project construction. Therefore, the Project would result in a ***Less Than Significant Impact With Mitigation*** to this resource.

Cumulative Impact Analysis: ***Less Than Significant Impact With Mitigation***

The geographic area of this cumulative analysis is Tulare County.

The proposed Project would only contribute to cumulative impacts related to this Checklist Item if Project-specific impacts were to occur. Based on the analysis contained in the CRIR, qualified expert consultant ECORP concluded that the proposed Project would result in a less than significant impact with mitigation. Tulare County RMA agrees with and support the assessment and conclusion. Therefore, the proposed Project would result in ***Less Than Significant Project-specific Impacts*** and ***Less Than Significant Cumulative Impacts With Mitigation*** for this resource.

Mitigation: ***See Mitigation Measures CUL-1 and CUL-2 as contained in Chapter 3.18.***

Conclusion: ***Less Than Significant Impact With Mitigation***

***Less Than Significant Project-specific and Cumulative Impacts With Mitigation*** to biological and cultural resources will occur.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

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<sup>15</sup> Op. Cit. 19.

Project Impact Analysis: *See Chapters 3.1 through 3.20*

Cumulative impacts are discussed within the analysis of each Checklist Item. In addition, cumulative impacts are summarized in Chapter 4.

Cumulative Impact Analysis: *See Chapter 4*

Cumulative impacts are discussed within the analysis of each Checklist Item. In addition, cumulative impacts are summarized in Chapter 4.

Mitigation: *See Mitigation Measures contained in Chapter 8.*

Conclusion: *See Chapters 3.1 through 3.20*

Cumulative impacts are discussed within the analysis of each Checklist Item. In addition, cumulative impacts are summarized in Chapter 4.

**c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

Project Impact Analysis: *Less Than Significant Impact*

The proposed Project would not result in any impacts to human beings beyond what has already been analyzed in Chapters 3.1 to 3.20.

There are no significant environmental adverse effects from this Project to human beings.

Cumulative Impact Analysis: *Less Than Significant Impact*

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County General Plan 2030 Update, General Plan background Report, Tulare County General Plan 2030 Update EIR, Foothill Growth Management Plan, and/or the Three Rivers Community Plan 2018 Update.

There are no significant environmental adverse effects from this Project to human beings.

Mitigation: *None Required.*

Conclusion: *Less Than Significant Impact*

There will be *Less Than Significant* environmental effects which will cause substantial adverse effects to impacts to human beings either directly or indirectly.

## **REFERENCES**

Chapters 3.1 through 3.20 of this DEIR.

Foothill Growth Management Plan

Tulare County General Plan 2030 Update. August 2012.

Tulare County General Plan 2030 Update. Background Report. February 2010.

Tulare County General Plan 2030 Update. Recirculated Draft Environmental Impact Report (RDEIR). February 2010.

Three Rivers Community Plan 2018 Update

# Summary of Cumulative Impacts

## Chapter 4

### CUMULATIVE IMPACTS ANALYSIS UNDER CEQA

#### Section 15355 Cumulative Impacts

“Cumulative impacts” refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

- (a) The individual effects may be changes resulting from a single project or a number of separate projects.
- (b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”<sup>1</sup>

#### Section 15130 Discussion of Cumulative Impacts

- “(a) An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in section 15065(a)(3). Where a lead agency is examining a project with an incremental effect that is not “cumulatively considerable,” a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.
  - (1) As defined in Section 15355, a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.
  - (2) When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR. A lead agency shall identify facts and analysis supporting the lead agency's conclusion that the cumulative impact is less than significant.
  - (3) An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The lead agency shall

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<sup>1</sup> CEQA Guidelines Section 15355.

identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable.

- (b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary to an adequate discussion of significant cumulative impacts:
  - (1) Either:
    - (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or
    - (B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.
  - (2) When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.
  - (3) Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.
  - (4) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available, and
  - (5) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.
- (c) With some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis.

- (d) Previously approved land use documents, including, but not limited to, general plans, specific plans, regional transportation plans, plans for the reduction of greenhouse gas emissions, and local coastal plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impacts analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or area wide cumulative impacts of the proposed project have already been adequately addressed, as defined in section 15152(f), in a certified EIR for that plan.
- (e) If a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact, as provided in Section 15183(j).<sup>2</sup>

Tulare County is the geographic extent for most impact analysis. This geographic area is the appropriate extent because of the following reasons:

1. The proposed Project is in Tulare County and County of Tulare is the Lead Agency; and
2. Tulare County General Plan policies apply to the proposed Project.

The basis for other resource specific cumulative impact analysis includes:

- For Air Quality and Greenhouse Gas Emissions it is the San Joaquin Valley Air Basin;
- For Biological Resources it is the San Joaquin Valley;
- For Cultural Resources it is Tulare County; and
- For Hydrology it is the Tulare Lake Basin.

## **PAST, PRESENT, PROBABLE FUTURE PROJECTS**

### Tulare County Association of Governments (TCAG) Blueprint Scenario

Under the Tulare County Regional Blueprint Preferred Growth Scenario, TCAG suggested a 25% increase over the status quo scenario to overall density by 2050. The preferred growth scenario principles included directing growth towards incorporated cities and communities where urban development exists and where comprehensive services and infrastructure are/or will be provided. Another relevant preferred scenario is the creation of urban separators around cities. The proposed Project location is outside incorporated areas and would be consistent with the goal of separating urban boundaries.<sup>3</sup>

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<sup>2</sup> CEQA Guidelines, Section 15130.

<sup>3</sup> Tulare County Associated of Governments Blueprint 2050, Preferred Scenario (2009).

Tulare County 2030 General Plan

The Cumulative Analysis outlined in the Tulare County General Plan Update 2030 Recirculated Draft EIR notes regional population growth (which in part was developed by TCAG) and a number major projects. Regional population projections are provided in the **Table 4-1**.<sup>4</sup>

<b>Table 4-1 Regional Population Projections and Planning Efforts</b>			
<b>Jurisdiction</b>	<b>General Plan Planning Timeframe</b>	<b>General Plan Buildout Population</b>	<b>Significant Environmental Impacts</b>
City of Dinuba	2006-2026	33,750	Farmland conversion; conflicts with agricultural zoning and Williamson Act contracts; conversion of agricultural soils to non-agricultural use; regional air quality impacts; and climate change-greenhouse gases.
City of Woodlake			Unavailable.
City of Visalia	1991-2020	165,000	Air quality; biological resources; land use conflicts; noise; transportation/traffic; mass transit; agricultural resources; water supply; and visual resources.
City of Tulare	2007-2030	134,910	Farmland conversion; aesthetics; water supply; traffic; air quality; global climate change; noise; flooding from levee or dam failure; biological resources; and cultural resources.
City of Farmersville	2002-2025	12,160	Agricultural resources; agricultural land use conflicts; air quality; and traffic circulation.
City of Exeter			Information unavailable at time of analysis.
City of Lindsay	1990-2010	17,500	Air quality and farmland land conversion.
City of Porterville	2006-2030	107,300	Farmland conversion; air quality; noise; and biological resources.
City of Kingsburg	1992-2012	16,740	Farmland conversion and air quality.
City of Delano	2005-2020	62,850	Air quality; noise; farmland conversion; disruption of agricultural production; and conversion of agricultural soils to non-agricultural use.
County of Fresno	2000-2020	1,113,790	Farmland conversion; reduction in agricultural production; cancellation of Williamson Act Contracts; traffic; transit; bicycle facilities; wastewater treatment facilities; storm drainage facilities; flooding; police protection; fire protection; emergency response services; park and recreation facilities; library services; public services; unidentified cultural resources; water supply; groundwater; water quality; biological resources; mineral resources; air quality; hazardous materials; noise; and visual quality.
County of Kern	2004-2020	1,142,000	Air quality; biological resources; noise; farmland conversion; and traffic.

<sup>4</sup> Tulare County General Plan 2030 Update Recirculated Draft EIR. Page 5-4 to 5-5.



<p style="text-align: center;"><b>Table 4-1</b> <b>Regional Population Projections and Planning Efforts</b></p>			
<b>Jurisdiction</b>	<b>General Plan Planning Timeframe</b>	<b>General Plan Buildout Population</b>	<b>Significant Environmental Impacts</b>
County of Kings*	1993-2005	149,100 (low) 228,000 (high)	Biological resources; wildlife movement; and special status species.
<p><i>* The adopted Kings County General Plan did not identify a projected population for 2005. The General Plan does include population projections for 2010, which is included in this table.</i></p> <p><i>SOURCE: City of Delano, 1999; City of Dinuba, 2008; City of Farmersville, 2003; City of Kingsburg, 1992; City of Lindsay, 1989; City of Porterville, 2007; City of Visalia, 2001, 1991; County of Fresno, 2000; County of Kern, 2004; County of Kings, 2009; DOF, 2007; TCAG, 2008.</i></p>			

In addition to the Regional Growth Projections used for the cumulative impact analysis, the Tulare County General Plan Update 2030 Recirculated Draft EIR noted the following Major Projects

- **Rancho Sierra:** Status – GPA approved. The project site consists of 114.6 acres. The site was a golf course facility located on both sides of Liberty Avenue (Avenue 264), east of Road 124, south of the city of Visalia. There are 30 existing homes within the golf course area but not a part of this application. The intended use is to subdivide the site into 175 single family residential lots.
  
- **Goshen:** Status – Approved. On June 5, 2018, the Tulare County Board of Supervisors (BOS) approved the Goshen Community Plan. The Goshen Community Plan Update was updated to implement the 2030 Tulare County General Plan (2012). The project Study Area Boundary assessed the potential project impacts from the proposed land use changes, for the areas generally north of Riggins Drive and south of Avenue 320, Road 60 to the east, Avenue 304 to the south (including areas between SR 99 and railroad tracks north of the northbound connector from SR 198), and to the City of Visalia’s sphere of influence to the east. The project EIR is based on a projected annual population growth rate of 1.3%. Additional growth beyond the 1.3% annual growth rate will require further growth analysis pursuant to CEQA. The Goshen Community Plan Update is consistent with the General Plan 2030 Update, and includes the following primary goals and objectives: (1) Land use and environmental planning - Promote development within planning areas next to the Regional State Route 99 Corridor; (2) Improvements for a “disadvantaged community”; and 3) Strengthening the relationship between the RMA the Tulare County Association of Governments (TCAG) which will help to facilitate the funding and implementation of several key transportation programs such as Safe Routes to Schools, Complete Streets, and Bike/Pedestrian Projects. By pursuing these transportation programs through a heightened collaborative process, the likelihood of getting actual projects in the ground will be realized faster than historically achieved. In doing so, these communities and others can become safer and healthier by providing a more efficient transportation network. Some of the major

components of the Community Plan Update are based on Caltrans reconstructing the over-crossing at Betty Drive and State Route 99 in the Community of Goshen. There are five additional projects that have been analyzed; three directly and two in relationship to the Project's impacts to these areas. The County is proposing more than 20 new land use and zoning designations, including a Mixed Use zone. Also in the process is an update to the Zoning Code to include a mixed use zoning district in compliance with the mixed use designation in the 2030 General Plan. The Goshen Community Plan is consistent with Tulare County General Plan 2030 Update.

- **Earlimart Community Plan:** Status – GPA approved. On January 28, 2018, the Tulare County Board of Supervisors (BOS) approved the Earlimart Community Plan Update (General Plan Amendment No. 14-005) to implement the Tulare County General Plan 2030 Update (2012). Among the entitlements that were updated are: (1) the General Plan Amendment, (2) changes to Zoning District Boundaries, and (3) changes to the Zoning Code Ordinance creating a New Mixed Use Zoning District only for the Earlimart Community Plan Update. Consistent with the General Plan and the Community Plan Update Study Area Boundary, the land uses and alternative land use patterns were considered based on expansion to the Urban Development Boundary (UDB) and their potential impacts to the environment. In addition, a Complete Streets Program was approved by the Board of Supervisors on December 15, 2015, for inclusion in the Circulation Element of this Community Plan Update. The Earlimart Complete Streets Program thoroughly analyzed the alternative forms of transportation, including transit, bicycle ways, and pedestrian circulation. The three (3) projects that were analyzed at the project level in this DEIR include: (1) the New High School Project, (2) the Northern Earlimart Rezone Project, and (3) the Existing UDB Project. The County adopted six (6) land use and zoning districts, including a Mixed Use zone. Also updated was the Zoning Code to include a mixed use zoning district in compliance with the mixed use designation in the 2030 General Plan. The Community Plan Update is intended to serve residents and business owners in the Project Area by providing necessary public improvements, encouraging rehabilitation and repair of deteriorating infrastructure and fostering economic development of the Project Area. The Earlimart Community Plan is consistent with Tulare County General Plan 2030 Update.
- **Traver Community Plan:** Status – GPA approved. On December 16, 2014 the Tulare County Board of Supervisors (BOS) approved an update to the Traver Community Plan. The Project site/amendment area covers approximately 268 acres in area and encompasses the existing Traver Community Urban Development Boundary (UDB). No change occurred to the UDB. The Traver Community Plan Update is consistent with the recent approval of the General Plan 2030 Update, and includes the following primary goals and objectives. i) a General Plan Amendment No. GPA 14-003 to Update the Traver Community Plan, including the Traver Complete Streets Report; ii) Adopted Section 18.9, the Zoning Ordinance, and established a Mixed-Use Combining Zone; iii) Applied the Mixed-Use Overlay Zone to select properties located within the UDB of Traver and approved the rezoning plan for the Community of Traver (PZ 14-002); and iii) Amendment to Section 16 of the Zone Code to allow additional “by-right” uses only within the Traver

Urban Development Boundary Area. The Traver Community Plan is consistent with Tulare County General Plan 2030 Update.

- **Ducor Community Plan:** Status – GPA approved. On November 3, 2015 the Tulare County Board of Supervisors (BOS) approved an update to the Ducor Community Plan. The project is a comprehensive update of the Ducor Community Plan for the unincorporated community of Ducor located in south-central Tulare County. The Ducor Urban Development Boundary (UDB) adopted in the 2004 Terra Bella/Ducor Community Plan, which established a Community boundary of 366 acres. The Project did not propose any changes to the existing Ducor UDB and, as such, the existing UDB and the proposed Project area remain at 366 acres. The objective in preparing the Plan Update was to develop a plan which can accurately reflect the needs and priorities of Ducor. The Plan Update includes assumptions regarding the amount and location of growth and development anticipated to occur in the community through the horizon Year 2030. The Ducor Community Plan is consistent with Tulare County General Plan 2030 Update.
- **Terra Bella Community Plan:** Status – GPA approved. On November 3, 2015 the Tulare County Board of Supervisors (BOS) approved an update to the Terra Bella Community Plan. Terra Bella is located in south-central Tulare County. The Terra Bella Urban Development Boundary (UDB) was adopted in the 2004 Terra Bella/Ducor Community Plan and contains 1,393 acres. The Terra Bella Community Plan Update (Plan Update or Project) did not propose any changes to the existing Terra Bella UDB and, as such, the existing UDB area remained at approximately 1,393 acres. The objective in preparing the Plan Update was to develop a plan which can accurately reflect the needs and priorities of Terra Bella. The Plan Update includes assumptions regarding the amount and location of growth and development anticipated to occur in the community through the horizon Year 2030. The Terra Bella Community Plan UDB has an adequate amount of land designated for development to accommodate growth through horizon Year 2030. The Terra Bella Community Plan is consistent with Tulare County General Plan 2030 Update.
- **Pixley Community Plan:** Status – GPA approved. On June 17, 2015 the Tulare County Board of Supervisors (BOS) approved an update to the Pixley Community Plan. Pixley is a rural unincorporated community located in the southwest portion of Tulare County between the communities of Tipton and Earlimart, adjacent to State Route 99. The Pixley Urban Development Boundary (UDB), which includes the North Pixley Specific Plan area, consists of approximately 1,992 acres. Overall, the BOS approved the Pixley Community Plan General Plan Update - GPA 14-002, Pixley Zone code Redistricting/Mixed Use Overlay - PZ 15-010, and Pixley By-Right Zoning - PZ 15-011, to allow consistency with the Tulare County General Plan 2030 Update. As such, the Pixley Community Plan is consistent with Tulare County General Plan 2030 Update and includes the following primary goals and objectives. The objective in preparing the Plan Update was to develop a plan which can accurately reflect the needs and priorities of Terra Bella. The Plan Update includes assumptions regarding the amount and location of growth and development anticipated to occur in the community through the horizon Year 2030. The Terra Bella

Community Plan UDB has an adequate amount of land designated for development to accommodate growth through horizon Year 2030.

- **Tipton Community Plan:** Status – GPA approved. On June 17, 2015 the Tulare County Board of Supervisors (BOS) approved the Tipton Community Plan. Tipton is located in the San Joaquin Valley portion of Tulare County, it is approximately eight miles south of Tulare. Tipton is located at the intersection of SR 99 (a major north and south transportation corridor) and State Route 190/Avenue 144 (west of SR 99 (an east and west transportation corridor). Overall, the objective of the Tipton Community Plan is to accurately reflect the needs and priorities of the unincorporated community of Tipton. As such, the Tipton Community Plan is consistent with Tulare County General Plan 2030 Update, and includes the following primary goals and objectives. 1) Land Use and Environmental Planning (to promote development within planning areas next to the Regional Highway 99 Corridor in order to implement applicable General Plan goals); 2) Improvements for a “disadvantaged community” (i.e., increase employment opportunities, increase competitiveness in receiving housing grant awards, and enhance opportunities to receive infrastructure grant awards); 3) Strengthening Relationship with TCAG – (which would help to facilitate the funding and implementation of key transportation programs, such as Complete Streets, and major state Transportation Improvement Program (STIP) projects); and 4) a Zone Ordinance Amendment adopting a Mixed-Use Overlay Zone; Amendment to Section 16 of the Zone Code to allow additional “by-right” uses only within the Tipton Urban Development Boundary Area; and adoption of a Complete Streets Policy for the unincorporated community of Tipton. Tipton’s Urban Development Boundary contains approximately 1,008 acres.
- **Strathmore Community Plan:** Status – GPA approved. On June 17, 2015 the Tulare County Board of Supervisors (BOS) approved an update to the Strathmore Community Plan. The Strathmore Community Plan is consistent with the approved Tulare County General Plan 2030 Update, and includes the following primary goals and objectives. 1) Land Use and Environmental Planning (to promote development within planning areas next to the SR 65 99 Corridor in order to implement applicable General Plan goals); 2) Improvements for a “disadvantaged community” (i.e., increase employment opportunities, increase competitiveness in receiving housing grant awards, and enhance opportunities to receive infrastructure grant awards); 3) Strengthening Relationship with TCAG – (which would help to facilitate the funding and implementation of key transportation programs, such as Complete Streets, and major state Transportation Improvement Program (STIP) projects); and 4) a Zone Ordinance Amendment adopting a Mixed-Use Overlay Zone; Amendment to Section 16 of the Zone Code to allow additional “by-right” uses only within the Strathmore Urban Development Boundary Area; and adoption of a Complete Streets Policy for the unincorporated community of Strathmore.
- **Three Rivers Community Plan:** Status – GPA approved. On June 26, 2018, the Tulare County Board of Supervisors (BOS) approved the Three Rivers Community Plan. The Three Rivers Community Plan Update was updated to implement the 2030 Tulare County General Plan (2012). The unincorporated community of Three Rivers is located within an

Urban Development Boundary (UDB) consisting of approximately 21,000 acres and is located approximately 30 miles northeast of Visalia. The nearest incorporated city is Woodlake, approximately 16 miles west on State Route 216. The Three Rivers Community Plan Update is consistent with the General Plan 2030 Update, and includes the following primary goals and objectives: (1) Land use and environmental planning; 2) Economic Development; 3) Three Rivers Community Plan Vision Statements (wherein the Community Plan will provide appropriate direction to help guide balanced public and private decisions affecting the community including provisions for the overall direction, density, type of growth, and protection of the natural environment that is consistent with the Tulare County General Plan, and the needs and desires of the Three Rivers Community to maintain its rural character); and 4) Strengthening Relationship with TCAG – (which would help to facilitate the funding and implementation of key transportation programs, such as Complete Streets, and major state Transportation Improvement Program (STIP) projects). The Board also approved an update to the Zoning Code (and Zone Map) to include a mixed use zoning district in compliance with the mixed use designation in the 2030 General Plan.

- **Poplar-Cotton Center:** Status – GPA approved. GPA approved. On December 4, 2018, the Tulare County Board of Supervisors (BOS) approved the Poplar/Cotton Center Community Plan update. The Project site is located approximately eight miles west of Porterville and eleven miles southwest of Lindsay. It is generally bound by Avenue 136 on the south, Avenue 152 on the north, Road 184 on the west, and Road 193 on the east; and encompasses approximately 1.3 square miles of land. The objective of the Poplar/Cotton Center Community Plan Update is to develop a community plan which can accurately reflect the needs and priorities of this unincorporated community. The Land Use and Circulation portions of this Plan will provide the mechanism to minimize or avoid the potential adverse impacts of urban growth. The development of an orderly, harmonious land use pattern and appropriate implementation measures are designed to reduce potential conflict between neighboring uses across Tulare County's 2030 planning horizon, consistent with the Tulare County 2030 General Plan Update. The Community Plan for General Plan Amendment No. GPA 17-010, which is inclusive of the Poplar/Cotton Center Community Plan, amendments to Section 18.9 (PZC 18-006), Section 16 (PZC 18-007), and the Zoning District Map (PZC 18-012), Section 16 (PZC 18-013), and the Zoning District Map (PZC 18-014) of Ordinance No. 352, the Zoning Ordinance, for the Community of Poplar/Cotton Center. The General Plan Amendment is required to i) update the existing Community Plan for Poplar/Cotton Center; ii) approve a Zoning Ordinance amendment to add Poplar/Cotton Center to the Mixed Use Overlay zoning district Section 18.9; iii) approve an amendment to Section 16 of the Zoning Code to allow additional by-right uses; and iv) approve the Zoning District Map, within the Poplar/Cotton Center Urban Development Boundary, under CEQA Sections 1507 through 1573 of the CEQA Guidelines.
- **Ivanhoe Community Plan:** Status – GPA approved. On July 9, 2019, the Tulare County Board of Supervisors (BOS) approved the Ivanhoe Community Plan update. The Ivanhoe Community Plan Update is intended to implement the 2030 Tulare County General Plan

(2012). Ivanhoe is bounded by Avenue 320 in the south, Avenue 336 in the north, Road 152 in the west, and Road 164 in the east and encompasses two square miles of land. SR 216 traverses the southeastern portion of the Community and provides access to SR 198 in Visalia (approximately ten miles southwest of Ivanhoe). SR 99 is located approximately 13 miles west of Ivanhoe. The objective of the Ivanhoe Community Plan Update is to develop a community plan which can accurately reflect the needs and priorities of the unincorporated community of Ivanhoe. The Plan is needed to increase the availability of infrastructure funding, such as drinking water system improvements (wells, water distribution piping, storage tanks, etc.), wastewater system improvements (such as treatment, piping, lift stations, etc.), and public works/safety improvements (such as curbs, gutters, sidewalks, etc.), and to stimulate economic development within the community. The Community Plan for General Plan Amendment No. GPA 17-006, which is inclusive of the Ivanhoe Community Plan, amendments to Section 18.9 (PZC 18-006), Section 16 (PZC 18-007), and the Zoning District Map (PZC 18-008) of Ordinance No. 352, the Zoning Ordinance for the Community of Ivanhoe, were required to achieve consistency with the Tulare County General Plan 2030 Update (August 2012). The General Plan Amendment is required to i) update the existing Community Plan for Ivanhoe; ii) approve a Zoning Ordinance amendment to add Ivanhoe to the Mixed Use Overlay zoning district Section 18.9; iii) approve an amendment to Section 16 of the Zoning Code to allow additional by-right uses; and iv) approve the Zoning District Map, within the Ivanhoe Urban Development Boundary, under CEQA Sections 1507 through 1573 of the CEQA Guidelines.

- **Plainview Community Plan:** Status – GPA approved. On July 9, 2019, the Tulare County Board of Supervisors (BOS) approved the Plainview Community Plan update. The Plainview Community Plan Update is intended to implement the 2030 Tulare County General Plan (2012). Plainview is located approximately four miles west of Strathmore and approximately six (6) miles southwest of Lindsay. The Plainview community boundary includes Avenue 196 on the north; Road 198 on the east; Avenue 194 on the south; it includes both sides of Road 196 on the north; Road 196 to the intersection of Avenue 192; and it includes areas near the Road 195 alignment to the west side of Plainview. The objective of the Plainview Community Plan is to develop a community plan which can accurately reflect the needs and priorities of the unincorporated community of Plainview. The Plan is needed to increase the availability of infrastructure funding, such as drinking water system improvements (wells, water distribution piping, storage tanks, etc.), wastewater system (such as piping, lift stations, etc.), and public work/safety improvements (such as curbs, gutters, sidewalks, etc.), and to stimulate economic development within the community. The Community Plan for General Plan Amendment No. GPA 17-009, which is inclusive of the Plainview Community Plan, amendments to Section 18.9 (PZC 19-007), Section 16 (PZC 19-008), and the Zoning District Map (PZC 19-009) of Ordinance No. 352, the Zoning Ordinance for the Community of Plainview, were required to achieve consistency with the Tulare County General Plan 2030 Update (August 2012). The General Plan Amendment is required i) for the Community Plan for Plainview; ii) to approve a Zoning Ordinance amendment to add Plainview to the Mixed Use Overlay zoning district Section 18.9; iii) to approve an amendment to Section 16 of the Zoning Code to allow

additional by-right uses; and iv) to approve the Zoning District Map, within the Plainview Urban Development Boundary, under CEQA Sections 1507 through 1573 of the CEQA Guidelines.

- **Woodville Community Plan:** Status – GPA approved. On July 9, 2019, the Tulare County Board of Supervisors (BOS) approved the Woodville Community Plan update. The Woodville Community Plan Update is intended to implement the 2030 Tulare County General Plan (2012). Woodville is located southeast of the Road 152/Avenue 168 intersection and is located approximately ten (10) miles southeast of the City of Tulare and eight (8) miles northeast of the State Route 99/Highway 190 interchange. The objective of the Woodville Community Plan is to develop a community plan which can accurately reflect the needs and priorities of the unincorporated community of Woodville. The Plan is needed to increase the availability of infrastructure funding, such as drinking water system improvements (wells, water distribution piping, storage tanks, etc.), wastewater system (such as piping, lift stations, etc.), and public works/safety improvements (such as curbs, gutters, sidewalks, etc.), and to stimulate economic development within the community. The Community Plan for General Plan Amendment No. GPA 17-013, which is inclusive of the Woodville Community Plan, amendments to Section 18.9 (PZC19-004), Section 16 (PZC 19-005), and the Zoning District Map (PZC 19-006) of Ordinance No. 352, the Zoning Ordinance for the Community of Woodville, is required to achieve consistency with the Tulare County General Plan 2030 Update (August 2012). The General Plan Amendment is required i) for the Community Plan for Woodville; ii) to approve a Zoning Ordinance amendment to add Woodville to the Mixed Use Overlay zoning district Section 18.9; iii) to approve an amendment to Section 16 of the Zoning Code to allow additional by-right uses; and iv) to approve the Zoning District Map, within the Woodville Urban Development Boundary, under CEQA Sections 1507 through 1573 of the CEQA Guidelines.

In addition to the Major Projects summarized above, the approved projects listed as follows may contribute to cumulative impacts:

- **Peña's:** Status – Approved. The project is for Peña's Material Recovery Facility (MRF) and Transfer Station (TS)' which currently sits on 18.01 acres that are being rezoned from AE 30 to M1 Light Industrial Zoning, and rezoning 6.7 acres and 11.3 acres from residential and industrial reserve zoning to industrial zoning. The land is currently operated by Peña's Disposal, Inc. and has a previously permitted peak processing capacity of 500 tons per day (TPD). This existing facility serves the unincorporated northern portions of Tulare County and the unincorporated southern portions of Fresno County, and the City of Orange Cove in Fresno County. Within the County of Tulare, the facility serves the cities of Dinuba and Porterville, the communities of Cutler, Orosi, London, Sultana, Traver, Seville and other smaller communities in the area that may need to utilize the facility for the recycling of source-separated recyclables, commingled recyclables, commercial and industrial rubbish, green material and wood wastes, construction and demolition wastes, and inert debris to assist in reaching the diversion goals of the California Integrated Waste Management Act of 1989 (AB 939).

- **South County Correctional Detention Facility in Porterville:** Status – Approved. The project will require a rezoning of the project site, which is half in the County and half in the City of Porterville. The proposed project contains a build-out “footprint” for the proposed facility of approximately 15.0 acres with a new maximum security Type II facility as the primary structure. The project will consist of 250-cell double occupancy units (500 beds) and 14 special use beds for a total of 514 beds. In addition to the main detention facility, the project will also include support service components.

As the site is currently under agricultural production, the project will require new utilities infrastructure (such as electrical, gas, phone, etc.). It will also require streets/roads improvements, potable water systems, wastewater systems, and storm water drainage infrastructure. These will be constructed or expanded to meet facility demands. Where feasible, the project will be extended to connect with existing potable water, wastewater, and storm water drainage infrastructure provided by City of Porterville. However, possible new construction of the above mentioned infrastructure may be necessary, and as such, will be evaluated.

- **Pixley Biogas:** Status – Approved. The project is for development of a biogas facility on 2.75 acre portion of an 8 acre parcel. The digester will extract methane gas, via an anaerobic manure digester. The facility will be used to produce 266 MMBTUS per day of biogas via an anaerobic digestion of manure feedstock from nearby dairies. The biogas produced will be used to fuel the Calgren bio-refinery facility, located adjacent and to the south of the project site, which will reduce the Calgren plant consumption of natural gas.
- **Harvest Power:** Status – Approved. The project is for a Composting Expansion and Anaerobic Digester. The project will allow a maximum total tonnage for the composting to increase from 156,000 tons per year to a potential 216,000 tons per year. An additional 60,000 tons will be allowed at the proposed anaerobic digester facility. The facility will produce transportation fuel through a compressed natural gas (CNG) refueling station.
- **Orosi Rock:** Status – Approved. The project includes concrete a recycling and surface mining operation on 35.13 acres where concrete from various construction projects around the region are delivered for recycling. The project includes transporting up to 800,000 tons of aggregate via 44,000 trips per year heavy-duty truck trips from the operation on an annual basis.

The amendment to the previous permit allows an increase of 1.9 million tons of rock and 2.1 million tons of imported recycled concrete. The total production of aggregate will be 10.8 million tons over the course of the existing 25 year period of the existing permit. Excavating will be limited to 400’ Mean Sea Level (MSL) and the operation will continue blasting by a licensed blaster to break up larger rocks that cannot be moved or broken up by mechanical equipment.



- **Tulare Solar Center:** Status – Approved. The project includes the construction of an 80 MW solar photovoltaic facility on up to 800 acres of an approximately 1,144 acre property historically used as agricultural farmland in Tulare County, California. Proposed Project construction generally requires a focus in three major areas. The areas of focus include: (1) The solar field with associated equipment, including solar PV panels/modules, racking systems, inverters, intermediate voltage transformers, access roads, and underground, above-ground, or overhead electrical systems to collect and consolidate power from across the Project; (2) A substation(s) that receives the solar field’s electrical production and increases the voltage to match the voltage of the adjacent utility grid via a generator step-up transformer(s), with Project owned gen-tie lines, and (3) Any other electrical interconnection components necessary for the Project’s production to reach the utility grid, including disconnect equipment, communications lines (e.g., fiber optics) and a sub-transmission tap line.
- **Deer Creek Mine (PMR 14-002):** Status – Approved. This project amended a Surface Mining Permit and Reclamation Plan to allow expanded operations at this site. The Applicant currently operates a rock and gravel surface mining operation on 98 of this 118 acre site. The site is located south of Deer Creek Drive, approximately 1/3 mile east of Avenue 120 and Road 272, approximately 4 miles southeast of Porterville. The Project will result in no increase in the maximum depth of the mine, as expansion will occur laterally within the existing mining footprint. The approval includes an increase in production by 450,000 tons per year (from a maximum of 500,000 tons per year to a maximum of 950,000 tons per year). Increase truck hauling by 176 round trips per day (from a maximum of 200 round trips per day to a maximum of 376 round trips per day). The Project will not result in any change to the estimated total rock production of 15,000,000 tons of rock material during the estimated 50 years of operation nor would it result in any change to the approved reclamation plan.
- **CMI (formerly Papich):** Status – Approved. The Applicant received a Special Use Permit through Tulare County for the following: 1) Permanent establishment of the asphalt batch plant on the existing site; 2) Expansion of the existing operation from 3,700 tons/day to 8,000 tons/day of asphalt; and 3) To conduct retail/commercial sales of asphalt.
- **Derrel’s Mini Storage:** Status – Approved. The Project includes a proposed General Plan Amendment (No. GPA 14-007) and proposed Change of Zone (No. PZ 14-001). GPA 14-007 received approval to amend the Tulare County Land Use Element of the General Plan by changing the land use designation on the 19.33-acre parcel from “Agriculture” to “Commercial or Light Industrial”. PZ 14-001 was approved to re-zone the AE-20 (Exclusive Agricultural-20 acre minimum) Zone to C-3 (Service Commercial) Zone on the same 19.33 acres. The zone change allows, as noted in the Tulare County Zoning Ordinance, Mini-Warehouses – “Storage or warehousing service within a building or buildings primarily for individuals to store personal effects”<sup>5</sup>

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<sup>5</sup> Tulare County Zoning Ordinance. Page 13.

The site consists of the phased construction of 19.33 acre mini- storage facility. Phase 1 consists of 129,550 square feet; Phase 2 consists of 148,950 square feet, and Phase 3 consists of 96,600 square feet. RV storage will be used on the Phase 2 portion of the site, moving to Phase 3 as the earlier phases are constructed with the eventuality of the entire site constructed as mini storage units (if necessary) to meet market demands. It is possible that Phase 3 will remain as RV storage. The applicant approximates a ten year full build-out of the entire proposed Project site.

- **Hash Farms Residential Subdivision:** Status – Approved. The Project will be located at the northwest corner of Road 16 and Avenue 396, partially within the City of Kingsburg, Fresno County, and Tulare County. The Hash Farms Development Specific Plan is an approved plan for development of a 200-unit residential subdivision (160 single-family units and 40 multi-family units) on a total of 54 acres, including a 2.54 acre park and 1.15 acre fenced stormwater basin. The site is approximately one-half mile east of State Route 99 and approximately one-tenth of a mile south of State Route 201. The 54-acre site is located on Tulare County APNs 028-140-007, 012, 013, 018 and 022, and Fresno County APNs 396-020-008 and 014. The County of Tulare Board of Supervisors approved a tentative subdivision map and a Specific Plan for this project. The City of Kingsburg, County of Fresno, Fresno County Local Agency Formation Commission, and Selma-Kingsburg-Fowler County Sanitation District will also need to take each agencies' respective actions.
- **Antelope Valley (Redfield):** Status – Approved. The 43-unit single-family residential Antelope Valley Subdivision is located on a ±125-acre site (with average lot size of 2.14 acres) on the north side of Avenue 360 (west side of Road 220), approximately one mile north of the City of Woodlake in Tulare County. The site is approximately five miles west of State Route 198 and twenty-two miles east of State Route 99. The site is zoned PD-F-M (Planned Development-Foothill Combining-Special Mobile Home) Zone and is within the Woodlake 7.5 Minute USGS Quadrangle.
- **Sequoia Gateway Commerce Park:** Status – Approved. The Project consists of a Specific Plan/Corridor Plan for the development of a highway commercial/regional commercial center on ±126.9 acres at the southeast quadrant of State Route 99 and Avenue 280 (Caldwell Avenue) in an unincorporated area of Tulare County. The project will be developed in two major phases. Phase 1 consists of 22,950 sf of highway commercial uses such as fast-food outlets, retail, and gas station fueling pumps with associated convenience store, along with a 60,000 sf medical clinic building on approximately 12.4 acres in the northwest corner of the project site. Phase 2, will consist of 986,000 sf of mixed-use commercial land uses including regional retail, hotel, office, restaurant, and fast-food uses on approximately 101.6 acres. Phase 2 will be developed in at least four incremental sub-phases, including additional highway commercial uses adjacent to Phase 1, hotel and restaurant uses, office uses, and regional retail uses. The remaining 12.9 acres will be used for a planned stormwater basin and wastewater treatment plant, along with roadway rights-of-way. Project development will occur in accordance with the detailed planning and design guidelines and standards set forth in the “Sequoia Gateway Commerce Park Specific

Plan” (which is contained in Appendix A of the EIR). Phase 1 would commence development in the near-term upon approval of entitlements and permits for that initial phase of development. Phase 2 would commence development at such future time as traffic capacity permits, or after the planned reconstruction of the State Route 99/Caldwell Avenue Interchange, currently in the planning stages, is completed, and other pre-requisite criteria are met for moving forward with permitting and entitlements for that latter phase of development.

- **Derrel’s Mini Storage:** Status – Approved. The re-designation of the land use and zone district for the ±15.0-acre parcel allows by-right construction of a mini-storage facility in two phases: Phase I – 148,500 sq. ft.; and Phase II – 175,200 sq. ft. At complete build-out, the total square footage of rentable storage space would be 323,700. The project also includes a 1,327 sq. ft. residence, a 391 sq. ft. garage, and an 804 sq. ft. office. The Board of Supervisors also approved General Plan Amendment No. GPA 17-031 and Zone Change No. PZC 18-015; (2) General Plan Amendment No. GPA 17-031 that changed the land use from “Mooney Corridor” to “Mixed Use” on one ±15.0 acre parcel; (3) Change of Zone No. PZC 18-015 that changed the zone district from AE-20 to C-2 on one ±15.0-acre parcel; (4) Categorical Exemption and General Plan Amendment No. GPA 17-036 that changed the land use designation from “Mooney Corridor” to “Mixed Use” on two 1.0-acre parcels; and (5) Categorical Exemption and Change of Zone No. PZC 17-043 that changed the zone district from AE-20 to C-2 on two 1.0-acre parcels, located on the east side of Mooney Blvd., approximately 660 feet south of Avenue 264, north of Tulare.
- **Dunn Asphalt and Concrete Batch Plant:** Status – Approved. The Applicant received approval of Special Use Permit (PSP 18-049) to operate the asphalt/concrete batch plant at 7763 Avenue 280 (Visalia, CA) which is located along the south side of Avenue 280, west of State Route 99 (SR 99) and east of Road 76 in an unincorporated area of Tulare County. The Special Use Permit (PSP 18-049) allows the following: 1) a concrete batch plant that would produce 100,000 tons of concrete per year for commercial and retail sale; 2) a hot-mix asphalt (HMA) batch plant that would produce 150,000 tons of HMA per year for commercial and retail sale; and 3) recycling of 30,000 tons per year of concrete and asphalt to be crushed into recycle base. The site is approximately one mile west of State Route 99. The approximately 20-acre site is located on Tulare County APN 119-010-039 and is currently zoned AE-40 (Exclusive Agricultural-40 Acre Minimum); the use is consistent with the zoning with an approved special use permit.
- **Deer Creek Mine (PMR 19-001):** Status – Approved. The applicant received approval of application PMR 19-001 to expand mining operations at a currently operating a rock and gravel surface mining operation on 110 acres, as permitted by PMR 01-001, PMR 09-002, and PSP 01-055 (ZA), and PMR 14-002. Approval will ultimately result in an approximately 20-acre expansion to the footprint and increased operations of the existing and currently operational Deer Creek Mine facility. The permit amendments requested by PMR 19-001 will allow consistency between PMR 01-001, PMR 09-002, PSP 01-055(ZA), and PMR 14-002; result in an approximately 20-acre expansion through the use of a lot line adjustment toward the east and southeast on land currently used for grazing;

increase annual production by 500,000 tons per year (from a maximum of 1,000,000 tons per year to a maximum of 1,500,000 tons per year); increase truck hauling by 224 round-trips per day (from a maximum of 376 round-trips per day to a maximum of 600 round-trips per day), with a maximum of 60,000 truck trips per year; result in an increase in the maximum depth of the mine to 300 MSL; and result in a change to the estimated total rock production of 40,000,000 tons of rock to 75,000,000 tons of rock material during the estimated 50 years of operation.

- **Cross Creek Bend Subdivision (Smee Homes)**: Status – Approved. At build-out, the Project would result in the development of 197 single-family residences on APN 075-440-002 at the northwest corner of Avenue 310 and Road 72 within the Goshen Community Plan Urban Development Boundary area. The approximately 37.0-acre site will have a density of 5.32 units per acre (based on the gross acreage). The remaining acreage will be utilized as open space in the form of a stormwater detention basin and roadways with curbs, gutters, and sidewalks. Residential parcels will be a minimum of 5,000 square feet. The Project will be developed in three (3) phases: Phase I 33 lots, Phase II 83 lots, and Phase III 81 lots. The existing zoning is C-2-MU (Mixed use); as such, the Project is consistent with the applicable zoning which allows single-family residential uses.
- **Rexford Solar Farm**: Status – Approved. The Rexford Solar Farm Project will result in the construction and operation of an up to 700 megawatt (MW) solar photovoltaic (PV) facility, including an energy storage system (ESS) with up to 700 MW storage capacity, on site substation, transmission and/or collector lines, and ancillary components on approximately 3,614 acres of land in unincorporated Tulare County, California. The Project site consists of 40 discontinuous parcels in south central Tulare County with a complete list of the Assessor Parcel Numbers and acreages can be found in Appendix “B” of the EIR. The Project is located near the unincorporated community of Ducor; neighboring unincorporated communities include Terra Bella to the north and Richgrove to the southwest. The Project site is generally located south of Avenue 68, west of Road 272, north of Avenue 12, and east of Road 216. The majority of the Project site is bisected by and lies east of State Route (SR) 65. The majority of the existing zoning is AE-40 (Exclusive Agriculture – 40 Acre Minimum); as such, the Project is consistent with the applicable zoning which allows renewable energy projects (such as solar power electricity generation).
- **Angela Solar**: Status – Approved. The Project would provide approximately 40 megawatts (MW) of electricity (renewable energy). Project components include solar (photovoltaic, PV) modules (approximately 138,408) mounted on single access trackers. The steel piles supporting the PV modules would be driven into the soils using pneumatic techniques. Various wiring, underground cables, combiner boxes, inverters, transformers, would also be installed. A new, on-site substation/switchyard (located in the northwest corner of the Project site) would tie into a new one mile (1.0) mile-long 138-kV transmission interconnection line (along a utility easement on non-maintained County roads and private property easement) with the nearby Pacific Gas & Electric (PG&E) Olive substation north of the Project site. The Project site is located approximately two

miles southeast of Alpaugh, in Tulare County, CA, generally south and north of Avenue 42 and west and east of Road 46 and east of Road 52. The Project will cover approximately 250 acres in area. The existing zoning is AE-80 (Exclusive Agriculture – 80 Acre Minimum); as such, the Project is consistent with the applicable zoning which allows renewable energy projects (such as solar power electricity generation).

- **Woodville Landfill:** Status – On-going. The proposed Project includes the expansion of the existing 160-acre Woodville landfill by 240 acres; combined, the landfill would encompass an area of approximately 400 acres. The currently unused portion of the existing landfill is vacant, unproductive land, while the proposed Project expansion area is predominately under agriculturally productive row crops. The proposed Project is designed to anticipate and meet the demands/needs of increases in project solid waste disposal of the County for the next 55 years. It is anticipated that daily tonnage received, number of vehicles entering/exiting, landfill operations equipment, water usage, ancillary uses, etc., will not increase or decrease. The proposed Project site is in western Tulare County, located approximately 12 miles southeast of the City of Visalia, seven miles southeast of the City of Tulare, and 13 miles northwest of the City of Porterville at the intersection of Avenue 200 and Road 152. The landfill address is 19800 Road 152, Tulare, CA 93274. The site, and the surrounding land, is zoned as AE-40 (Exclusive Agriculture-40 Acre minimum) and has a Tulare County General Plan designation of Agriculture. The site is not located within any Urban Development Boundary or Urban Area Boundary. The landfill is an allowable use within the AE-40 zone.

## SUMMARY OF CUMULATIVE IMPACTS

In this summary section, mitigated impacts and immitigable impacts will be discussed. Checklist Item criteria that would result in No Impact are discussed in Chapter 3 and are not reiterated here.

### Unavoidable Impacts

There are no significant and unavoidable impacts. All potentially significant cumulative impacts have been reduced below a level of significance through mitigation.

### Less than Significant Impacts with Mitigation

All impacts that can be effectively mitigated are listed in the **Table 4-2**.

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<b>Table 4-2</b> <b>Checklist Items with Less Than Significant Impacts with Mitigation</b>		
<b>Impact Section</b>	<b>Checklist Item No.</b>	<b>Checklist Criteria</b>
Air Quality	3.1 a)	Conflict with or obstruct implementation of the applicable air quality plan?
Air Quality	3.1 b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
Biology	3.4 a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game [Wildlife] or U.S. Fish and Wildlife Service?
Biology	3.4 c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
Biology	3.4 e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
Cultural	3.5 a)	Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?
Cultural	3.5 b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?
Cultural	3.5 c)	Disturb any human remains, including those interred outside of formal cemeteries?
Geology and Soils	3.7 f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
Greenhouse Gases	3.8 b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?
Noise	3.13 a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
Tribal Cultural Resources	3.18 a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?
Tribal Cultural Resources	3.18 b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe?
Mandatory Findings of Significance	3.21 a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

See Chapter 9 Mitigation Monitoring and Reporting Program for a comprehensive list of Mitigation Measures to be implemented as part of the proposed Project.

### Less Than Significant Impact

All impacts that are Less Than Significant are listed in **Table 4-3**.

<b>Table 4-3</b> <b>Checklist Items with Less Than Significant Impacts</b>		
<b>Impact Section</b>	<b>Checklist Item No.</b>	<b>Checklist Criteria</b>
Aesthetics	3.1 a)	Have a substantial adverse effect on a scenic vista?
Aesthetics	3.1 b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
Aesthetics	3.1 d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?
Air Quality	3.3 c)	Expose sensitive receptors to substantial pollutant concentrations?
Air Quality	3.3 d)	Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?
Biological Resources	3.4 d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
Energy	3.6 a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
Energy	3.6 b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?
Geology & Soils	3.7 a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> <li>i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</li> <li>ii) Strong seismic ground shaking?</li> <li>iii) Seismic-related ground failure, including liquefaction?</li> </ul>
Geology & Soils	3.7 b)	Result in substantial soil erosion or the loss of topsoil?
Geology & Soils	3.7 e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
Greenhouse Gas Emissions	3.8 a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
Hazards & Hazardous Materials	3.9 a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

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**Table 4-3**  
**Checklist Items with Less Than Significant Impacts**

<b>Impact Section</b>	<b>Checklist Item No.</b>	<b>Checklist Criteria</b>
Hazards & Hazardous Materials	3.9 b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
Hazards & Hazardous Materials	3.9 e)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?
Hydrology & Water Quality	3.10 a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality??
Hydrology & Water Quality	3.10 b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
Hydrology & Water Quality	3.10 c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would: <ul style="list-style-type: none"> <li>i) Result in a substantial erosion or siltation on- or off-site?</li> <li>ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</li> <li>iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</li> </ul>
Hydrology & Water Quality	3.10 e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?
Land Use & Planning	3.11 b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?
Noise	3.13 a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
Noise	3.13 b)	Generation of excessive groundborne vibration or groundborne noise levels?
Public Services	3.15 a) Fire protection, Police protection	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?
Recreation	3.16 a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
Transportation	3.17 a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?



**Table 4-3**  
**Checklist Items with Less Than Significant Impacts**

<b>Impact Section</b>	<b>Checklist Item No.</b>	<b>Checklist Criteria</b>
Transportation	3.17 b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
Transportation	3.17 c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
Transportation	3.17 d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
Transportation	3.17 e)	Result in inadequate emergency access?
Mandatory Findings of Significance	3.2 c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

## **REFERENCES**

Chapters 3.1 through 3.20 of this DEIR.

CEQA Guidelines, Sections 15130 (e) and 15355

Tulare County General Plan 2030 Update, Recirculated Draft Environmental Impact Report (RDEIR), February 2010

Tulare County Associated of Governments Blueprint 2050, Preferred Scenario (2009)

# Alternatives

## Chapter 5

### INTRODUCTION

This Chapter will conclude that the proposed Project is the preferred Alternative. Alternative No. 3 Reduced (50%) Project is the Environmentally Superior Alternative; however, it does not meet the economic/financial feasibility objectives of the proposed Project.

CEQA Guidelines Section 15126.6 requires that a reasonable range of alternatives to the Preferred/Proposed Project be discussed in the EIR. Specific requirements include the following:

CEQA Guidelines §15126.6(a): Alternatives to the Proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. The Lead Agency is responsible for selecting a range of alternatives for examination and must publicly disclose its reasoning for selecting those alternatives.

CEQA Guidelines §15126.6 (b) Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

CEQA Guidelines §15126.6 (c) Selection of a range of reasonable alternatives. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

CEQA Guidelines §15126.6(d) Evaluation of alternatives. The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental

effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.

CEQA Guidelines §15126.6 (e) “No project” alternative.

- (1) The specific alternative of “no project” shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (see Section 15125).
- (2) The “no project” analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.
- (3) A discussion of the “no project” alternative will usually proceed along one of two lines:
  - (A) When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the “no project” alternative will be the continuation of the existing plan, policy or operation into the future. Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.
  - (B) If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the “no project” alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this “no project” consequence should be discussed. In certain instances, the no project alternative means “no build” wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.
  - (C) After defining the no project alternative using one of these approaches, the lead agency should proceed to analyze the impacts of the no project alternative by projecting what

would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

CEQA Guidelines §15126.6(f): Rule of reason. The range of alternatives required in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.

- (1) Feasibility. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.
- (2) Alternative locations.
  - (A) Key question. The key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
  - (B) None feasible. If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location.
  - (C) Limited new analysis required. Where a previous document has sufficiently analyzed a range of reasonable alternative locations and environmental impacts for projects with the same basic purpose, the lead agency should review the previous document. The EIR may rely on the previous document to help it assess the feasibility of potential project alternatives to the extent the circumstances remain substantially the same as they relate to the alternative.
- (3) An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

“CEQA Guidelines Section 15021. Duty to minimize environmental damage and balance competing public objectives

- (a) CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible.
  - (1) In regulating public or private activities, agencies are required to give major consideration to preventing environmental damage.
  - (2) A public agency should not approve a project as proposed if there are feasible alternatives or mitigation measures available that would substantially lessen any significant effects that the project would have on the environment.
- (b) In deciding whether changes in a project are feasible, an agency may consider specific economic, environmental, legal, social, and technological factors.
- (c) The duty to prevent or minimize environmental damage is implemented through the findings required by CEQA Guidelines Section 15091.
- (d) CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian. An agency shall prepare a statement of overriding considerations as described in Section 15093 to reflect the ultimate balancing of competing public objectives when the agency decides to approve a project that will cause one or more significant effects on the environment.”<sup>1</sup>

## **FACTORS CONSIDERED IN ANALYSIS OF ALTERNATIVES**

In this Alternatives analysis the following evaluation criteria will be used:

### **Evaluation Criteria 1: Realize All Project Components**

- 3-story, 105 guest room hotel
- 108 parking stalls (with 6 dedicated as handicap accessible stalls)
- Hotel to include manager’s office, meeting room, in-house food preparation, breakfast area and various hotel facilities (such as in-house and guest laundry, elevator, fitness center, storage closets, etc.)
- Swimming pool with cabana
- Septic tank with filter and dripline system
- New domestic well
- On-site storm drainage (with option for biofiltration)
- One access/egress point on the west side of the property
- Landscaping

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<sup>1</sup> CEQA Guidelines, Section 15021

## **Evaluation Criteria 2: Expand County's Economic Base**

Tulare County General Plan Policy ED-3.1 (Diverse Economic Base) encourages the development of a diversified economic base by continuing to promote agriculture, recreation services, and commerce, and by expanding its efforts to encourage industrial development including the development of energy resources; ED-5.7 (Foothills) encourages additional recreational and visitor-serving development in the Sierra and foothills in areas such as Three Rivers and Springville as gateway communities; and LU-4.4 (Travel-Oriented Tourist Commercial Uses) requires travel-oriented tourist commercial uses (for example, entertainment, commercial recreation, lodging, fuel) to be used in areas where traffic patterns are oriented to major arterials and highways. The proposed Project consists of commercial development that is allowed by-right and is consistent with both the existing zoning classification and the existing land use designation as contained in the Tulare County General Plan 2030 Update (and Three Rivers Community Plan).

## **Evaluation Criteria 3: Implement the Three Rivers Community Plan**

The proposed Project would implement many Three Rivers Community Plan goals, objectives, and policies. Following are some of the more significant: Objective 1.1 Development Compatibility: Ensure compliance with the Community Plan to ensure compatibility between and within new and existing development. Policy 1.1.2 Mixed Uses to ensure that development to accommodate growth includes a balanced mix of residential, commercial and public uses that enhance the community's economic vitality while maintaining its rural character and quality of life. Policy: 1.2.1 New Development Compatibility to ensure that the size, type, and scale of new development in Three Rivers is compatible with the rural character of the community. Policy 1.2.13 SL-3.3 Highway Commercial wherein the County shall require highway commercial uses to be located and designed to reduce their visual impact on the travel experience along State scenic highways and County scenic routes. Goal 2: Economic Vitality: A strong, diversified economic environment within Three Rivers which is consistent with the rural and visual atmosphere of the community. Policy 2.1.4 Highway-Oriented Commercial Development to maintain existing commercial areas along SR 198 to the extent feasible for highway-oriented commercial development. Objective 2.2 Business Attraction, Expansion, and Retention: To promote business growth and industry diversification and maintain a favorable business climate and a supportive economic foundation. In summary, the proposed Project is consistent with and implements these and many other Three Rivers Community Plan goals, objectives, and policies.

## **Evaluation Criteria 4: Provide Visitor/Tourist Lodging Accommodations**

The Project would accommodate visitors/tourists to the Three Rivers area by implementing the following: Objective 1.1 Development Compatibility, Policy 1.1.4 Compatible Commercial Establishments, to encourage compatible commercial establishments necessary to serve residents and tourists that are commensurate with the scale and intensity of the community, preserve the environment, and which do not have to the extent feasible, significant traffic, light, noise or visual impacts to the community. Goal 2: Economic Vitality, Policy 2.1.5 ED-5.4 Recreational

Accommodations, wherein the County shall support the development of visitor-serving attractions and accommodations in unincorporated areas near natural amenities and resources that would not be diminished by tourist activities. Policy 2.1.8 ED-5.7 Foothills wherein the County shall encourage additional recreational and visitor-serving development in the Sierra and foothills in areas such as Three Rivers. The proposed 105-room hotel Project's proximity to SR 198 and Sequoia National Park is ideally suited to accommodate the proposed Three Rivers Hampton Inn & Suites project.

#### **Evaluation Criteria 5: Efficient Business Operations**

The proposed Project is intended to implement Applicant's strategic business plan by planning, designing, constructing, and operating a facility which is economically, technologically and environmentally feasible.

#### **Evaluation Criteria 6: Control of Land and Physical Feasibility (Land Size and Configuration Constraints)**

Control of land is required as an applicant, either through owning or leasing, must have the discretion to make land use and other decisions that would affect a proposed Project. Physical feasibility is required because if site for a particular alternative is too small or if the components of the proposed Project cannot be configured on the site, then the alternative would not be feasible and should be eliminated from review.

### **ALTERNATIVES ANALYSIS**

In accordance with CEQA Guidelines Section 15126.6, the following alternatives were selected to be evaluated against the proposed Project:

- Alternative 1 – No Build/No Project
- Alternative 2 – Alternative Site
- Alternative 3 – Reduced (25%) Project

#### **Alternative 1: No Build/No Project (No Project)**

Description: Under this alternative, the proposed 105-room hotel (including its ancillary components) and the project site would remain in its present condition (that is, vacant land). However, demand for overnight visitor/tourist lodging accommodations would continue within Three Rivers and throughout the vicinity (see also Alternative 2, below). Environmental impacts could likely occur as a result of an alternate location and/or an increase in lodging accommodations from other lodging (hotel/motel) provider in order to meet demand. Most environmental impacts (with the exception of air quality, energy, greenhouse gas emissions, and traffic; see discussion below at Environmental Considerations) under the No-Project Alternative would be less than the proposed Project. The No-Project Alternative, by definition, would not meet the objectives of the proposed Project that were discussed earlier in this chapter.

The No-Project Alternative would result in the following:

- Lack of issuance of a building permit(s) in a properly zoned location where this type of use is allowed by-right;
- Failure to implement the County's goal to expand its economic base thereby negating an estimated 12 new, full-time employment opportunities;
- Failure to capture a new source of sales tax, increased property valuation, and transit occupancy tax revenues;
- Failure to provide overnight visitor/tourist lodging accommodations thereby requiring the need for visitors/tourists to seek out alternative lodging accommodations outside of the Three Rivers area;
- Would not implement any of the goals/objective/policies contained in the Tulare County General Plan or Three Rivers Community Plan specific to developing a diverse economic base, additional recreational and visitor-serving development in the Sierra and foothills in areas specific to the Three Rivers area, maintain economic vitality, development of highway-oriented commercial development, etc.;
- Would not meet any project objective or project-specific elements; and
- Would not meet any business objectives desired by the applicant.

Environmental Considerations: Demand for overnight visitor/tourist lodging accommodations would continue due to the proximity of recreational opportunities near and within the Three Rivers area in general and within Tulare County in particular. Environmental impacts could occur as a result of an alternate location and/or an increase in lodging accommodations from another lodging provider in order to meet demand. As noted in the TIS (included in Appendix "E" of the Draft EIR) prepared by consultant VRPA, "The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure [lodging] accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable [lodging] accommodations or stay in properties located outside the market area. Seeking [lodging] accommodations outside of the desired market area increases VMT since travelers would be forced to travel longer distances to secure [lodging] accommodations. The development of the Project would reduce the unaccommodated demand, thus reducing VMT in the market area."<sup>2</sup> According to the Feasibility Study, there are an estimate 680 hotel rooms (that is, on average daily room count) of similar lodging accommodations located an average of 30 miles from the proposed Project site. The majority of alternative lodging is located in Visalia, while Exeter and SNP each have one lodging accommodation site. As such, multiple day visitors/tourist to the Three Rivers area would have to drive an average of 60 miles (round-trip) versus no miles with the proposed Project. This

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<sup>2</sup> "Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020" (TIS) report. Pages 25-26. Prepared by VRPA Technologies, Inc., (included in Appendix "E" of this Draft EIR).



alternative would likely result in increased air pollutants, increased greenhouse gas emissions, and increased energy consumption (in the form of gasoline and/or diesel fuels) as a result of greater vehicle distances travelled (i.e., vehicle miles travelled or VMT) by visitors/tourists to stay at locations with lodging accommodations outside of Three Rivers. However, for this analysis, it is determined that the No-Project Alternative would eventually mean that the proposed hotel would not exist on the site and the vacant land use would remain unchanged. All environmental impacts under the No-Project Alternative would be less than the Proposed Project. The No-Project Alternative by definition would not meet the objectives of the proposed Project that were discussed earlier in this chapter.

## **Alternative 2: Alternate Site**

Description: The environmental considerations associated with an alternate site would be highly dependent on several variables, including physical site conditions, surrounding land use, site access, and suitability of the local roadway network. Physical site conditions include land, air, water, flora, fauna, noise, objectives of historic (cultural and tribal cultural), or aesthetic significance, and would affect the nature and degree of direct impacts, needed environmental control systems, mitigation, and permitting requirements.

The constraint on alternate site selection is the reduction or elimination of significant project impacts. The economic viability of the proposed project is dependent on the ability to efficiently accommodate visitors/tourists in the Three Rivers areas. Any potentially feasible alternate site needs to be located near or within Three Rivers, near major roadways/highways in a location that meets other criteria outlined earlier herein.

Environmental Considerations: Development of an alternate site could theoretically meet most of the Project objectives presented earlier in this chapter. However, construction and operation of an alternate site would not be as cost effective or operationally efficient and thus is not consistent with the Project objectives. In addition, construction and operation at an alternate site would likely result in environmental impacts that are equal to or greater than the proposed project. The majority of project impacts identified in the proposed Project are likely to occur at an alternate site.

Importantly, the Applicant does not have control of an alternate site. If control were viable, the applicant would have to re-initiate the application process as a new project. Similar to the proposed Project site, an alternate site would require environmental review once the Applicant has prepared sufficient project description information. At present, the Applicant does not have control of an alternate site. The time requirements for these activities would severely hamper the ability of the Applicant to accommodate their projected construction/operation schedule thereby adversely affecting their business model for efficiency. This alternative would be the most complex, costly, and time-consuming alternative to implement. Various engineering and technical studies would then be completed to define the project and its required control systems. Environmental review and obtaining local and state entitlements would follow prior to construction-activities.

An alternate site was not chosen for evaluation for reasons identified in CEQA Guidelines §15126.6(f): Rule of reason. In addition, an alternate site would likely result in similar or greater

environmental impacts in every environmental impact criteria listed in the CEQA Guidelines Appendix G checklist. Therefore, an alternate site was not evaluated.

### **Alternative 3: Reduced (25%) Project**

Description: Under Alternative 3, the proposed Project would be permitted for only 75% of the proposed capacity. Alternative 3 would reduce the size of the proposed Project by reducing the availability of rooms from 105 to approximately 79 rooms, parking stalls from 108 to approximately 81 stalls (handicapped stalls from 6 to 5 stalls) and reduce the footprint of the hotel thereby rendering the balance of the parcel useless for the intended use. A 25 percent reduction in rooms is a reasonable amount to illustrate what impact such an alternative would have on the significant effects of the proposed Project. Operations would essentially be the same as the proposed Project except that room availability would be substantially reduced.

Environmental Considerations: Most of the environmental issues associated with Alternative 3 would be similar to those of the proposed Project. Issues sensitive to changes in reducing the proposed Project size by 25 percent would directly impact air quality, greenhouse gases, energy, and traffic (in the form of vehicle miles travelled (VMT)), and economic considerations which are discussed as follows:

**Air Quality and Greenhouse Gases:** According to the Air Quality and Greenhouse Gas Assessment (See Appendix “A” of this document) prepared for the proposed Project, the proposed Project result in annual air pollutant emission rates which are less than the applicable San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds of significance, resulting in a less than significant impact. Even though the proposed project is below existing thresholds of significance, a reduced project size would result in a further reduction of air and greenhouse gas emissions. However, even though Alternative 3 would result in lower annual emission rates than the proposed Project at the proposed Project site, conversely, it would likely increase air and greenhouse gas emissions as visitors/tourists would have to travel farther to find lodging accommodations. Likely, the demand for lodging accommodations for visitors/tourists would not be met relative to the number of annual visitors/tourist to nearby recreational attractions, particularly Sequoia National Park (SNP, which attracted 1,246,053 visitors during 2019 vs. 1,229,594 visitors in 2018<sup>3</sup>). Despite the anomalous decline of visitors/tourists during the COVID crises of 2020, SNP attendance will likely rebound to historic trends of averaging 1.1 million visitations between 2004 and 2019. The ability to accommodate some of these visitors would be adversely impacted if Alternative 3 were implemented.

**Traffic (VMT) and Energy:** VRPA Technologies prepared a Traffic Impact Study for the proposed project (See Appendix “F” of this document). According to the TIS, “The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and

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<sup>3</sup> United States Department of the Interior. National Park Service Sequoia and Kings Canyon National Park Visitation By Year. Accessed February 2021 at: <https://www.nationalparked.com/sequoia-kings-canyon/visitation-statistics>.

sell-out trends. Unaccommodated demand refers to individuals who are unable to secure [lodging] accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable [lodging] accommodations or stay in properties located outside the market area. Seeking [lodging] accommodations outside of the desired market area increases VMT since travelers would be forced to travel longer distances to secure [lodging] accommodations. The development of the Project would reduce the unaccommodated demand, thus reducing VMT in the market area.”<sup>4</sup> Conversely, a 25% reduction of rooms would result in increases in VMT for the reasons stated by VRPA. Energy would be adversely impacted in the form of increases in fuel consumption (i.e., gasoline and/or diesel) as VMT would increase which then would contribute to air and greenhouse gas emissions. According to the Feasibility Study, there are approximately 680 hotel rooms of similar lodging accommodations located an average of 30 miles from the proposed Project site. As such, multiple day visitors/tourists to the Three Rivers area would have to drive an average of 60 miles versus no miles with the proposed Project to find overnight lodging accommodations. Thus, although Alternative 3 would reduce the traffic **volume** (*emphasis added*), it would ultimately result in **increased Vehicle Miles Travelled (VMT)** (*emphasis added*) thereby adversely impacting air quality, greenhouse gas emissions, energy, and VMT.

**Economic Considerations:** As noted above, VRPA Technologies prepared a Traffic Impact Study for the proposed project (See Appendix “F” of this document) which cites to a Feasibility Study provided by applicant/agent; to wit, “The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure [lodging] accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable [lodging] [lodging] accommodations or stay in properties located outside the market area.”<sup>5</sup> A reduction to 79 rooms rather than the proposed 105 rooms would result in a narrower profit margin for the reduced project. Much of the efficiencies that would be gained by having 105 rooms versus 79 rooms would be lost on the reduced project. Also included would be lost wages (due to less employment), lost transient occupancy tax (due to fewer rooms), lost sales from suppliers (due to less demand for supplies because of a smaller project), and lost property valuation (due to a smaller project). Based on the economic considerations, it is not unreasonable to conclude that a 25% reduction in this Project’s size would result in a substantial reduction of the economic objectives of this Project.

**Evaluation of Alternatives:** Alternative 1 (No Project) is not considered a viable alternative as it does not accomplish the main element of the Project, which is to develop a 105-room hotel (including ancillary uses). Factors considered in the comparison of Alternative 2 (Alternative Site) include control of an alternative site, re-initiating the entire application process, the need for new technical studies and/or investigations (e.g., air quality/greenhouse gases, biological, cultural, geologic, hydrogeologic, traffic, etc.), and other considerations as noted earlier in this Chapter. As

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<sup>4</sup> “Three Rivers Hampton Inn & Suites Traffic Impact Study, June 2020” (TIS) report. Pages 25-26. Prepared by VRPA Technologies, Inc., (included in Appendix “E” of this Draft EIR).

<sup>5</sup> Ibid.

noted earlier, actors considered in the comparison of Alternative 3 (25% Reduction) include air quality, energy, greenhouse gases, traffic, and economic considerations. Environmental considerations for CEQA purposes are discussed in the next section of this chapter.

In summary, the proposed Project is preferred over all other Alternatives for the following reasons:

- The proposed Project is capable of contributing toward meeting lodging needs to accommodate overnight visitors/tourists seeking to experience recreational opportunity in the Three Rivers area.
- The proposed Project contributes in implementing goals/objectives/policies as encouraged in the Tulare County General Plan and Three Rivers Community Plan.
- The proposed Project satisfies all six (6) Evaluation Criteria noted earlier.
- The proposed Project is an allowed use with a special use permit in the C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone) zone.

## ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6 (e)(2) requires that the environmentally superior alternative be identified. If the environmentally superior alternative is the No Project Alternative, the EIR shall identify an environmentally superior alternative among the other alternatives.

The following analyses evaluates Alternatives 1, 2, and 3 against the proposed Project in order to identify the environmentally superior alternative. The relative environmental impacts associated with each of the Alternatives, as compared to the proposed Project, are summarized in **Table 5-1**. A matrix comparing the Evaluation Criteria and Project objectives as they pertain to each Alternative is provided in **Table 5-2**.

<b>Table 5-1</b>			
<b>Alternatives Evaluation</b>			
	Alternative 1 No Project	Alternative 2 Alternate Site	Alternative 3 Reduced (25%) Project
1. Realize Project Components	No	Some	Some
2. Expand County's Economic Base	No	Some	Some-to-Yes
3. Implement the Three Rivers Community Plan	No	Unknown-to-Some	Some-to-Yes
4. Provide Visitor/Tourist Lodging Accommodations	No	Yes	Some-to-Yes
5. Efficient Business Operations	No	Unknown-to-No	No-to-Some
6. Control of Land and Physical Feasibility	No	No	Yes

**Alternative 1: – No Project Alternative.** The No Project Alternative would avoid all potential construction- and operations-related impacts related to air quality, biological resources, cultural

resources, greenhouse gas emissions, noise, and traffic (VMT) resulting from the proposed Project and each of the other Alternatives identified earlier. However, the No Project Alternative would not meet any of the Project objectives or project-specific elements. Therefore, the consideration of the No Project Alternative being the environmentally superior alternative would require the judgment of whether in balance, eliminating or avoiding certain impacts is of greater benefit environmentally than avoiding certain other impacts. Therefore, this Alternative would not meet the criteria as the Environmentally Superior Alternative.

**Alternative 2: – Alternate Site.** It is unknown if the environmental impacts associated with this Alternative would be less than the proposed Project because it would be speculative to evaluate an unsecured alternate site. This is primarily due to the fact that the applicant does not have control of an alternate site. However, as noted earlier, construction and operation at an alternate site would result in environmental impacts that are likely equal to or greater than the proposed Project. The majority of Project impacts are also likely to occur at an alternate site. Therefore, impacts associated with air quality, greenhouse gas emissions, water use, traffic (and possibly noise and infrastructure) could likely be equal to or greater than the proposed Project. If an alternate site acquisition were viable, the applicant would have to re-initiate the application and environmental review process as a new project. Various engineering and technical studies would need to be completed. The time requirements for these activities would reduce the ability of the Applicant to accommodate projected asphalt/concrete demand in a timely manner compared to the proposed Project. As such, this alternative would be the most complex, costly, and time-consuming alternative to implement. Therefore, Alternative 2 is not superior to the proposed Project and is not considered a viable alternative.

**Alternative 3: – Reduced (25%) Project.** As noted earlier, under Alternative 3, the proposed Project would be permitted for only 75% of the proposed capacity. Operations would essentially be the same as the proposed Project except that throughput would be substantially reduced. Most of the environmental issues associated with Alternative 3 would be similar to those of the proposed Project. This Alternative may result in reduction of building height through elimination of one-story of floor area, thereby reducing impacts to aesthetics. Although Alternative 3 would reduce the traffic volume, it would ultimately result in increased Vehicle Miles Travelled (VMT) thereby adversely impacting air quality, greenhouse gas emissions, energy, and VMT. Further, as noted earlier, a reduction to 79 rooms rather than the proposed 105 rooms would result in a narrower profit margin for the reduced project. Much of the efficiencies that would be gained by having 105 rooms versus 79 rooms would be lost on the reduced project. Also included would be lost wages (due to less employment), lost sales taxes (to both the proposed Project and adjacent/nearby businesses), lost transient occupancy tax (due to fewer rooms), lost sales to suppliers (due to less demand for supplies because of a smaller project), and lost property valuation (due to a smaller project). Also, as noted earlier, it is not unreasonable to conclude that a 25% reduction in this Project's size would result in a substantial reduction of the economic objectives of this Project. Apart from the No Project Alternative, Alternative 3 Reduced (25%) Project would be the Environmentally Superior alternative because it would result in less adverse physical impacts to the environment with regard to air, greenhouse gases, energy, and traffic (VMT). However, the Reduced (25%) Project does not meet all of the applicant's Project objectives, particularly with regard to the financial feasibility of this alternative.

In summary, based upon the above analyses, Alternative 3 is the Environmentally Superior Alternative as it would, overall, result in reduced significant impacts. However, it does not meet all of the evaluation criteria and importantly, it would not meet the economic objectives of the Project. As seen in **Table 5-2** contains a comparison of each Alternative's and the proposed Project's abilities to achieve the Project objectives and reduce environmental impacts.

<b>Table 5-2</b> <b>Impacts of Alternatives Compared to the Proposed Project</b>			
<b>Impact Topic</b>	<b>Alternative 1 No Project</b>	<b>Alternative 2 Alternate Site</b>	<b>Alternative 3 Reduced (25%) Project</b>
Aesthetics	Less	Unknown-to-Similar	Unknown-to-Less
Agriculture and Forestry Resources	Less	Similar-to-Unknown	Similar
Air Quality	Less	Similar-to-More	Less-to-More
Biological Resources	Less	Unknown	Similar
Cultural Resources	Less	Unknown	Less
Energy	Less-to-More	More	Similar-to-More
Geology and Soils	Unknown	Unknown	Similar
Greenhouse Gas Emissions	Less-to-More	Less-to-More	Less-to-More
Hazards and Hazardous Materials	Unknown	Unknown	Similar-to-Less
Hydrology and Water Quality	Less	Unknown	Less
Land Use and Planning	Less	Unknown	Similar
Mineral Resources	Less	Unknown	Similar
Noise	Less	Unknown	Similar-to-Less
Population and Housing	Less	Similar	Similar
Public Services	Less	Unknown	Similar-to-Less
Recreation	Similar	Similar	Similar
Transportation (VMT)	Less-to-More	Unknown-to-More	Less-to-More
Tribal Cultural Resources	Unknown	Unknown	Similar
Utilities and Service Systems	Less	Unknown-to-More	Similar-to-Less
Wildfire	Unknown	Unknown	Similar
Mandatory Findings of Significance	Less	Less-to-More	Less-to-More

## REFERENCES

See References cited in Chapter 3-2 Air Quality; Chapter 3-4 Biological Resources; Chapter 3-5 Cultural Resources; Chapter 3-7 Greenhouse Gas Emissions; Chapter 3-10 Hydrology and Water Quality; Chapter 3-13 Noise, Chapter 3-16 Transportation; and Chapter 3-18 Tribal Cultural Resources.

# Economic, Social, and Growth-Inducing Effects

## Chapter 6

### INTRODUCTION

This chapter discusses economic, social, and growth-inducing effects of the Project. **Table 6-1** provides the CEQA requirements and a summary of the impact analysis.

<b>Table 6-1</b> <b>Summary of Economic, Social and Growth Inducing Impacts</b>		
<b>Topic</b>	<b>Summary of Impact</b>	<b>CEQA Requirement</b>
<b>Economic Impact</b>	The proposed Project will not result in negative impacts to the region. It will result in increases in economic benefits as the Project is anticipated to provide up to 12 permanent jobs.	CEQA does not have specific requirements for evaluating the economic impacts of a Project. Section 15131 of CEQA Guidelines states that “Economic or social information may be included in an EIR or may be presented in whatever form the agency desires.”
<b>Social Impact</b>	The proposed Project would not result in disproportionate environmental effects on minority populations, low income populations, or Native Americans. The proposed Project does not pose any adverse environmental justice issues that would require mitigation.	The social impacts of a project include environmental justice considerations. California Government Code Section 65040.12 defines Environmental Justice as “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies.”
<b>Growth Inducing Effect</b>	The proposed Project would not result in significant growth inducing impacts. The proposed Project will result in only 12 permanent jobs. The Project will not result in new housing. Growth inducing impacts will be less than significant.	CEQA Guidelines Section 15126 (d) makes recommendations for analyzing impacts due to growth inducement, including discussing ways in which the project could foster economic or population growth, the construction of additional housing, or other factors which could remove obstacles to population growth or encourage and facilitate other activities which could impact the environment individually or cumulatively.

Based on the information provided in **Table 6-1**, implementation of the proposed Project would result in ***Less Than Significant*** environmental impacts, either individually or cumulatively, caused by either economic, social, or growth-inducing effects. No mitigation measures are required.

### DEMOGRAPHICS

Approximately 169,300 people were employed in Tulare County in November 2020. The unemployment rate in the Tulare County was 9.8 percent in November 2020, down from a revised 10.5 percent in October 2020, and above the year-ago estimate of 8.7 percent. This compares with

an unadjusted unemployment rate of 7.9 percent for California and 6.4 percent for the nation during the same period.<sup>1</sup> The current COVID-19 crisis (2020) has resulted in fluctuating employment; however, this fluctuation is anomalous and anticipated to self-adjust over time.

The 2000 Census was the first Census to designate the Three Rivers Community as a Census Designated Place, or CDP. The Census counts included Tulare County Census Tract 1, Block Groups 3-6. This was a larger geographic area than the CDP. Thus, due to the recalculation of the Three Rivers Census area, the more accurate figure for the 2000 population was the CDP population, which was 2,248 people at the time.<sup>2</sup> The general demographic information can be found in **Table 6-2**.

<b>Table 6-2</b>		
<b>Profile of General Population and Housing Characteristics - 2010<sup>3</sup></b>		
<b>Demographic Profile Data</b>	<b>Tulare County</b>	<b>Three Rivers<sup>4</sup></b>
<b>Population</b>		
Total	442,179	2,182
% Hispanic or Latino	60.6%	9.72%
% not Hispanic or Latino	39.4%	90.28%
White alone	27.5%	90.56%
Black or African American alone	0.4%	0.32%
Asian alone	0.2%	1.42%
Some other race alone	0.1%	3.44%
Two or more races	1.4%	2.98%
<b>Housing</b>		
Total housing units	141,696	1,407
Occupied Housing Units	130,352	1,116
Vacant housing units	11,344	213
Owner-occupied housing units	76,586 (58.8%)	859 (77%)
Renter-occupied housing units	53,766 (41.2%)	257 (23%)
Homeowner vacancy rate (%)	2.4%	3.1%
Renter vacancy rate (%)	5.8%	7.6%

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<sup>1</sup> California Employment Development Department. Labor Market Information December 18, 2020. Accessed January 2021 at: [https://www.labormarketinfo.edd.ca.gov/file/lfmonth/visa\\$pd.pdf](https://www.labormarketinfo.edd.ca.gov/file/lfmonth/visa$pd.pdf)

<sup>2</sup> Tulare County. Three Rivers Community Plan 2018 Update. Page 91. Accessed February 2021 at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>

<sup>3</sup> U.S. Census Bureau, 2010 Demographic Profile Data. Accessed June 2019 at: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

<sup>4</sup> Tulare County. Three Rivers Community Plan 2018 Update. Draft EIR. Pages 3.13-3 through -12.



## ECONOMIC EFFECTS

Section 15131 of the CEQA Guidelines states:

“Economic or social information may be included in an EIR or may be presented in whatever form the agency desires.

- (a) Economic or social effects of a project shall not be treated as significant effects on the environment. But rather, an EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.
- (b) Economic or social effects of a project may be used to determine the significance of physical changes caused by the project. For example, if the construction of a new freeway or rail line divides an existing community, the construction would be the physical change, but the social effect on the community would be the basis for determining that the effect would be significant. As an additional example, if the construction of a road and the resulting increase in noise in an area disturbed existing religious practices in the area, the disturbance of the religious practices could be used to determine that the construction and use of the road and the resulting noise would be significant effects on the environment. The religious practices would need to be analyzed only to the extent to show that the increase in traffic and noise would conflict with the religious practices. Where an EIR uses economic or social effects to determine that a physical change is significant, the EIR shall explain the reason for determining that the effect is significant.
- (c) Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR. If information on these factors is not contained in the EIR, the information must be added to the record in some other manner to allow the agency to consider the factors in reaching a decision on the project.”<sup>5</sup>

### Economic and Social Benefits of the Proposed Project

The proposed Project will provide multiple economic and social benefits as follows:

- Addition of 20 new permanent jobs;

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<sup>5</sup> State of California, Natural Resources Agency, Guidelines for the Implementation of the California Environmental Quality Act (CEQA). Section 15131. Accessed in June 2020 at: [http://resources.ca.gov/ceqa/docs/2018\\_CEQA\\_FINAL\\_TEXT\\_122818.pdf](http://resources.ca.gov/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf).

- Production of construction materials (asphalt and concrete) to support roadway improvements and other construction projects in the County of Tulare;
- Reduction of air quality impacts (that is, in the form of air pollutants avoided to extract and transport raw material);
- Decrease raw material extraction through recycling of asphalt and concrete for re-use;
- Increase diversion to landfills through recycling of asphalt and concrete; and
- Increase conservation, reduction, and efficiency of energy usage (that is, in the form of electricity, natural gas, gasoline, and diesel fuel used to produce/transport finished products).

## **SOCIAL EFFECTS**

### Environmental Justice

#### Federal Policy Framework

“The basis for EJ lies in the Equal Protection Clause of the U.S. Constitution. The Fourteenth Amendment expressly provides that the states may not “deny to any person within [their] jurisdiction the equal protection of the laws” (U.S. Constitution, amend. XIV, §1). On February 11, 1994, President Clinton signed Executive Order (E.O.) 12898, titled “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.” The executive order followed a 1992 report by the U.S. Environmental Protection Agency (U.S. EPA) indicating that “[r]acial minority and low-income populations experience higher than average exposures to selected air pollutants, hazardous waste facilities, and other forms of environmental pollution.”<sup>6</sup>

“Among other things, E.O. 12898 directed federal agencies to incorporate EJ into their missions. In a memorandum accompanying E.O. 12898, President Clinton underscored existing federal laws that can be used to further EJ. These laws include Title VI of the Civil Rights Act of 1964, which prohibits any recipient (state or local entity or public or private agency) of federal financial assistance from discriminating on the basis of race, color, or national origin in its programs or activities; and, the National Environmental Policy Act (NEPA), which requires environmental review for federal actions or federally-funded actions.”<sup>7</sup>

#### State Policy Framework

“Anti-discrimination laws existed in California prior to the passage of the first State EJ legislation in 1999. For example, the California Constitution prohibits discrimination in the operation of public employment, public education, or public contracting (Article I, § 31). State law further

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<sup>6</sup> State of California, General Plan Guidelines 2017. Page 4. Accessed February 2020 at: [http://opr.ca.gov/docs/20200706-GPG\\_Chapter\\_4\\_EJ.pdf](http://opr.ca.gov/docs/20200706-GPG_Chapter_4_EJ.pdf)

<sup>7</sup> Ibid.

prohibits discrimination under any program or activity that is funded or administered by the State (Gov. Code, § 11135). The Planning and Zoning Law prohibits any local entity from denying any individual or group of the enjoyment of residence, land ownership, tenancy, or any other land use in California due to the race, sex, gender, color, religion, ethnicity, national origin, ancestry, lawful occupation, or age, among other bases, of the individual or group of individuals (Gov. Code, § 65008, subd. (a)). The Fair Employment and Housing Act (FEHA) specifically prohibits housing discrimination on the basis of race, color, religion, sex, sexual orientation, marital status, national origin, ancestry, familial status, disability, or source of income (Gov. Code, § 12900, et seq.).”<sup>8</sup>

The EIR does not identify any potentially significant impacts that could result from the proposed Project as the Project is intended to provide short-term accommodations for visitors/tourists to the Three Rivers area. Therefore, the proposed Project will not adversely impact low-income and/or minority populations.

#### Inappropriateness of Affordable Housing

The project does not include a land use change from agricultural nor does it propose to add or remove any affordable housing. In addition, the project site is not suitable for affordable housing. Affordable housing projects require high-densities to maintain economic and financial viability. Low densities typically do not result in enough income volume to pay for the cost of construction. In addition, the project site is not located adjacent to a bus line or within the central portion (downtown) of a community, which would place additional hardships and increase the cost of living for potential low-income residents.

#### Appropriateness of Location

The project site is located in a commercial/mixed-use zone with adequate access to a major east-west highway (SR 198). As noted earlier, Project site is located in the unincorporated community of Three Rivers and is adjacent to an existing hotel along and east of SR 198/Sierra Drive. The immediate area surrounding the Project site is generally level; there are two nearby hills northeast and east of the site and numerous hills north and west the site (north and west of the Kaweah River). The Comfort Inn and Suites is located to the northeast, the Kaweah River is west of site (west of SR 198) and scattered development (i.e., two rural residences), undeveloped land to the southeast and, a rural residence and two large compressed natural gas tanks to the south.

### **GROWTH-INDUCING EFFECTS**

As outlined in the CEQA Guidelines Section 15126.2 (e), growth-inducing impact of the proposed Project should “[d]iscuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community

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<sup>8</sup> Op. Cit. Pages 4-5.

service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.”<sup>5</sup>

Generally, growth inducing impacts are a result of very large businesses or very large housing developments. A large influx of jobs or people would require additional services which could potentially induce growth related impacts. The proposed Project involves a hotel use that is allowed by the zoning classification at the Project location. Although the proposed Project is estimated to result in up to 12 new jobs, most of these are low skill jobs and would be available to any able bodied person. As these jobs will not require high skilled labor, it will not be necessary to recruit higher skilled person beyond the region of the Project and it is anticipated that the majority of new employees will be current residents within or near Three Rivers vicinity and/or the County. As such, the proposed Project will not significantly induce growth. See summary in **Table 6-3**.

<b>Table 6-3 Growth Impacts</b>	
Potential Growth Inducing Impacts	<i>Discussion</i>
Economic/Population Growth	<i>The proposed Project will result in up to 12 new jobs, which will result in increased economic growth. Although the proposed Project will result in an economic benefit for Tulare County, the proposed Project will not induce substantial growth</i>
Foster the Construction of Additional Housing	<i>The Proposed Project will not result in a need for additional housing.</i>
Other Activities	<i>The proposed Project will not include other growth related activities.</i>

As noted in **Table 6-3**, the Project would result in ***Less Than Significant Growth-Inducing Impacts***.

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# **Immitigable Impacts**

## **Chapter 7**

### **NO ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED**

Under CEQA Guidelines §15126.2 (b), “[w]here there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.”<sup>1</sup> This analysis should include a description of any significant impacts, including those which can be mitigated but not reduced to a level of insignificance.

The proposed Project is not anticipated to result in and Significant and Unavoidable Impacts to any resource. All impacts have been found to be Less Than Significant or can be mitigated to a level considered Less Than Significant.

Based upon the information contained in this Draft Environmental Impact Report and supporting conclusions contained in studies and/or other referenced information, it is the RMA’s conclusion that the public benefits of the Project, including benefits to air quality emissions, energy, greenhouse gas emissions, reduce development pressure on agriculture, and increased employment, would outweigh any negligible impacts to the environment.

### **NO IRREVERSIBLE IMPACTS**

Under CEQA Guidelines §15126.2 (c), “[u]ses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified. (See Public Resources Code section 21100.1 and Title 14, California Code of Regulations, section 15127 for limitations to applicability of this requirement.)”<sup>2</sup>

The resources committed to the proposed Project are standard resources necessary for the construction and operation of a typical hotel. Potential minimal impacts would occur during the construction-related phase and once the site is developed. As noted in applicable resource sections, the proposed Project would be required to comply with local, state, and federal permitting requirements and operational practices, as applicable. For example, the proposed Project would be required to comply with San Joaquin Valley Air District rules and regulations

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<sup>1</sup> CEQA Guidelines, Section 15126.2 (b).

<sup>2</sup> Ibid. 15126.2 (c).

that would reduce or prevent air quality and greenhouse gas emissions (for example, Regulation VIII (Fugitive PM-10 Prohibitions), Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations, Rule 9510 (Indirect Source Review), etc.). As such, the proposed Project would not result in any irreversible life-cycle costs. Further, the proposed Project will be in compliance with the goals of the Climate Change Scoping Plan that outlines the State's GHG reductions strategy by reducing vehicle miles travelled by visitors/tourists.

## **STATEMENT OF OVERRIDING CONSIDERATIONS**

### Authority to Approve Project Despite Significant Effects

As contained in CEQA Guidelines §15043, “[a] public agency may approve a project even though the project would cause a significant effect on the environment, if the agency makes a fully informed and publicly disclosed decision that:

- (a) There is no feasible way to lessen or avoid the significant effect (see Section 15091); and
- (b) Specifically identified expected benefits from the project outweigh the policy of reducing or avoiding significant environmental impacts of the project. (see Section 15093)”<sup>3</sup>

When approving a project pursuant to § 15043, an agency must prepare a statement of overriding considerations. As noted in CEQA Guidelines § 15093, “CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered acceptable.”<sup>4</sup>

“When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.”<sup>5</sup>

“If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.”<sup>6</sup>

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<sup>3</sup> CEQA Guidelines, Section 15043.

<sup>4</sup> Ibid. 15093 (a).

<sup>5</sup> Ibid. 15093 (b).

<sup>6</sup> Ibid. 15093 (c).

### Overriding Considerations for the Proposed Project

Based on the analysis contained in this Draft EIR, Tulare County concludes that there is no need for any other feasible alternatives to reduce any impacts as all impacts have been determined to result in a less than significant level. Furthermore, the Project's merits and objectives are discussed in the Project Description (Chapter 2) and are found to be consistent with the intent of Tulare County General Plan 2030 Update and the Three Rivers Community Plan 2018 Update. Lastly, the Project's merits would outweigh any unavoidable and immitigable impacts warranting a Statement of Overriding Considerations.

### Finding of No Feasible Alternatives

CEQA section 21061.1 defines "feasibility" as involving a balancing of various economic, environmental, social, and technological factors.

The primary purpose of the proposed Project is to establish and operate a 105-room hotel in Three Rives in the County of Tulare to provide overnight accommodations to visitors and tourists desiring to take advantage of nearby attractions in the vicinity of Three Rivers (for example, Sequoia National Park). This DEIR has analyzed potential impacts in accordance with CEQA standards and outlines appropriate mitigations in the instance where the proposed Project could cause potential significant impacts upon resources. The DEIR concludes and determines that mitigation measures are feasible and will be implemented as applicable, therefore, there is no need for other feasible alternatives.

## **PROJECT BENEFIT STATEMENTS**

The Project Objectives are also presented in full in Chapter 2 of this DEIR. As noted in Chapter 2, the Applicant has proposed construction and operation of a 105-room hotel to accommodate visitors/tourists in Three Rivers. The project benefits are described below:

## **PROJECT OBJECTIVES**

### **Objective 1: Expands County's Economic Base**

Tulare County General Plan Policy ED-3.1 (Diverse Economic Base) encourages the development of a diversified economic base by continuing to promote agriculture, recreation services, and commerce, and by expanding its efforts to encourage industrial development including the development of energy resources; ED-5.7 (Foothills) encourages additional recreational and visitor-serving development in the Sierra and foothills in areas such as Three Rivers and Springville as gateway communities; and LU-4.4 (Travel-Oriented Tourist Commercial Uses) requires travel-oriented tourist commercial uses (for example, entertainment, commercial recreation, lodging, fuel) to be used in areas where traffic patterns are oriented to major arterials and highways. The proposed Project consists of commercial development that is allowed by-right and is not only consistent with the existing zoning classification, but also the existing land use designation as contained in the Tulare County General Plan 2030 Update.



## **Objective 2: Implements the Three Rivers Community Plan**

The proposed Project would implement many Three Rivers Community Plan goals, objectives, and policies. Following are some of the more significant: Objective 1.1 Development Compatibility: Ensure compliance with the Community Plan to ensure compatibility between and within new and existing development. Policy 1.1.2 Mixed Uses to ensure that development to accommodate growth includes a balanced mix of residential, commercial and public uses that enhance the community's economic vitality while maintaining its rural character and quality of life. Policy: 1.2.1 New Development Compatibility to ensure that the size, type, and scale of new development in Three Rivers is compatible with the rural character of the community. Policy 1.2.13 SL-3.3 Highway Commercial wherein the County shall require highway commercial uses to be located and designed to reduce their visual impact on the travel experience along State scenic highways and County scenic routes. Goal 2: Economic Vitality: A strong, diversified economic environment within Three Rivers which is consistent with the rural and visual atmosphere of the community. Policy 2.1.4 Highway-Oriented Commercial Development to maintain existing commercial areas along SR 198 to the extent feasible for highway-oriented commercial development. Objective 2.2 Business Attraction, Expansion, and Retention: To promote business growth and industry diversification and maintain a favorable business climate and a supportive economic foundation. In summary, the proposed Project is consistent with and implements these and many other Three Rivers Community Plan goals, objectives, and policies.

## **Objective 3: Provide Visitor/Tourist Accommodations**

The Project would accommodate visitors/tourists to the Three Rivers area by implementing the following: Objective 1.1 Development Compatibility, Policy 1.1.4 Compatible Commercial Establishments, to encourage compatible commercial establishments necessary to serve residents and tourists that are commensurate with the scale and intensity of the community, preserve the environment, and which do not have to the extent feasible, significant traffic, light, noise or visual impacts to the community. Goal 2: Economic Vitality, Policy 2.1.5 ED-5.4 Recreational Accommodations, wherein the County shall support the development of visitor-serving attractions and accommodations in unincorporated areas near natural amenities and resources that would not be diminished by tourist activities. Policy 2.1.8 ED-5.7 Foothills wherein the County shall encourage additional recreational and visitor-serving development in the Sierra and foothills in areas such as Three Rivers. The proposed Project's proximity to SR 198 and Sequoia-Kings Canyon National Parks) is ideally suited to accommodate the proposed Three Rivers Hampton Inn & Suites project.

## **Objective 4: Efficient Business Operations**

The proposed Project is intended to implement Applicant's strategic business plan by planning, designing, constructing, and operating a facility which is economically, technologically and environmentally feasible.

## **PROJECT BENEFITS**

### **Project Benefit # 1): Facilitates Visitor/Tourism Industry**

The Project will facilitate the availability of overnight accommodations for visitors/tourists in the Three Rivers area by making available 105 rooms.

### **Project Benefit # 2): Job Creation**

The Project will directly create approximately 12 new, full-time jobs for Tulare County residents.

### **Project Benefit # 3): Reduce Air Quality Emissions, Greenhouse Gas Emissions, and Energy Usage**

With the availability of up to 105 rooms, visitors/tourists would not have to drive to Visalia or other communities thereby reducing vehicle miles travelled. As such, air quality emissions, greenhouse gas emissions, and energy (in the form of gasoline/diesel usage) would be reduced.

### **Project Benefit # 4): Implementation of Countywide Tulare County General Plan 2030 Update and Three Rivers Community Plan 2018 Update policies**

Tulare County's General Plan and Three Rivers Community Plan Policies that are consistent with the Project's purpose and objectives are included in each CEQA Checklist Resource chapter contained in Chapters 3-1 thru 3-21. One hundred eighty-three (183) General Policies apply to this Project.

#### **I. AESTHETICS – 14 Policies**

LU-5.3 Storage Screening  
LU-5.6 Industrial Use Buffer  
LU-7.6 Screening  
LU-7.14 Contextual and Compatible Design  
LU-7.19 Minimize Lighting Impacts  
SL-1.1 Natural Landscapes  
SL-1.2 Working Landscapes  
SL-2.1 Designated Scenic Routes and Highways  
ERM-1.4 Protect Riparian Areas  
ERM-1.5 Riparian Management Plans and Mining Reclamation Plans  
ERM-1.6 Management of Wetlands  
ERM-1.8 Open Space Buffers  
ERM-1.15 Minimize Lighting Impacts  
ERM-5.19 Night Sky Protection

## II. AGRICULTURAL LANDS & FORESTRY RESOURCES – 12 Policies

AG-1.1 Primary Land Use  
AG-1.3 Williamson Act  
AG-1.4 Williamson Act in UDBs and HDBs  
AG-1.6 Conservation Easements  
AG-1.7 Preservation of Agricultural Lands  
AG-1.8 Agriculture within Urban Boundaries  
AG-1.9 Agricultural Preserves Outside Urban Boundaries  
AG-1.10 Extension of Infrastructure into Agricultural Areas  
AG-1.11 Agricultural Buffers  
AG-1.17 Agricultural Water Resources  
LU-2.3 Open Space Character  
LU-2.6 Industrial Development

## III. AIR QUALITY – 11 Policies

AQ-1.1 Cooperation with Other Agencies  
AQ-1.2 Cooperation with Local Jurisdictions  
AQ-1.3 Cumulative Air Quality Impacts  
AQ-1.4 Air Quality Land Use Compatibility  
AQ-1.5 California Environmental Quality Act (CEQA) Compliance  
AQ-2.2 Indirect Source Review  
AQ-3.2 Infill near Employment  
AQ-3.4 Landscape  
AQ-3.6 Mixed Land Uses  
AQ-4.1 Air Pollution Control Technology  
AQ-4.2 Dust Suppression Measures

## IV. BIOLOGY – 8 Policies

ERM-1.1 Protection of Rare and Endangered Species  
ERM-1.2 Development in Environmentally Sensitive Areas  
ERM-1.4 Protect Riparian Areas  
ERM-1.6 Management of Wetlands  
ERM-1.7 Planting of Native Vegetation  
ERM-1.12 Management of Oak Woodland Communities  
ERM-1.15 Minimize Lighting Impacts  
ERM-1.16 Cooperate with Wildlife Agencies

## V. CULTURAL RESOURCES – 8 Policies

ERM-6.1 Evaluation of Cultural and Archaeological Resources  
ERM-6.2 Protection of Resources with Potential State or Federal Designations  
ERM-6.3 Alteration of Sites with Identified Cultural Resources

ERM-6.4 Mitigation  
ERM-6.8 Solicit Input from Local Native Americans  
ERM-6.9 Confidentiality of Archaeological Sites  
ERM-6.10 Grading Cultural Resources Sites  
LU-7.12 Historic Buildings and Areas

#### VI. Energy – 5 Policies

ERM-4.1 Energy Conservation and Efficiency Measures  
ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation  
ERM-4.3 Local and State Programs  
ERM-4.4 Promote Energy Conservation Awareness  
AQ-3.5 Alternative Energy Design

#### VIII. GEOLOGY AND SOILS – 9 Policies

HS-1.2 Development Constraints  
HS-1.3 Hazardous Lands  
HS-1.5 Hazard Awareness and Public Education  
HS-1.11 Site Investigations  
HS-2.1 Continued Evaluation of Earthquake Risks  
HS-2.4 Structure Siting  
HS-2.7 Subsidence  
HS-2.8 Alquist-Priolo Act Compliance  
WR-2.3 Best Management Practices  
WR-2.4 Construction Site Sediment Control

#### VIII. GREENHOUSE GAS EMISSIONS – 13 Policies

AQ-1.3 Cumulative Air Quality Impacts  
AQ-1.5 California Environmental Quality Act (CEQA) Compliance  
AQ-1.7 Support Statewide Climate Change Solutions  
AQ-1.8 Greenhouse Gas Emissions Reduction Plan/Climate Action Plan  
AQ-1.9 Support Off-Site Measures to Reduce Greenhouse Gas Emissions  
AQ-1.10 Alternative Fuel Vehicle Infrastructure  
AQ-3.5 Alternative Energy Design  
LU-1.1 Smart Growth and Healthy Communities  
ERM-4.1 Energy Conservation and Efficiency Measures  
ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation  
ERM-4.8 Energy Efficiency Standards  
FGMP-8.16 Proximity to Transportation  
FGMP-8.17 Reduce Vehicle Emissions

#### IX. HAZARDS AND HAZARDOUS MATERIALS – 9 Policies

HS-4.1 Hazardous Materials

HS-4.2 Establishment of Procedures to Transport Hazardous Wastes  
HS-4.4 Contamination Prevention  
HS-6.1 New Building Fire Hazards  
HS-6.2 Development in Fire Hazard Zones  
HS-6.4 Encourage Cluster Development  
HS-6.6 Wildland Fire Management Plans  
HS-6.7 Water Supply System  
HS-6.8 Private Water Supply

#### X. HYDROLOGY AND WATER QUALITY - 18 Policies

AG-1.17 Agricultural Water Resources  
HS-4.4 Contamination Prevention  
HS-5.1 Development Compliance with Federal, State, and Local Regulations  
HS-5.2 Development in Floodplain Zones  
HS-5.10 Flood Control Design  
HS-5.11 Natural Design  
PFS-3.5 Wastewater System Failures  
PFS-2.3 Well Testing  
PFS-2.5 New Systems or Individual Wells  
PFS-3.1 Private Sewage Disposal Standards  
WR-1.1 Groundwater Withdrawal  
WR-1.6 Expand Use of Reclaimed Water  
WR-2.1 Protect Water Quality  
WR-2.2 National Pollutant Discharge Elimination System (NPDES) Enforcement  
WR-2.3 Best Management Practices (BMPs)  
WR-2.4 Construction Site Sediment Control  
WR-2.8 Point Source Control  
WR-3.5 Use of Native and Drought Tolerant Landscaping

#### XI. LAND USE AND PLANNING - 21 Policies

ED-3.1 Diverse Economic Base  
ED-5.7 Foothills  
ED-5.14 Interagency Cooperation  
ERM-2.9 Compatibility  
PF-1.1 Maintain Urban Edges  
PF-1.2 Location of Urban Development  
PF-1.3 Land Uses in UDBs/HDBs  
PF-1.4 Available Infrastructure  
PF-2.1 Urban Development Boundaries – Communities  
PF-2.4 Community Plans  
PF-2.7 Improvement Standards in Communities  
PF-2.8 Inappropriate Land Use  
PF-3.4 Mixed Use Opportunities

LU-1.2 Innovative Development  
LU-1.3 Prevent Incompatible Uses  
LU-1.8 Encourage Infill Development  
LU-2.3 Open Space Character  
LU-7.15 Energy Conservation  
LU-7.16 Water Conservation  
LU-4.4 Travel-Oriented Tourist Commercial Uses

## XII. MINERAL RESOURCES – 3 Policies

ERM-2.1 Conserve Mineral Deposits  
ERM-2.2 Recognize Mineral Deposits  
ERM-2.9 Compatibility

## XIII. NOISE – 14 Policies

HS-8.1 Economic Base Protection  
HS-8.2 Noise Impacted Areas  
HS-8.3 Noise Sensitive Land Uses  
HS-8.6 Noise Level Criteria  
HS-8.8 Adjacent Uses  
HS-8.10 Automobile Noise Enforcement  
HS-8.11 Peak Noise Generators  
HS-8.13 Noise Analysis  
HS-8.14 Sound Attenuation Features  
HS-8.15 Noise Buffering  
HS-8.16 State Noise Insulation  
HS-8.17 Coordinate with Caltrans  
HS-8.18 Construction Noise  
HS-8.19 Construction Noise Control

## XIV. POPULATION AND HOUSING – 8 Policies

PFS-7.1 Fire Protection  
PFS-7.2 Fire Protection Standards  
PFS-7.3 Visible Signage for Roads and Buildings  
PFS-7.5 Fire Staffing and Response Time Standards  
PFS-7.6 Provision of Station Facilities and Equipment  
PFS-7.8 Law Enforcement Staffing Ratios  
PFS-7.9 Sheriff Response Time  
PFS-7.12 Design Features for Crime Prevention and Reduction

## XV. PUBLIC SERVICES – 9 Policies

PFS-7.1 Fire Protection

PFS-7.2 Fire Protection Standards  
PFS-7.3 Visible Signage for Roads and Buildings  
PFS-7.5 Fire Staffing and Response Time Standards  
PFS-7.6 Provision of Station Facilities and Equipment  
PFS-7.8 Law Enforcement Staffing Ratios  
PFS-7.9 Sheriff Response Time  
PFS-7.12 Design Features for Crime Prevention and Reduction

#### XVII. TRANSPORTATION/TRAFFIC – 5 Policies

TC-1.13 Land Dedication for Roadways and Other Travel Modes  
TC-1.14 Roadway Facilities  
TC-1.15 Traffic Impact Study  
TC-1.16 County Level Of Service (LOS) Standards  
HS-1.9 Emergency Access

#### XVIII. TRIBAL RESOURCES – 7 Policies

ERM-6.1 Evaluation of Cultural and Archaeological Resources  
ERM-6.2 Protection of Resources with Potential State or Federal Designations  
ERM-6.3 Alteration of Sites with Identified Cultural Resources  
ERM-6.4 Mitigation  
ERM-6.8 - Solicit Input from Local Native Americans  
ERM-6.9 Confidentiality of Archaeological Sites  
ERM-6.10 Grading Cultural Resources Sites

#### XIX. UTILITIES AND SERVICE SYSTEMS - 9 Policies

HS-1.5 Hazard Awareness and Public Education  
HS-6.1 New Building Fire Hazards  
HS-6.2 Development in Fire Hazard Zones  
HS-6.4 Encourage Cluster Development  
HS-6.5 Fire Risk Recommendations  
HS-6.7 Water Supply System  
HS-6.8 Private Water Supply  
HS-7.1 Coordinate Emergency Response  
HS-7.2 Mutual Aid Agreement

#### **Project Benefit # 5): Generate Sales Tax, Increase Property Valuation, and Transit Occupancy Tax**

The proposed Project would generate sales taxes, transit occupancy taxes, and result in an overall increase in property valuation at the site.

## **REFERENCES**

Chapter 3.1 thru 3.21 of this DEIR

Public Resources Code, Sections 2710-2796

CEQA Guidelines, Sections 15043, 15093 (a) (b) (c), and 15126.2 (b) (c)

Three Rivers Community Plan 2018 Update

Tulare County General Plan 2030 Update, August 2012



# Mitigation Monitoring and Reporting Program Chapter 8

This Draft Mitigation Monitoring and Reporting Program (MMRP) has been prepared in compliance with State law and based upon the findings of the Draft Environmental Impact Report (EIR) for the proposed Project. The MMRP lists mitigation measures recommended in the draft EIR for the proposed Project and identifies monitoring and reporting requirements.

The CEQA Public Resources Code Section 21081.6 requires the Lead Agency decision making body is going to approve a project and certify the EIR that it also adopt a reporting or monitoring program for those measures recommended to mitigate or avoid significant/adverse effects of the environment identified in the EIR. The law states that the reporting or monitoring program shall be designed to ensure compliance during project implementation. The MMRP is to contain the following elements:

- **Action and Procedure.** The mitigation measures are recorded with the action and procedure necessary to ensure compliance. In some instances, one action may be used to verify implementation of several mitigation measures.
- **Compliance and Verification.** A procedure for compliance and verification has been outlined for each action necessary. This procedure designates who will take action, what action will be taken and when and by whom and compliance will be monitored and reported and to whom it will be report. As necessary the reporting should indicate any follow-up actions that might be necessary if the reporting notes the impact has not been mitigated.
- **Flexibility.** The program has been designed to be flexible. As monitoring progresses, changes to compliance procedures may be necessary based upon the recommendations by those responsible for the MMRP. As changes are made, new monitoring compliance procedures and records will be developed and incorporated into the program

**Table 8-1** presents the Mitigation Measures identified for the proposed Project in this EIR. Each Mitigation Measure is identified by the impact number. For example, 4-1 would be the first Mitigation Measure identified in the Biological analysis of the Draft EIR.

The first column of **Table 8-1** identifies the Mitigation Measure. The second column, entitled “Monitoring Timing/Frequency,” identifies the time the Mitigation Measure should be initiated and the frequency of the monitoring that should take place to assure the mitigation is being or has been implemented to achieve the desired outcome or performance standard. The third column, “Action Indicating Compliance,” identifies the requirements of compliance with the Mitigation Measure. The fourth column, “Monitoring Agency,” names the party ultimately responsible for

ensuring that the Mitigation Measure is implemented. The fifth column, “Person/Agency Conducting Monitoring/Reporting” names the party/agency/entity responsible for verification that the Mitigation Measure has been implemented. The last three columns will be used by the Lead Agency (County of Tulare) to ensure that individual Mitigation Measures have been complied with and monitored.

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Table 8-1 Mitigation Monitoring and Reporting Program							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
AIR QUALITY							
AQ-1. In accordance with SJVAPCD Rule 9510, a detailed air impact assessment (AIA) shall be prepared detailing the specific construction requirement (i.e., equipment required, hours of use, etc.). In accordance with this rule, emissions of NOX from construction equipment greater than 50 horsepower used or associated with the development Project shall be reduced by 20 percent from baseline (unmitigated) emissions and PM10 shall be reduced by 45 percent. The Project shall demonstrate compliance with Rule 9510, including payment of all applicable fees, before issuance of the first building permit. While the specific emission reduction measures will be developed to the satisfaction of the SJVAPCD, the following measures would reduce short-term air quality impacts attributable to the Proposed Project consistent with Rule 9510: <ul style="list-style-type: none"><li>• During all construction activities, all diesel-fueled construction equipment including, but not limited to, rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, and tractors shall be of a certified clean fleet.</li><li>• All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. Equipment maintenance records shall be kept on-site and made available upon request by the SJVAPCD or the County.</li></ul>	Prior to Issuance of Building Permit.	Verified on submitted site plans.	Tulare County Building Inspector	Tulare County Building Inspector			

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Table 8-1 Mitigation Monitoring and Reporting Program							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
<ul style="list-style-type: none"> <li>The Project applicant shall comply with all applicable SJVAPCD rules and regulations. Copies of any applicable air quality permits and/or monitoring plans shall be provided to the County.</li> </ul>							
<p><b>AQ-2.</b> In accordance with SJVAPCD Rule 9510, a detailed air impact assessment shall be prepared detailing the operational characteristics associated with the Proposed Project. In accordance with this rule, operational emissions of NOx shall be reduced by a minimum of 33.3 percent and operational emissions of PM10 must be reduced by a minimum of 50 percent over a period of ten years. (Emissions reductions are in comparison to the Project's operational baseline emissions presented in Table 2-6.) The Project would demonstrate compliance with Rule 9510, including payment of all applicable fees, before issuance of the first building permit.</p> <p>Based on the findings of the air impact assessment, the applicant shall pay the SJVAPCD a monetary sum necessary to offset the required operational emissions that are not reduced by the emission reduction measures contained in the air impact assessment. The quantity of operational emissions that need to be offset will be calculated in accordance with the methodologies identified in Rule 9510, Indirect Source Review, and approved by the SJVAPCD. Operational emissions reduction methods will be selected under the direction of the SJVAPCD according to the air impact assessment process detailed in, and required by Rule 9510, Indirect Source Review (see Rule 9510, subsection 5).</p>	Prior to Issuance of Building Permit.	Verified on submitted site plans.	Tulare County Building Inspector	Tulare County Building Inspector			

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**Table 8-1  
Mitigation Monitoring and Reporting Program**

Table 8-1 Mitigation Monitoring and Reporting Program							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
BIOLOGICAL RESOURCES							
Measures for Special Status Plant Species							
BIO-1. Pre-construction Survey - Perform focused plant surveys according to USFWS, CDFW, and CNPS protocols. Surveys should be timed according to the blooming period for target species and known reference populations, if available, and/or local herbaria should be visited prior to surveys to confirm the appropriate phenological state of the target species.	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings to CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist.			
BIO-2. Plants Absence - If no special-status plants are found within the Project Area, no further measures pertaining to special-status plants are necessary.	Prior to start of construction.	Retention of professional biologist to determine absence.	County of Tulare Planning Department	Field survey by a qualified Biologist.			
BIO-3. Avoidance - If special-status plant species are found during surveys within the Project and avoidance of the species is not possible, seed collection, transplantation, and/or other mitigation measures may be developed in consultation with appropriate resource agencies to reduce impacts to special-status plant populations.	Prior to construction-related activities.	Retention of professional biologist. Submittal of Report of Findings to CDFW, if applicable	County of Tulare Planning Department	Qualified biologist. Collaboration with CDFW			
Measures for Special Status Reptiles							
BIO-4. Pre-construction Survey - A Northern California legless lizard and Blainville’s horned lizard pre-construction survey will be conducted by a qualified biologist within 14 days prior to the initiation	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/	County of Tulare Planning Department	Field survey by a qualified Biologist.			

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**Table 8-1  
Mitigation Monitoring and Reporting Program**

Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
of ground disturbance (e.g., tree/vegetation removal, mass grading). The survey will consist of the entire Project footprint, including accessible areas within 100 feet.		submittal of Report of Findings, if applicable.					
<b>BIO-5.</b> Presence - If individuals of either of these two special-status reptiles are found during the pre-construction survey, a qualified biologist with a CDFW Scientific Collecting Permit shall relocate the individuals, with the concurrence of CDFW, to a site with suitable habitat. Relocation methods shall be approved by CDFW	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings to CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with CDFW.			
<b><i>Measures for Nesting Raptors and Migratory Birds</i></b>							
<b>BIO-6.</b> Pre-construction Survey - Conduct a pre-construction nesting raptor and bird survey of all suitable habitat on the Project site within 14 days of the commencement ground disturbance (e.g., tree/vegetation removal, mass grading) during the nesting season (February 1 – August 31). Where accessible, surveys should be conducted within 300 feet of the Project site for nesting raptors, and 100 feet of the Project site for other nesting birds.	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings to CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist.			
<b>BIO-7.</b> Buffers - If active nests are found, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist, in consultation with CDFW. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest tree, to be determined by a qualified biologist. Once the young are	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings to	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with CDFW.			

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SCH# 2020110016

**Table 8-1  
Mitigation Monitoring and Reporting Program**

Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
independent of the nest, no further measures are necessary.		CDFW, if applicable.					
<b><i>Measures for Special Status Mammals (Bats)</i></b>							
<b>BIO-8.</b> Pre-construction Survey: Absence - If no suitable roosting habitat is found, or if no bats are not found during the emergence surveys, no further measures are necessary	Prior to start of construction.	Retention of professional biologist, submittal of Report of Findings to CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist.			
<b>BIO-9.</b> Pre-construction Survey: Presence - A qualified biologist will conduct a bat habitat assessment of all suitable roosting habitat (i.e., suitable trees) prior to the initiation of site disturbance (e.g., tree removal, mass grading). If the assessment identifies suitable roosting habitat, a qualified biologist will conduct an evening bat emergence survey that may include acoustic monitoring to determine whether or not bats are present. If special-status bats are found, consult with CDFW to develop avoidance and/or exclusion methods.	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings to CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with CDFW			
<b><i>Measures for Waters of the United States and State</i></b>							
<b>BIO-10.</b> Perform Delineation - Potentially jurisdictional features should be avoided and fenced. Runoff from entering any avoided aquatic features could be considered an indirect impact. Adherence to a Construction General Permit and stormwater pollution prevention plan/Best Management Practices could	Prior to start of construction.	Retention of professional biologist, submittal of Report of Findings to	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with CDFW			

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Mitigation Monitoring and Reporting Program**

Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
reduce potential indirect impacts from runoff into aquatic features.		CDFW, if applicable.					
<b>BIO-11.</b> Avoidance - Potentially jurisdictional features should be avoided and fenced. Runoff from entering any avoided aquatic features could be considered an indirect impact. Adherence to a Construction General Permit and stormwater pollution prevention plan/Best Management Practices could reduce potential indirect impacts from runoff into aquatic features.	Prior to start of construction.	Retention of professional biologist, submittal of Report of Findings to USACE and/or CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with USACE and/or CDFW.			
<b>BIO-12.</b> Section 404 Permit - If Waters of the U.S./State cannot be avoided, authorization to fill wetlands and other Waters of the U.S. under the Section 404 Permit must be obtained from USACE prior to discharging any dredged or fill materials into any Waters of the U.S. Mitigation measures will be developed as part of the Section 404 Permit to ensure no-net-loss of wetland function and values. To facilitate such authorization, an application for a Section 404 Permit for the Project will be prepared and submitted to USACE and will include direct, avoided, and preserved acreages to Waters of the U.S. Mitigation for impacts to Waters of the U.S. typically consists of a minimum of a 1:1 ratio for direct impacts; however final mitigation requirements will be developed in consultation with USACE.	Prior to start of construction.	Retention of professional biologist/ongoing monitoring/ submittal of Report of Findings to USACE and/or CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with USACE and/or CDFW.			
<b>BIO-13.</b> Section 401 Permit - A Water Quality Certification or waiver pursuant to Section 401 of the	Prior to start of construction.	Retention of professional biologist,	County of Tulare	Field survey by a qualified Biologist.			



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**Table 8-1  
Mitigation Monitoring and Reporting Program**

Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
CWA must be obtained from the RWQCB for Section 404 permit actions.		submittal of Report of Findings to USACE and/or CDFW, if applicable.	Planning Department	Collaboration with USACE and/or CDFW.			
<b>BIO-14.</b> RWQCB permit - Pursuant to the Porter-Cologne Water Quality Act, a permit authorization from the RWQCB is required prior to the discharge of material in an area that could affect Waters of the State. Mitigation requirements for discharge to Waters of the State within the Project site will be developed in consultation with the RWQCB.	Prior to start of construction.	Retention of professional biologist, submittal of Report of RWQCB and/or CDFW, if applicable.	County of Tulare Planning Department	Field survey by a qualified Biologist. Collaboration with RWQCB and/or CDFW.			
<b><i>Measures for Oak Woodlands</i></b>							
<b>BIO-15.</b> Avoidance/Conservation - If feasible, avoid/conserv oak woodlands	Prior to start of construction.	Retention of professional arborist, if applicable.	County of Tulare Planning Department	County of Tulare Planning Department.			
<b>BIO-16.</b> Replacement - If oak woodlands are proposed for impact, plant an appropriate number of trees, including maintain planting and replacing dead or diseased trees; this requirement to maintain trees pursuant to this paragraph terminates seven years after the trees are planted; mitigation pursuant to this paragraph shall not fulfill more than 1/2 of the mitigation requirements for the Project; the requirements imposed pursuant to this paragraph also may be used to restore former oak woodlands.	Prior to start of construction.	Retention of professional arborist, if applicable.	County of Tulare Planning Department	County of Tulare Planning Department.			

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**Table 8-1  
Mitigation Monitoring and Reporting Program**

Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
<b>BIO-17.</b> Contribution - Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of the Section 1363 of the California Fish and Game Code. A project applicant who contributes funds under this paragraph shall not receive a grant from the Oak Woodland Woodlands Conservation Fund as part of the mitigation for the Project.	Prior to start of construction.	Retention of professional arborist, if applicable.	County of Tulare Planning Department	County of Tulare Planning Department.			
<b>BIO-18.</b> Other – Implement other mitigation measures developed by the County.	Prior to start of construction.	Retention of professional arborist, if applicable.	County of Tulare Planning Department	County of Tulare Planning Department.			
<b>CULTURAL RESOURCES</b>							
<b>CUL-1</b> - Prior to the start of construction, all field personnel shall receive worker's environmental awareness training on cultural resources. The training, which may be conducted with other environmental or safety trainings, will provide a description of cultural resources that may be encountered during construction and outline the steps to follow in the event that a discovery is made. Documentation of this training should be reviewed and approved by the lead agency prior to the start of construction.	During Construction	Daily or as needed throughout the construction period if suspicious resources are discovered	County of Tulare Planning Department via field evaluation of the resource finds by a qualified archaeologist	A qualified archaeologist shall document the results of field evaluation and shall recommend further actions that shall be taken to mitigate for unique resource or human remains found, consistent with all applicable			

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Table 8-1 Mitigation Monitoring and Reporting Program							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
				laws including CEQA.			
<p><b>CUL-2</b> - If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for pre-contact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:</p> <p><b>(a):</b> If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.</p> <p><b>(b):</b> If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead federal agency, the lead CEQA agency, and applicable landowner. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead</p>	During Construction	Daily or as needed throughout the construction period if suspicious resources are discovered	County of Tulare Planning Department via field evaluation of the resource finds by a qualified archaeologist	A qualified archaeologist shall document the results of field evaluation and shall recommend further actions that shall be taken to mitigate for unique resource or human remains found, consistent with all applicable laws including CEQA.			

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**Table 8-1  
Mitigation Monitoring and Reporting Program**

Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
<p>agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.</p> <p>(c): If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Tulare County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate</p>							

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<b>Table 8-1</b> <b>Mitigation Monitoring and Reporting Program</b>							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.							
	During Construction	Daily or as needed throughout the construction period if suspicious resources are discovered	County of Tulare Planning Department via field evaluation of the resource finds by a qualified archaeologist	A qualified archaeologist shall document the results of field evaluation and shall recommend further actions that shall be taken to mitigate for unique resource or human remains found, consistent with all applicable laws including CEQA.			
<b>GEOLOGY AND SOILS (PALEONTOLOGICAL RESOURCES)</b>							
See CUL-1 subsets (a) through (c), as specified in Item 5 Cultural Resources (as applicable).	During Construction	Daily or as needed throughout the	County of Tulare Planning	A qualified archaeologist shall document			

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<b>Table 8-1</b> <b>Mitigation Monitoring and Reporting Program</b>							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
		construction period if suspicious resources are discovered	Department via field evaluation of the resource finds by a qualified archaeologist	the results of field evaluation and shall recommend further actions that shall be taken to mitigate for unique resource or human remains found, consistent with all applicable laws including CEQA.			
<b>GREENHOUSE GASES</b>							
<b>GHG-1.</b> - The Project must provide an onsite renewable energy system(s). The Project shall include solar panels or other alternative energy source meeting the County Solar Ordinance or new Title 24 standards, whichever is more stringent. The onsite renewable energy system(s) must be installed as part of the construction process and be functional upon commencement of Project operation. The Project Proponent must include solar on building plans and provide Title 24 compliance reports with Building Permit applications to the County.	Prior to Issuance of Building Permit.	Verified on submitted site plans.	Tulare County Building Inspector	Tulare County Building Inspector			
<b>GHG-2</b> - The Project shall meet the charging installation/charging ready requirements of the CALGreen Code. The Project Proponent shall include EV charging accommodations as specified in the	Prior to Issuance of Building Permit.	Verified on submitted site plans.	Tulare County Building Inspector	Tulare County Building Inspector			

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<b>Table 8-1</b> <b>Mitigation Monitoring and Reporting Program</b>							
Mitigation Measure	Monitoring Timing / Frequency	Action Indicating Compliance	Monitoring Agency	Person conducting Monitoring / Reporting	Verification of Compliance		
					Initials	Date	Remarks
CALGreen Code in building plans for review and approval by the County, prior to commencement of Project construction.							
<b>TRIBAL CULTURAL RESOURCES</b>							
See CUL-1 subsets (a) through (c), as specified in Item 5 Cultural Resources (as applicable).	During Construction	Daily or as needed throughout the construction period if suspicious resources are discovered	County of Tulare Planning Department via field evaluation of the resource finds by a qualified archaeologist	A qualified archaeologist shall document the results of field evaluation and shall recommend further actions that shall be taken to mitigate for unique resource or human remains found, consistent with all applicable laws including CEQA.			

# **REPORT PREPARATION**

## **CHAPTER 9**

### **INTRODUCTION**

Key persons from the County of Tulare and the consulting firms that contributed to preparation of the Draft Environmental Impact Report (Draft EIR) are identified below:

### **THE COUNTY OF TULARE**

#### **This Draft EIR has been prepared for:**

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- ❖ Pete Vander Poel – District 2
- ❖ Amy Shuklian (Chair) – District 3
- ❖ Eddie Valero (Vice Chair) – District 4
- ❖ Dennis Townsend – District 5

#### **Tulare County Planning Commissioners:**

- ❖ John F. Elliott, Commissioner, Three Rivers – District 1
- ❖ Gil Aguilar, Commissioner (Alternate), Tulare – District 2
- ❖ Bill Whitlatch, Commissioner (Chair), Visalia – District 3
- ❖ Wayne O. Millies, Commissioner, Springville – At Large
- ❖ Maria McElroy, Commissioner (Vice Chair), Dinuba – District 4
- ❖ Ed Dias, Commissioner, Visalia – At - Large
- ❖ Steve Pearson, Commissioner, Porterville – District 5

#### **County Administrative Office**

- ❖ Jason T. Britt, County Administrative Officer



**Tulare County Resource Management Agency (RMA)**

- ❖ Reed Schenke, Director
- ❖ Michael Washam, Associate Director
- ❖ Aaron Bock, Assistant Director, Economic Development and Planning
- ❖ Hector Guerra, Chief, Environmental Planning Division
- ❖ RMA Staff: Jessica Willis (Planner IV)
- ❖ Cheng Chi (Planner II)

**CONSULTING FIRMS**

**Technical documents have been prepared by:**

- ❖ ALD General Engineering, Inc. – Hampton Inn & Suites Report of Waste Discharge Technical Report. October 14, 2020 (See Appendix “F”)
- ❖ ECORP Consulting, Inc.
  - Air Quality & Greenhouse Gas Assessment, Three Rivers Hampton Inn and Suites Project, Tulare County, California. July 2020 (See Appendix “A”)
  - Biological Resources Assessment, Hampton Inn and Suites Three Rivers, Tulare County, California. August 19, 2020(See Appendix “B”)
  - Cultural Resources Inventory Report, Hampton Inn and Suites Three Rivers, Tulare County. June 2020 (See Appendix “C”)
  - Noise Impact Assessment, Three Rivers Hampton Inn and Suites Project, Tulare County, California. August 2020(See Appendix “D”)
- ❖ VRPA Technologies, Inc. – Three Rivers Hampton Inn & Suites Traffic Impact Study Report. June 2020. (See Appendix “E”)

# **Air Quality & Greenhouse Gas Assessment**

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## **Three Rivers Hampton Inn and Suites Project**

Tulare County, California

### **Prepared For:**

Ineffable Hospitality, Inc.

**July 2020**

**(Updated October 2020)**



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS

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## **LIST OF ATTACHMENTS**

Attachment A – CalEEMod Output Files

## **LIST OF ACRONYMS AND ABBREVIATIONS**

°F	Degrees Fahrenheit
µg/m <sup>3</sup>	Micrograms per cubic meter; ppm = parts per million
AB	Assembly Bill
AQMD	Air Quality Management District
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CH <sub>4</sub>	Methane
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
DPM	Diesel particulate matter
EO	Executive Order
GHG	Greenhouse gas
GWP	Global warming potential

## **LIST OF ACRONYMS AND ABBREVIATIONS**

IPCC	Intergovernmental Panel on Climate Change
LOS	Level of service
N <sub>2</sub> O	Nitrous oxide
NAAQS	National Ambient Air Quality Standards
NO <sub>2</sub>	Nitrogen dioxide
NO <sub>x</sub>	Nitric oxides
O <sub>3</sub>	Ozone
OEHHA	California Office of Environmental Health Hazard Assessment
PM	Particulate matter
PM <sub>10</sub>	Coarse particulate matter 10 micrometers or smaller
PM <sub>2.5</sub>	Fine particulate matter 2.5 micrometers or smaller
ppb	Parts per billion
Project	Three Rivers Hampton Inn & Suites Project
RCPG	Regional Comprehensive Plan and Guide
ROGs	Reactive organic gases
SB	Senate Bill
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur dioxide
SO <sub>x</sub>	Sulfur oxides
SR	State Route
SRA	Source receptor area
TACs	Toxic air contaminants
USEPA	U.S. Environmental Protection Agency
VOCs	Volatile organic compounds

## 1.0 INTRODUCTION

This report documents the results of an Air Quality and Greenhouse Gas (GHG) Emissions Assessment completed for the Three Rivers Hampton Inn and Suites Project (Project), which is the construction of a three-story hotel on approximately 2.8 acres in Tulare County. The Project site is currently undeveloped.

This assessment was prepared using methodologies and assumptions recommended by the San Joaquin Valley Air Pollution Control District (SJVAPCD). Regional and local existing conditions are presented, along with pertinent emissions standards and regulations. The purpose of this assessment is to estimate Project-generated criteria air pollutants and GHG emissions attributable to the Project and to determine the level of impact the Project would have on the environment.

### 1.1 Project Location and Description

The Project site is located within Tulare county, in the community of Three Rivers. Three Rivers is located in the northern portion of Tulare County, bordered by Fresno, Inyo, and Kings Counties. The Project site is located on approximately 2.8 acres, just east of State Highway 198 (see Figure 1. *Project Location*). The Project is the development of a Hampton Inn on the currently undeveloped Project site. The Project site is surrounded by a Comfort Inn and Suites hotel and a vacant commercial building to the north, and farmland and rural housing to the east, south, and west.

The Project is the development of a 105-room hotel with 108 parking spaces. The hotel is proposed to be three stories tall. Aside from the 105 guest rooms, the hotel is proposed to contain a meeting room, lobby, breakfast and food preparation areas, laundry, an employee breakroom, and more rooms typical of a moderate to high-end hotel. Other onsite infrastructure would include a swimming pool, two water tanks and wells, and a trash enclosure.

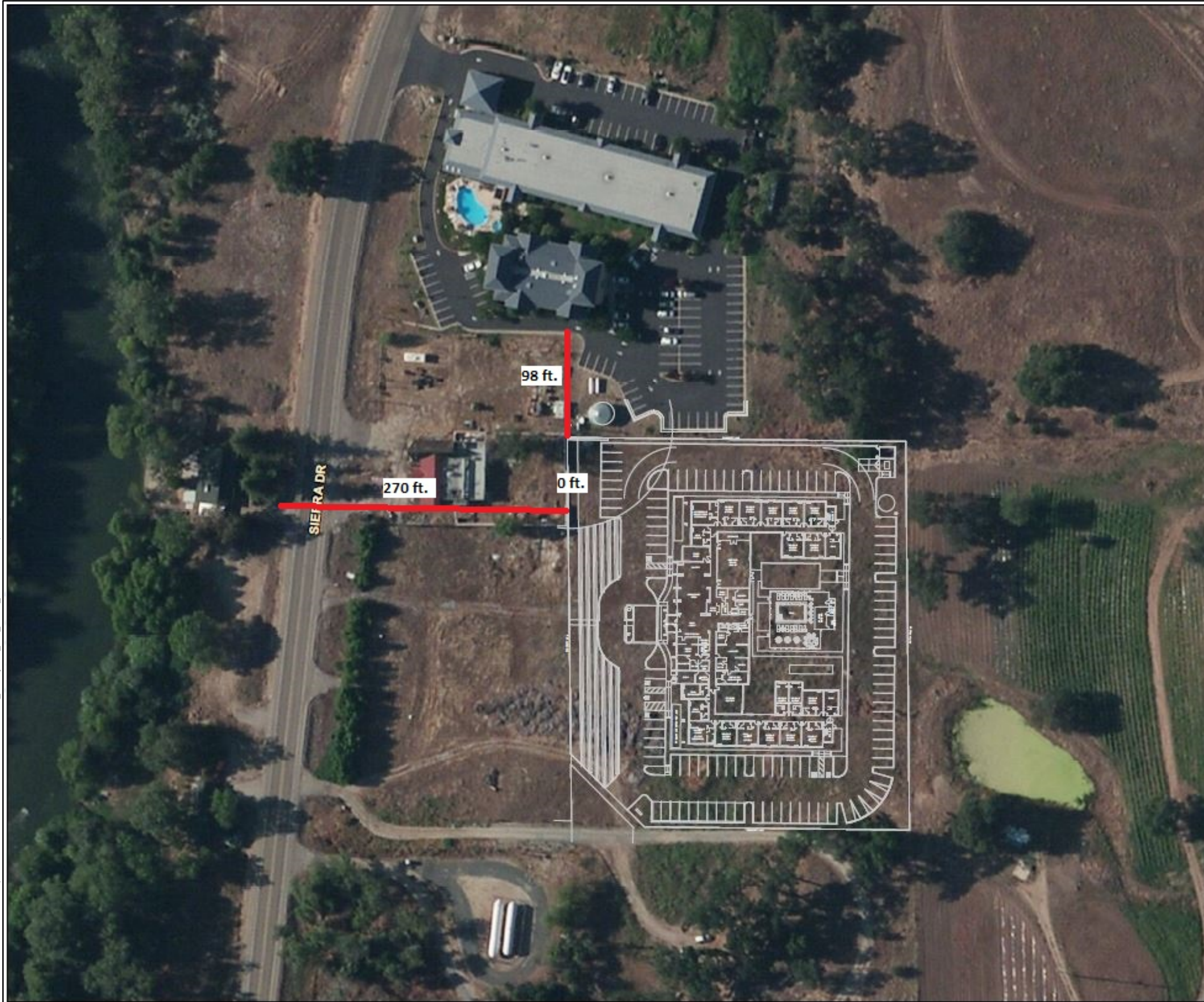
Per the Traffic Study prepared for the Project, the Project is conservatively anticipated to generate 860 additional one-way vehicle trips per day on Saturdays and 625 additional one-way vehicle trips per day on Sundays (VRPA 2020). Based on the CalEEMod defaults for Tulare County for weekday trip generation, the Project is anticipated to generate 858 additional one-way vehicle trips per day on weekdays.

A construction period of approximately one year is anticipated, with construction likely to begin in summer of 2021. Project construction is anticipated to include site preparation, grading, building construction, paving, and painting of buildings and parking space and road lines.

The Proposed Project site is designated for *Urban Development* in the Tulare County General Plan; however, the Project site is located in a generally rural area.



ECORP: N:\2020\2020-090 Hampton Inn and Suites Three Rivers\MAPS\Location\_Vicinity\HIS\_LnV\_CEQA\_20200722.mxd (CCH)-chirkelman 10/12/2020



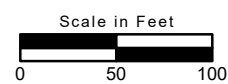
Map Features  
— Site Plan

Sources: ESRI, USGS



Map Date: 10/12/2020

**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS



**Figure 1. Project Location and Vicinity**

2020-090 Hampton Inn and Suites Three Rivers



## **2.0 AIR QUALITY**

### **2.1 Air Quality Setting**

Ambient air quality is commonly characterized by climate conditions, the meteorological influences on air quality, and the quantity and type of pollutants released. The air basin is subject to a combination of topographical and climatic factors that increase the potential for high levels of regional and local air pollutants. These factors are discussed below, along with the current regulatory structure that applies to the San Joaquin Valley Air Basin (SJVAB), which encompasses the Project site, pursuant to the regulatory authority of the SJVAPCD.

#### **2.1.1 San Joaquin Valley Air Basin**

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The SJVAB occupies the southern two-thirds of the Central Valley and includes the community of Three Rivers. The SJVAB is mostly flat, less than 1,000 feet in elevation, and is surrounded on three sides by the Sierra Nevada, Tehachapi, and Coast Range mountains. This bowl-shaped feature forms a natural barrier to the dispersion (spreading over an area) of air pollutants. As a result, the SJVAB is highly susceptible to pollutant accumulation over time (CARB 2003).

#### **Climate and Meteorology**

The climate in the SJVAB is strongly influenced by the presence of mountain ranges. The mountains create a partial rain shadow over the valley and block the free circulation of air, trapping stable air in the valley for extended periods. The climate is semi-arid and is characterized by long, hot, dry summers and cool, wet, and foggy winters. Based on historical data obtained from Weatherspark, the hot season in Visalia, located approximately 22 miles southwest of Three Rivers, lasts from June 1 to September 22, with an average daily high temperature above 88°F. The hottest day of the year is July 16, with an average high of 96°F and low of 65°F. The cool season lasts from November 20 to February 21, with an average daily high temperature below 64°F. The coldest day of the year is December 22, with an average low of 38°F and high of 56°F. The rainy period of the year lasts for seven months, from October 8 to May 8, with a sliding 31-day rainfall of at least 0.5 inches. The most rain falls during the 31 days centered around January 2, with an average total accumulation of 2.6 inches. The windier part of the year lasts from April 4 to July 23, with average wind speeds of more than 5.1 miles per hour. The windiest day of the year is May 30, with an average hourly wind speed of 5.9 miles per hour. The calmer time lasts from July 23 to April 4. The calmest day of the year is November 11, with an average hourly wind speed of 4.3 miles per hour (Weatherspark 2020).

#### **Atmospheric Stability and Inversions**

Stability describes the relative resistance of the atmosphere to vertical motion, which in turn mixes the air. The stability of the atmosphere is dependent on the vertical distribution of temperature with height. Unstable conditions often occur during daytime hours when solar heating warms the lower atmospheric layers while the upper layers remain cold. In contrast, an inversion is a layer of warmer air over a layer of cooler air. Inversions influence the mixing depth of the atmosphere, which is the vertical depth available



for diluting air pollution near the ground. The SJVAB experiences both surface-based and elevated inversions. The shallow surface-based inversions can be present in the morning but are often broken by daytime heating of the air layers near the ground. The deep, elevated inversions occur less frequently than the surface-based inversions but generally result in more severe air stagnation. The surface-based inversions occur more frequently in the fall, and the stronger elevated inversions usually occur during December and January. These naturally occurring conditions can make local air quality significantly worse than they would be without the inversions and the stagnation created by regional weather and topography.

### 2.1.2 Criteria Air Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O<sub>3</sub>), coarse particulate matter (PM<sub>10</sub>), and fine particulate matter (PM<sub>2.5</sub>) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), and sulfur dioxide (SO<sub>2</sub>) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 2-1.

Table 2-1. Criteria Air Pollutants- Summary of Common Sources and Effects		
Pollutant	Major Manmade Sources	Human Health & Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO <sub>2</sub>	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O <sub>3</sub>	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (N <sub>2</sub> O) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM <sub>10</sub> & PM <sub>2.5</sub>	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
SO <sub>2</sub>	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: California Air Pollution Control Officers Association (CAPCOA 2013)

## Carbon Monoxide

CO in the urban environment is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches, aggravate cardiovascular disease and impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations of CO are typically found near crowded intersections and along heavy roadways with slow moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within relatively short distances of the source. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973.

## Nitrogen Oxides

Nitrogen gas comprises about 80 percent of the air and is naturally occurring. At high temperatures and under certain conditions, nitrogen can combine with oxygen to form several different gaseous compounds collectively called nitric oxides ( $\text{NO}_x$ ). Motor vehicle emissions are the main source of  $\text{NO}_x$  in urban areas.  $\text{NO}_x$  is toxic to animals and humans because of its ability to form nitric acid with water in the eyes, lungs, mucus membrane, and skin. In animals, long-term exposure to  $\text{NO}_x$  increases susceptibility to respiratory infections, and lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high concentrations can suffer from lung irritation or possible lung damage. Precursors of  $\text{NO}_x$ , such as NO and  $\text{NO}_2$ , attribute to the formation of  $\text{O}_3$  and  $\text{PM}_{2.5}$ . Epidemiological studies have also shown associations between  $\text{NO}_2$  concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

## Ozone

$\text{O}_3$  is a secondary pollutant, meaning it is not directly emitted. It is formed when volatile organic compounds (VOCs) or ROGs and  $\text{NO}_x$  undergo photochemical reactions that occur only in the presence of sunlight. The primary source of ROG emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust.  $\text{NO}_x$  forms as a result of the combustion process, most notably due to the operation of motor vehicles. Sunlight and hot weather cause ground-level  $\text{O}_3$  to form. Ground-level  $\text{O}_3$  is the primary constituent of smog. Because  $\text{O}_3$  formation occurs over extended periods of time, both  $\text{O}_3$  and its precursors are transported by wind and high  $\text{O}_3$  concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when  $\text{O}_3$  levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level  $\text{O}_3$  exposure to a variety of problems including lung irritation, difficult breathing, permanent lung damage to those with repeated exposure, and respiratory illnesses.

## **Particulate Matter**

PM includes both aerosols and solid particulates of a wide range of sizes and composition. Of concern are those particles smaller than or equal to 10 microns in diameter size (PM<sub>10</sub>) and small than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>). Smaller particulates are of greater concern because they can penetrate deeper into the lungs than larger particles. PM<sub>10</sub> is generally emitted directly as a result of mechanical processes that crush or grind larger particles or form the resuspension of dust, typically through construction activities and vehicular travel. PM<sub>10</sub> generally settles out of the atmosphere rapidly and is not readily transported over large distances. PM<sub>2.5</sub> is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants, including NO<sub>x</sub>, sulfur oxides (SO<sub>x</sub>) and VOCs. PM<sub>2.5</sub> can remain suspended in the atmosphere for days and/or weeks and can be transported long distances.

The principal health effects of airborne PM are on the respiratory system. Short-term exposure of high PM<sub>2.5</sub> and PM<sub>10</sub> levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure is associated with premature mortality and chronic respiratory disease. According to the U.S. Environmental Protection Agency (USEPA), some people are much more sensitive than others to breathing PM<sub>10</sub> and PM<sub>2.5</sub>. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM<sub>10</sub> and PM<sub>2.5</sub>. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.

### **2.1.3 Toxic Air Contaminants**

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Additionally, diesel engines emit a complex mixture of air pollutants composed of gaseous and solid material. The solid emissions in diesel exhaust are known as diesel particulate matter (DPM). In 1998, California identified DPM as a TAC based on its potential to cause cancer, premature death, and other health problems (e.g., asthma attacks and other respiratory symptoms). Those most vulnerable are children (whose lungs are still developing) and the elderly (who may have other serious health problems). Overall, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants. Diesel engines also contribute to California's PM<sub>2.5</sub> air quality problems. Public exposure to TACs can result from emissions from normal

operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

### **Diesel Exhaust**

Most recently, CARB identified DPM as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine (USEPA 2002). Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs; due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

#### **2.1.4 Ambient Air Quality**

Ambient air quality at the Project site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains more than 60 monitoring stations throughout California. O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> are the pollutant species most potently affecting the Project region. As described in detail below, the region is designated as a nonattainment area for the federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub> (CARB 2018). The Visalia monitoring station, located at 310 N. Church St., Visalia, CA 93291, located approximately 22 miles southwest of the Project site monitors ambient concentrations of O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered “generally” representative of ambient concentrations in the Project area.

Table 2-2 summarizes the published data concerning O<sub>3</sub>, PM<sub>2.5</sub> and PM<sub>10</sub> since 2016 for each year that the monitoring data is provided.

<b>Table 2-2. Summary of Ambient Air Quality Data</b>			
<b>Pollutant Standards</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>O<sub>3</sub></b>			
Max 1-hour concentration (ppm)	0.098	0.109	0.112
Max 8-hour concentration (ppm) (state/federal)	0.083 / 0.083	0.092 / 0.091	0.095 / 0.094
Number of days above 1-hour standard (state/federal)	1 / 0	9 / 0	8 / 0
Number of days above 8-hour standard (state/federal)	19 / 0	65 / 6	58 / 7
<b>PM<sub>10</sub></b>			
Max 24-hour concentration (µg/m <sup>3</sup> ) (state/federal)	132.5 / 137.1	145.7 / 144.8	159.6 / 153.4
Number of days above 24-hour standard (state/federal)	* / 0	135.9 / 0	164.4 / 0
<b>PM<sub>2.5</sub></b>			
Max 24-hour concentration (µg/m <sup>3</sup> ) (state/federal)	132.5 / 137.1	145.7 / 144.8	159.6 / 153.4
Number of days above federal 24-hour standard	21.3	26.7	42.3

Source: CARB 2019a

µg/m<sup>3</sup> = micrograms per cubic meter; ppm = parts per million

\* = Insufficient data available

The USEPA and CARB designate air basins or portions of air basins and counties as being in “attainment” or “nonattainment” for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the Tulare County portion of the SJVAB, which encompasses the Project site, is included in Table 2-3.

<b>Table 2-3. Attainment Status for the San Joaquin Valley Air Basin</b>		
<b>Pollutant</b>	<b>State Designation</b>	<b>Federal Designation</b>
O <sub>3</sub>	Nonattainment	Nonattainment
PM <sub>10</sub>	Nonattainment	Attainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO <sub>2</sub>	Attainment	Unclassified/Attainment
SO <sub>2</sub>	Attainment	Unclassified/Attainment

Source: CARB 2018

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for

determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as nonattainment area for federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> standards (CARB 2018).

### **2.1.5 Sensitive Receptors**

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The nearest sensitive receptors to the Project site are the Comfort Inn and Suites located approximately 98 feet north of the Project site boundary, the vacant commercial building located approximately zero feet west of the Project site boundary, and a residence located across State Highway 198 from the site, approximately 270 feet to the west. The distance to the Comfort Inn and Suites was measured from the property line of the Proposed Project to the portion of the Comfort Inn and Suites property line which is located adjacent to the nearest hotel building on the property (see Figure 1). The parking lot located in the southeast section of the Comfort Inn and Suites site is not considered to be the nearest point to the sensitive receptor, as visitors to the hotel would spend the majority of their stay in their hotel room, in the nearby community center, and/or in Sequoia and Kings Canyon National Parks, thus remaining in the parking lot for a relatively short duration. In addition, hotel staff would spend relatively little time in the hotel parking lot.

## **2.2 Regulatory Framework**

### **2.2.1 Federal**

#### **Clean Air Act**

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the USEPA to establish the NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that carbon dioxide (CO<sub>2</sub>) is an air pollutant covered by the CAA; however, no NAAQS have been established for CO<sub>2</sub>.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults

can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The USEPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. Table 2-3 lists the federal attainment status of the SJVAB for the criteria pollutants.

### **2.2.2 State**

#### **California Clean Air Act**

The California Clean Air Act (CCAA) allows the state to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

#### **California State Implementation Plan**

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register.

The SJVAPCD is the agency primarily responsible for ensuring that national and state ambient air quality standards are not exceeded and that air quality conditions are maintained in the SJVAB. In an attempt to achieve NAAQS and CAAQS and maintain air quality, the air district has completed the following air quality attainment plans and reports, which together constitute the SIP for the portion of the SJVAB encompassing the Project:

- **2004 Extreme Ozone Attainment Demonstration Plan and 2013 Plan for the Revoked 1-Hour Ozone Standard.** The SJVAPCD initially adopted this plan in 2004 to address EPA's 1-hour ozone standard. Although the EPA approved the SJVAPCD's 2004 plan in 2010, the EPA withdrew this approval as a result of a court ruling in November 2012. The SJVAPCD adopted a new plan for the EPA's revoked 1-hour ozone standard in September 2013 (SJVAPCD 2013).
- **2007 Ozone Plan.** The Ozone Plan, approved in 2007, contains a comprehensive list of regulatory and incentive-based measures to reduce emissions and particulate matter with the goal of addressing the EPA's standards. The 2007 Ozone Plan calls for a 75 percent reduction of ozone-forming NO<sub>x</sub> emissions (SJVAPCD 2007a). These NO<sub>x</sub> reductions are preferred and essential to meeting the new 8-hour ozone and PM<sub>2.5</sub> standards. The plan calls for new and more stringent rules and regulations for stationary sources, new and more stringent tail-pipe emission standards for mobile sources, emission standards for locomotives, local regulations and voluntary measures to reduce and/or mitigate mobile source emissions, incentive-based measures, and alternative compliance programs. This plan also addresses EPA's 8-hour ozone standard of 84 parts per billion (ppb), which was established by EPA in 1997 (SJVAPCD 2007a).
- **2009 Reasonably Available Control Technology Demonstration for Ozone State Implementation Plan.** The SJVAPCD adopted the Reasonably Available Control Technology (RACT) Demonstration for Ozone State Implementation Plan in 2009. The Clean Air Act requires RACT for certain sources in all nonattainment areas. The SJVAPCD is required to ensure the EPA's Control Techniques Guidance (CTG) is being implemented through SJVAPCD regulations. The 42 CTGs were developed to control major sources of emissions (SJVAPCD 2009).
- **2016 Plan for the 2008 8-Hour Ozone Standard.** The Ozone Plan, approved in 2016, contains a comprehensive list of regulatory and incentive-based measures to reduce emissions and particulate matter with the goal of addressing the EPA's standards. The plan calls for new and more stringent rules and regulations for stationary sources, new and more stringent tail-pipe emission standards for mobile sources, emission standards for locomotives, local regulations and voluntary measures to reduce and/or mitigate mobile source emissions, incentive-based measures, and alternative compliance programs. This plan satisfies CAA requirements and ensures expeditious attainment of the 75 parts per billion 8-hour ozone standard (SJVAPCD 2016a).
- **2020 Reasonably Available Control Technology Demonstration Plan.** The SJVAPCD adopted the 2020 Reasonably Available Control Technology (RACT) Demonstration Plan for the 2015 8-Hour Ozone Standard on June 18, 2020. The Plan guides implementation of RACT requirements for sources subject to EPA Control Techniques Guidelines (CTGs) and for major sources of VOCs and NO<sub>x</sub>, to reduce ozone emissions and help attain ozone reduction goals (SJVAPCD 2020a).
- **2007 PM<sub>10</sub> Maintenance Plan and Request for Redesignation.** In 2007, the SJVAPCD adopted the 2007 PM<sub>10</sub> Attainment Plan to ensure the continued attainment of the EPA's PM<sub>10</sub> standard. Since the EPA determined that the air basin had attained the federal PM<sub>10</sub> standards on October 30, 2006, the valley is designated as an attainment area (SJVAPCD 2007b).



- **2016 Moderate Area Plan for the 2012 PM<sub>2.5</sub> Standard.** In 2016, the SJVAPCD adopted the 2016 PM<sub>2.5</sub> Plan to address the EPA's 24-hour standards. The plan utilizes the best available information to develop a strategy to demonstrate attainment of the federal standard for PM<sub>2.5</sub>. A number of local strategies are included in the plan, including regulations to address stationary sources, use of a risk-based approach to prioritize measures to expedite attainment standards, incentive measures, technology advances, policy efforts to shape new legislation, and public outreach (SJVAPCD 2016b).
- **2018 Plan for the 1997, 2006, and 2012 PM<sub>2.5</sub> Standards.** This Plan outlines a strategy to attain the federal health-based 1997, 2006, and 2012 national ambient air quality standards (standards, or NAAQS) for fine particulate matter (PM<sub>2.5</sub>); as expeditiously as considered practical by the SJVAPCD. The EPA 1997 standard for PM<sub>2.5</sub> is an annual average standard of 15 micrograms per cubic meter (µg/m<sup>3</sup>) and a 24-hour average standard of 65 µg/m<sup>3</sup>, the 2006 standard is a 24-hour average standard of 35 µg/m<sup>3</sup>, and the 2012 annual standard is an annual PM<sub>2.5</sub> standard of 12 µg/m<sup>3</sup> (SJVAPCD 2018).

### **Tanner Air Toxics Act & Air Toxics "Hot Spots" Information and Assessment Act**

CARB's Statewide comprehensive air toxics program was established in 1983 with Assembly Bill (AB) 1807, the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

CARB also administers the state's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA) and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the "Hot Spots" Act was amended by Senate Bill (SB) 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

### **2.2.3 Local**

#### **San Joaquin Valley Air Pollution Control District**

The local air quality agency affecting the SJVAB is the San Joaquin Valley Air Pollution Control District (SJVAPCD), which is charged with the responsibility of implementing air quality programs and ensuring that national and state ambient air quality standards are not exceeded and that air quality conditions are maintained in the SJVAB. In an attempt to achieve national and state ambient air quality standards and maintain air quality, the air district has completed several air quality attainment plans and reports, which together constitute the State Implementation Plan (SIP) for the portion of the SJVAB encompassing the Project.

The SJVAPCD has also adopted various rules and regulations for the control of stationary and area sources of emissions. Provisions applicable to the Proposed Project are summarized as follows:

- **Regulation IV (Prohibitions), Rule 4101 Visible Emissions.** The purpose of this rule is to prohibit the emissions of visible air contaminants to the atmosphere.. It prohibits emissions of visible air contaminants into the atmosphere for a period or periods aggregating more than three minutes in any one hour which exceeds opacity or shade standards.
- **Regulation IV (Prohibitions), Rule 4102, Nuisance.** The purpose of this rule is to protect the health and safety of the public. The rule prohibits discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such person or the public or which cause or have a natural tendency to cause injury or damage to business or property.
- **Regulation IV (Prohibitions), Rule 4601, Architectural Coatings.** The rule limits volatile organic compound (VOC) emissions from architectural coatings and specifies practices for proper storage, cleanup, and labeling requirements. Rule 4601 applies to “any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures, blends or repackages any architectural coating for use within the District.” Materials covered by the rule include adhesives, architectural coatings, paints, varnishes, sealers, stains, concrete curing compounds, concrete/masonry sealers, and waterproofing sealers. The rule contains VOC content limits for colorants and coatings with different VOC limits for prior to and after January 1<sup>st</sup>, 2022.
- **Regulation IV (Prohibitions), Rule 4641, Cutback, Slow Curve and Emulsified Asphalt, Paving and Maintenance Operations.** The purpose of this rule is to limit VOC emissions by restricting the application and manufacturing of certain types of asphalt and maintenance operations and applies to the use of these materials. Specifically, certain types of asphalt cannot be used for penetrating prime coat, dust palliative, or other paving: rapid cure and medium cure cutback asphalt, slow cure asphalt that contains more than 0.5 percent of organic compound which evaporates at 500°F or lower, and emulsified asphalt containing VOC in excess of 3 percent which evaporates at 500°F or lower.
- **Regulation VIII (Fugitive PM<sub>10</sub> Prohibitions), Rules 8021–8071, Fugitive PM<sub>10</sub> Prohibitions.** The purpose of these rules is to limit airborne particulate emissions associated with construction, demolition, excavation, extraction, and other earthmoving activities, as well as with open disturbed land and emissions associated with paved and unpaved roads. Accordingly, these rules include specific measures to be employed to prevent and reduce fugitive dust emissions from anthropogenic sources.
- **Regulation IX (Mobile and Indirect Sources), Rule 9510, Indirect Source Review.** This rule is the result of state requirements outlined in California Health and Safety Code Section 40604 and the SIP. The air district’s SIP commitments were originally contained in the SJVAPCD’s 2003 PM<sub>10</sub> Plan and 2004 Extreme Ozone Attainment Demonstration Plan, which presented the SJVAPCD’s strategy to reduce PM<sub>10</sub> and NO<sub>x</sub> in order to reach the ambient air pollution standards on schedule, which had been 2010. The plans quantify the reduction from current SJVAPCD rules and

proposed rules, as well as state and federal regulations, and then model future emissions to determine whether the SJVAPCD may reach attainment for applicable pollutants. This rule is meant to reduce emissions of NO<sub>x</sub> and PM<sub>10</sub> from new development projects that attract or generate motor vehicle trips. In general, new development contributes to the air pollution problem in the SJVAB by increasing the number of vehicles and vehicle miles traveled. Although newer, cleaner technology is reducing per-vehicle pollution, the emissions increase from new development partially offsets emission reductions gained from technology advances.

Per Section 2.1, this rule applies to any applicant that seeks to gain a final discretionary approval for a development project, or any portion thereof that meets certain size and use requirements. Per Section 2.2, this rule also applies to any applicant that seeks to gain approval from a public agency for a large development project that meets certain size and use requirements. Rule 9510 applies to the Project under Section 2.2, as the Project is otherwise permitted by-right and is 10,000 square feet or more of commercial space. In accordance with this rule, developers of larger residential, commercial, and industrial projects are required to reduce smog-forming NO<sub>x</sub> and PM<sub>10</sub> emissions from their projects' baselines as follows (SJVAPCD 2017):

- 20 percent of construction NO<sub>x</sub> exhaust
- 45 percent of construction PM<sub>10</sub> exhaust
- 33 percent of operational NO<sub>x</sub> over 10 years
- 50 percent of operational PM<sub>10</sub> over 10 years

These reductions are intended to be achieved through incorporation of on-site reduction measures. If, after implementation of on-site emissions reduction measures project emissions still exceed the minimum baseline reduction, the Indirect Source Review requires a project applicant to pay an off-site fee to the SJVAPCD, which is then used to fund clean-air projects within the air basin.

## **2.3 Air Quality Emissions Impact Assessment**

### **2.3.1 Thresholds of Significance**

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to air quality if it would do any of the following:

- 1) Conflict with or obstruct implementation of any applicable air quality plan.
- 2) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- 3) Expose sensitive receptors to substantial pollutant concentrations.

- 4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

### **2.3.2 Methodology**

Air quality impacts were assessed in accordance with methodologies recommended by CARB and the SJVAPCD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for Tulare County.

Operational air pollutant emissions were based on the Project site plans and the estimated weekend traffic trip generation rates calculated by VRPA Technologies, Inc. (2020), and the CalEEMod defaults for Tulare County for weekday trip generation.

### **2.3.3 Impact Analysis**

#### **Project Construction-Generated Criteria Air Quality Emissions**

Construction associated with the Proposed Project would generate short-term emissions of criteria air pollutants, including ROG, CO, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The largest amount of ROG, CO, SO<sub>x</sub>, and NO<sub>x</sub> emissions would occur during the earthwork phase. PM<sub>10</sub> and PM<sub>2.5</sub> emissions would occur from fugitive dust (due to earthwork and excavation) and from construction equipment exhaust. Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the Project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to and from the site. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact.

During construction activities, the Project would be required to comply with SJVAPCD Regulation VIII (Fugitive PM<sub>10</sub> Prohibitions). The purpose of this regulation is to limit airborne particulate emissions associated with construction, demolition, excavation, extraction, and other earthmoving activities, as well as with open disturbed land and emissions associated with paved and unpaved roads. Accordingly, these rules include specific measures to be employed to prevent and reduce fugitive dust emissions from anthropogenic sources. For instance, the Project applicant would be required to prepare a dust control plan. Construction activities anywhere within the regulatory jurisdiction of the SJVAPCD, including the Proposed Project site, may not commence until the SJVAPCD has approved or conditionally approved the dust control plan, which must describe all fugitive dust control measures that are to be implemented before, during, and after any dust-generating activity. Regulation VIII specifies the following measures that may be included in the dust control plan to minimize fugitive dust emissions:

- Apply water to unpaved surfaces and areas.
- Use nontoxic chemical or organic dust suppressants on unpaved roads and traffic areas.

- Limit or reduce vehicle speed on unpaved roads and traffic areas to a maximum 15 miles per hour.
- Maintain areas in a stabilized condition by restricting vehicle access.
- Install wind barriers.
- During high winds, cease outdoor activities that disturb the soil.
- Keep bulk materials sufficiently wet when handling.
- Store and handle materials in a three-sided structure.
- When storing bulk materials, apply water to the surface or cover the storage pile with a tarp.
- Don't overload haul trucks. Overloaded trucks are likely to spill bulk materials.
- Cover haul trucks with a tarp or other suitable cover. Or, wet the top of the load enough to limit visible dust emissions.
- Clean the interior of cargo compartments on emptied haul trucks prior to leaving a site.
- Prevent trackout by installing a trackout control device.
- Clean up trackout at least once a day. If along a busy road or highway, clean up trackout immediately.
- Monitor dust-generating activities and implement appropriate measures for maximum dust control.

The SJVAPCD's (2015) Guidance for Assessing and Mitigating Air Quality Impacts identifies significance thresholds for ROG, CO, and NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Construction-generated criteria air pollutant emissions associated with the Proposed Project were calculated using CalEEMod. Predicted maximum annual construction-generated emissions of criteria air pollutants for the Proposed Project are summarized in Table 2-4.

**Table 2-4. Construction-Related Emissions - Fugitive PM<sub>10</sub> Prohibitions Included**

Construction Year	Maximum Pollutants (tons per year)					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Annual (Maximum Tons per Year)</b>						
Year One Construction (2021)	0.71	2.65	2.62	0.00	0.21	0.14
Year Two Construction (2022)	0.20	0.71	0.78	0.00	0.05	0.03
<i>SJVAPCD Potentially Significant Impact Threshold</i>	10	10	100	27	15	15
<b>Exceed SJVAPCD Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SJVAPCD Regulation VIII. The specific regulation applied in CalEEMod was watering unpaved surfaces two times per day.

Emissions account for the site preparation and grading for 2.8 acres.

As shown in Table 2-4, construction-generated emissions would not exceed SJVAPCD significance thresholds.

In addition to the SJVAPCD criteria air pollutant thresholds, SJVAPCD Rule 9510, Indirect Source Review, Section 2.2, aims to fulfill the District's emission reduction commitments in the PM<sub>10</sub> and Ozone Attainment Plans. This rule applies to construction projects within the jurisdiction of the SJVAPCD which upon full build-out will include any one of the following:

- 250 residential units;
- 10,000 square feet of commercial space;
- 125,000 square feet of light industrial space;
- 500,000 square feet of heavy industrial space;
- 100,000 square feet of medical office space;
- 195,000 square feet of general office space;
- 45,000 square feet of educational space;
- 50,000 square feet of government space;
- 100,000 square feet of recreational space; or
- 45,000 square feet of space not identified above..

This rule also applies to any transportation or transit project where construction exhaust emissions equal or exceed two tons of NO<sub>x</sub> or two tons of PM<sub>10</sub>. The project developers are required to reduce concentrations of NO<sub>x</sub> by 20 percent and PM<sub>10</sub> by 45 percent during construction activities. Development projects that have a mitigated baseline below two tons per year of NO<sub>x</sub> and two tons per year of PM<sub>10</sub> shall be exempt from the requirements per Rule 9510 (SJVAPCD 2017).

The Project is proposing the construction of more than 10,000 square feet of commercial space, permitted by-right. Thus, adherence to Rule 9510 is required of the Proposed Project. In accordance with Rule 9510, the Project applicant is required to prepare a detailed air impact assessment (AIA) for submittal to the SJVAPCD, which demonstrates reduction of NO<sub>x</sub> emissions from the Project's baseline by 20 percent and a reduction of PM<sub>10</sub> by 45 percent. Therefore, the following mitigation is required.

### Mitigation Measures

#### **AQ-1**

In accordance with SJVAPCD Rule 9510, a detailed air impact assessment (AIA) shall be prepared detailing the specific construction requirement (i.e., equipment required, hours of use, etc.). In accordance with this rule, emissions of NO<sub>x</sub> from construction equipment greater than 50 horsepower used or associated with the development Project shall be reduced by 20 percent from baseline (unmitigated) emissions and PM<sub>10</sub> shall be reduced by 45 percent. The Project shall demonstrate compliance with Rule 9510, including payment of all applicable fees, before issuance of the first building permit.

While the specific emission reduction measures will be developed to the satisfaction of the SJVAPCD, the following measures would reduce short-term air quality impacts attributable to the Proposed Project consistent with Rule 9510:

- During all construction activities, all diesel-fueled construction equipment including, but not limited to, rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, and tractors shall be of a certified clean fleet.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. Equipment maintenance records shall be kept on-site and made available upon request by the SJVAPCD or the County.
- The Project applicant shall comply with all applicable SJVAPCD rules and regulations. Copies of any applicable air quality permits and/or monitoring plans shall be provided to the County.

*Timing/Implementation:*                      *During the construction period*

*Monitoring/Enforcement:*                      *Tulare County*

As demonstrated in Table 2-5, implementation of mitigation measure AQ-1 would reduce annual NO<sub>x</sub> emissions by as much as 75 percent during each phase of construction and would reduce annual PM<sub>10</sub> emissions by more than 60 percent, which is far beyond the reduction needed to achieve the SJVAPCD Rule 9510 target. The actual emissions reduction would depend on the construction fleet utilized for construction, as clean fleet vehicles vary in emissions.

<b>Table 2-5. Construction Related NO<sub>x</sub> and PM<sub>10</sub> Emissions- Baseline and Mitigated (tons per year)</b>			
<b>Construction Year</b>	<b>NO<sub>x</sub> Baseline</b>	<b>NO<sub>x</sub> Mitigated</b>	<b>Percent Reduction</b>
Year One Construction (2021)	2.65	0.61	77%
Year Two Construction (2022)	0.71	0.18	75%
<b>SJVAPCD Potentially Significant Impact Threshold</b>			<b>20%</b>
<b>Construction Year</b>	<b>PM<sub>10</sub> Baseline</b>	<b>PM<sub>10</sub> Mitigated</b>	<b>Percent Reduction</b>
Year One Construction (2021)	0.19	0.07	63%
Year Two Construction (2022)	0.05	0.02	60%
<b>SJVAPCD Potentially Significant Impact Threshold</b>			<b>45%</b>

Source: CalEEMod version 2013.2.2. See Attachment A for emission outputs

Notes: Percent reduction calculated using  $((\text{baseline}-\text{mitigated}) / \text{baseline}) = \text{percent reduction}$

As previously stated, construction-generated emissions would not exceed SJVAPCD significance thresholds. However, the Project is the construction of a by-right commercial project over 10,000 square feet, instigating the implementation of Rule 9510. Rule 9510 requires a project to reduce NO<sub>x</sub> emissions from the Project's baseline by 20 percent and reduce annual PM<sub>10</sub> emissions by 45 percent. Mitigation measure AQ-1 would result in a greater than required reduction in NO<sub>x</sub> and PM<sub>10</sub> emissions from baseline for all construction activities. Note that the actual emissions reduction would depend on the construction fleet utilized for construction, as clean fleet vehicles vary in emissions. Since the project's emissions would not exceed SJVAPCD thresholds, no exceedance of the ambient air quality standards would occur, and no health effects from project criteria pollutants would occur.

### Project Operations Criteria Air Quality Emissions

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and SO<sub>2</sub> as well as ozone precursors such as ROG and NO<sub>x</sub>. Project-generated increases in emissions would be predominantly associated with motor vehicle use. Table 2-6 summarizes operational emissions from the Proposed Project.

The SJVAPCD's (2015) Guidance for Assessing and Mitigation Air Quality Impacts identifies significance thresholds for ROG, CO, and NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Operational-generated O<sub>3</sub> precursor emissions associated with the both Proposed Project were calculated using CalEEMod. Predicted maximum annual operational-generated emissions of criteria air pollutants for the Proposed Projects are summarized in Table 2-6.



**Table 2-6. Operational Emissions**

Emission Source	Maximum Pollutants (tons per year) – Operations Commencing 2022					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Proposed Project Annual Emissions</b>						
Area	0.33	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.08	0.07	0.00	0.00	0.00
Mobile	0.24	2.05	2.24	0.00	0.60	0.16
<b>Total</b>	<b>0.58</b>	<b>2.14</b>	<b>2.32</b>	<b>0.00</b>	<b>0.60</b>	<b>0.17</b>
<i>SJVAPCD Significance Threshold</i>	<i>10</i>	<i>10</i>	<i>100</i>	<i>27</i>	<i>15</i>	<i>15</i>
<b>Exceed SJVAPCD Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs.

Notes: Emissions projections account for trip generation rates identified by VRPA Technologies, Inc. (2020) for weekend trips and CalEEMod default trips for Tulare County for weekday trips.

As indicated in Table 2-6, operational-generated emissions would not exceed SJVAPCD significance thresholds.

As previously mentioned, SJVAPCD Rule 9510 is intended to fulfill the region's emission reduction commitments in the SJVAPCD PM<sub>10</sub> and Ozone Attainment Plans. The Proposed Project is subject to Rule 9510 and would be required to consult with the SJVAPCD regarding the specific applicability of Rule 9510 in relation to Project operations. In accordance with Rule 9510, the Project applicant would be required to prepare a detailed air impact assessment for submittal to the SJVAPCD demonstrating the reduction from the Project's baseline of NO<sub>x</sub> emissions. The following mitigation is required.

### Mitigation Measures

#### **AQ-2**

In accordance with SJVAPCD Rule 9510, a detailed air impact assessment shall be prepared detailing the operational characteristics associated with the Proposed Project. In accordance with this rule, operational emissions of NO<sub>x</sub> shall be reduced by a minimum of 33.3 percent and operational emissions of PM<sub>10</sub> must be reduced by a minimum of 50 percent over a period of ten years. (Emissions reductions are in comparison to the Project's operational baseline emissions presented in Table 2-6.) The Project would demonstrate compliance with Rule 9510, including payment of all applicable fees, before issuance of the first building permit.

Based on the findings of the air impact assessment, the applicant shall pay the SJVAPCD a monetary sum necessary to offset the required operational emissions that are not reduced by the emission reduction measures contained in the air impact assessment. The quantity of operational emissions that need to be offset will be calculated in accordance with the methodologies identified in Rule 9510, Indirect

Source Review, and approved by the SJVAPCD. Operational emissions reduction methods will be selected under the direction of the SJVAPCD according to the air impact assessment process detailed in, and required by Rule 9510, Indirect Source Review (see Rule 9510, subsection 5).

*Timing/Implementation:*                      *Prior to the issuance of building permits*

*Monitoring/Enforcement:*                      *County of Tulare Planning and Building Department*

Since the project's emissions do not exceed SJVAPCD thresholds, no exceedance of the ambient air quality standards would occur, and no health effects from project criteria pollutants would occur.

As previously identified, the Tulare County portion of the SJVAB is listed as a nonattainment area for the federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>. O<sub>3</sub> is a health threat to persons who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. PM can adversely affect the human respiratory system. As shown in Table 2-6, the Proposed Project would result in increased emissions of the O<sub>3</sub> precursor pollutants ROG and NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>, however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the SJVAB is contained in the SJVAPCD air quality planning documents, previously described. The SJVAPCD air quality attainment plans and reports provide control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines such as the application of available cleaner technologies, best management practices, incentive programs, as well as development and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SJVAPCD are designed to meet the objectives of regional air quality planning efforts and in doing so achieve attainment status with state and federal standards. As noted above, the Project would increase the emission of these pollutants, but would not exceed the thresholds of significance established by the SJVAPCD for purposes of reducing air pollution and its deleterious health effects.

On December 24, 2018, the California Supreme Court issued an opinion identifying the need to provide sufficient information connecting a project's air emissions to health impacts or explain why such information could not be ascertained (*Sierra Club v. County of Fresno [Friant Ranch, L.P.]* [2018] 6 Cal.5<sup>th</sup> 502, Case No. S219783). Pursuant to Rule 8.520(f) of the Rules of the California Court, the SJVAPCD filed an amicus curiae brief in regard to this case. In the brief, SJVAPCD provided technical explanations as to why it may not be feasible for a project to relate the expected adverse air quality impacts to likely health consequences. As summarized below, for the reasons set forth by the SJVAPCD, the Proposed Project's air pollutant contribution currently cannot feasibly be directly related to likely health consequences. The technical demands for feasibly and accurately relating regional air pollutants to likely health consequences are too high for this Proposed Project at this time. The technical challenges are listed below, with the SJVAPCD amicus brief providing support on the findings for the Proposed Project:

- O<sub>3</sub> is not formed at the location of sources/emissions, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time.

"For the so-called criteria pollutants, such as O<sub>3</sub>, it may be more difficult to quantify health impacts. O<sub>3</sub> is formed in the atmosphere from the chemical reaction of NO<sub>x</sub> and VOC [ROG] in the presence of sunlight. It takes time and the influence of meteorological conditions for these reactions to occur, so O<sub>3</sub> may be formed at a distance downwind from the sources." [SJVAPCD p.11]

- O<sub>3</sub> and secondary PM formation is complex, which necessitates the use of more sophisticated modeling that is not reasonably feasible for the Project at this time. The Proposed Project, while much smaller in scale to the Friant Ranch project, similarly includes area wide sources and mobile sources.

"Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of O<sub>3</sub> or PM. This is especially true for a project like Friant Ranch where most of the criteria pollutant emissions derive not from a single 'point source,' but from area wide sources (consumer products, paint, etc.) or mobile sources (cars and trucks) driving to, from and around the site." [SJVAPCD p.9]

- The quantity of precursor emissions is not proportional to local O<sub>3</sub> and secondary PM concentration, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time.

"Ground level O<sub>3</sub> (smog) is not directly emitted into the air but is formed when precursor pollutants such as NO<sub>x</sub> and VOCs [ROG] are emitted into the atmosphere and undergo complex chemical reactions in the process of sunlight. Once formed, O<sub>3</sub> can be transported long distances by wind. Because of the complexity of O<sub>3</sub> formation, a specific tonnage amount of NO<sub>x</sub> or VOCs [ROG] emitted in a particular area does not equate to a particular concentration of O<sub>3</sub> in that area." [SJVAPCD p.4]

"Secondary PM, like O<sub>3</sub>, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO<sub>x</sub> and NO<sub>x</sub>. Because of the complexity of secondary PM formation, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area." [SJVAPCD p.5]

- Emissions do not cause health effects – it is the resulting concentration of criteria pollutants, which is influenced by sunlight, complex reactions, and transport, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time.

"The disconnect between the tonnage of precursor pollutants (NO<sub>x</sub>, SO<sub>x</sub> and VOCs [ROG]) and the concentration of O<sub>3</sub> or PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting O<sub>3</sub> or PM." [SJVAPCD p.5]

- Currently available modeling tools are appropriate for regional evaluations, but not individual projects like the Proposed Project.

"For instance, the computer models used to simulate and predict an attainment date for the O<sub>3</sub> or particulate matter NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NO<sub>x</sub>, SO<sub>x</sub> and VOCs [ROG]) and the atmospheric chemistry and meteorology of the Valley... the models simulate future O<sub>3</sub> or PM levels based on predicted changes in precursor emissions Valley wide... The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the Valley attains the NAAQS. Rather, the Air District's modeling and planning strategy is regional in nature and based on the extent to which all of the emission-generating sources in the Valley (current and future) must be controlled in order to reach attainment." [SJVAPCD p.6-7]

"Thus, the CEQA air quality analysis for criteria pollutants is not really a localized, project-level impact analysis but one of regional, "cumulative impacts."" [SJVAPCD p.8]

"...the currently available modeling tools are equipped to model the impact of all emission sources in the Valley on attainment... Running the photochemical grid model used for predicting O<sub>3</sub> attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO<sub>x</sub> and VOC [ROG] in the Valley) is not likely to yield valid information given the relative scale involved." [SJVAPCD p.9-10]

- The SJVAPCD indicates that it is currently impossible to accurately correlate project level emissions to specific health impacts.

"Finally, even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like O<sub>3</sub> and some particulates, it remains impossible, using today's models, to correlate that increase in concentration to a specific health impact. The reason is the same: such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level." [SJVAPCD p.10]

For the reasons set forth above, it is not currently feasible to relate the Proposed Project's contribution of regional air pollutants to likely health consequences. The SJVAPCD is responsible for assessing air pollutant impacts regionally, and the potential health consequences from those on a regional basis. The current evaluation on the limitations and uncertainties of existing tools is consistent with SJVAPCD findings. Currently available regional modeling tools are not designed to capture changes in pollutant concentrations for this Proposed Project that would be meaningful. This is due in part to a relatively coarse spatial resolution (e.g., greater than 4 x 4 kilometers) which makes it speculative to discern regional Project impacts on air quality.

### **Conflict with the SJVAPCD Air Quality Attainment Plans**

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based

programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the NAAQS and CAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The SJVAPCD prepared the 2004 Extreme Ozone Attainment Demonstration Plan, 2013 Plan for the Revoked 1-Hour Ozone Standard, 2007 Ozone Plan, 2009 Reasonably Available Control Technology Demonstration for Ozone State Implementation Plan, 2016 Plan for the 2008 8-Hour Ozone Standard, 2016 Moderate Area Plan for the 2012 PM<sub>2.5</sub> Standard, 2013 Plan for the Revoked 1-Hour Ozone Standard, 2018 Plan for the 1997, 2006, and 2012 PM<sub>2.5</sub> Standards, 2020 RACT Demonstration, and 2007 PM<sub>10</sub> Maintenance Plan and Request for Re-designation. These plans collectively address the air basin's nonattainment status with the national and state O<sub>3</sub> standards as well as particulate matter by establishing a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. Pollutant control strategies are based on the latest scientific and technical information and planning assumptions, updated emission inventory methodologies for various source categories, and the latest population growth projections and associated vehicle miles traveled projections for the region. SJVAPCD's latest population growth forecasts were defined in consultation with local governments and with reference to local general plans.

The Project site is designated for *Urban Development* by the General Plan. The General Plan identifies the *Urban Development* designation as meant for development generally characterized by low to high density residential development, commercial development, industrial development, and typically supported by public services such as central water and sewer systems. The Project is consistent with this General Plan designation and would not exceed the population or job growth projections used by the SJVAPCD to develop its air quality attainment plans. Additionally, as shown in Table 2-4 and Table 2-6 above, both Project construction and Project operations would not generate emissions that would exceed SJVAPCD significance thresholds. Furthermore, the implementation of AQ-1 would reduce construction-generated emissions below what is required in Rule 9510 and AQ-2 would reduce operational-generated emissions or offset the emissions with payment of a fee, which is then used to fund clean-air projects within the air basin. Note that reductions in construction-generated emissions due to AQ-1 will vary per the fleet used. Regardless, AQ-1 would reduce construction-generated emissions below what is required in Rule 9510. The Project would be consistent with the emission-reduction goals of the SJVAPCD Attainment Plans.

### **Exposure of Sensitive Receptors to Toxic Air Contaminants**

As previously described, sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptors to the Project site are the Comfort Inn and Suites located approximately 98 feet north of the Project site boundary, the vacant commercial building located approximately zero feet west of the Project

site boundary, and a residence located across State Highway 198 from the site, approximately 270 feet to the west. As stated previously, the distance to the Comfort Inn and Suites was measured from the property line of the Proposed Project to the portion of the Comfort Inn and Suites property line which is located adjacent to the nearest hotel building on the property (see Figure 1). The parking lot located in the southeast section of the Comfort Inn and Suites site is not considered to be the nearest point to the sensitive receptor, as visitors to the hotel would spend the majority of their stay in their hotel room, at the nearby community center, and/or in Sequoia and Kings Canyon National Parks, thus remaining in the parking lot for a relatively short duration. In addition, hotel staff would spend relatively little time in the hotel parking lot.

#### Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of diesel particulate matter (DPM), ROG, NO<sub>x</sub>, CO, and PM<sub>10</sub> from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. However, as shown in Tables 2-4, the Project would not exceed the SJVAPCD construction emission thresholds. The portion of the SJVAB which encompasses the Project area is classified nonattainment area for the federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub> (CARB 2018). Thus, existing O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> levels in the SJVAB are at unhealthy levels during certain periods.

The health effects associated with O<sub>3</sub> are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in O<sub>3</sub> precursor emissions (ROG or NO<sub>x</sub>) in excess of the SJVAPCD thresholds, the Project is not anticipated to substantially contribute to regional O<sub>3</sub> concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the SJVAPCD thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary toxic air contaminant (TAC) of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by the CARB in 1998. The potential cancer risk from the inhalation of DPM outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Based on the emission modeling conducted, the maximum onsite construction-related daily emissions (mitigated) of exhaust PM<sub>2.5</sub>, considered a surrogate for DPM, would be 0.07 pounds/day (see Attachment A). (PM<sub>2.5</sub> exhaust is considered a surrogate for DPM

because more than 90 percent of DPM is less than 1 microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter (i.e., PM<sub>2.5</sub>). Most PM<sub>2.5</sub> derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.) As with O<sub>3</sub> and NO<sub>x</sub>, the Project would not generate emissions of PM<sub>10</sub> or PM<sub>2.5</sub> that would exceed the SJVAPCD's thresholds. Additionally, the Project would be required to comply with Regulation VIII, Rules 8021–8071– Fugitive PM<sub>10</sub> Prohibitions and Rule 9510– Indirect Source Review, as described above, which limit the amount of fugitive dust generated during construction. Accordingly, the Project's PM<sub>10</sub> and PM<sub>2.5</sub> emissions are not expected to cause any increase in related regional health effects for these pollutants. Although health risk due to TACs cannot be accurately quantified, based on quantitative and qualitative analysis of anticipated Project emissions, a significant health risk would not result.

In summary, the Project would not result in a potentially significant contribution to regional or localized concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants.

#### *Naturally Occurring Asbestos*

Another potential air quality issue associated with construction-related activities is the airborne entrainment of asbestos due to the disturbance of naturally-occurring asbestos-containing soils. The Proposed Project is not located within an area designated by the State of California as likely to contain naturally-occurring asbestos (DOC 2011). As a result, construction-related activities would not be anticipated to result in increased exposure of sensitive land uses to asbestos.

#### *Valley Fever*

*Coccidioidomycosis* (CM), often referred to as San Joaquin Valley Fever or Valley Fever, is one of the most studied and oldest known fungal infections. Valley Fever most commonly affects people who live in hot dry areas with alkaline soil and varies with the season. This disease, which affects both humans and animals, is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). CI spores are found in the top few inches of soil and the existence of the fungus in most soil areas is temporary. The cocci fungus (an organism that grows and feeds on dead or decaying organic matter) lives as a saprophyte in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-moving activities and become airborne. Agricultural workers, construction workers, and other people who work outdoors and who are exposed to wind and dust are more likely to contract Valley Fever. Children and adults whose hobbies or sports activities expose them to wind and dust are also more likely to contract Valley Fever. After the fungal spores have settled in the lungs, they change into a multicellular structure called a spherule. Fungal growth in the lungs occurs as the spherule grows and bursts, releasing endospores, which then develop into more spherules.

Valley fever (*Coccidioidomycosis*) is found in California, including Tulare County. In about 50 to 75 percent of people, valley fever causes either no symptoms or mild symptoms and those infected never seek medical care; when symptoms are more pronounced, they usually present as lung problems (cough, shortness of breath, sputum production, fever, and chest pains). The disease can progress to chronic or

progressive lung disease and may even become disseminated to the skin, lining tissue of the brain (meninges), skeleton, and other body areas.

Tulare County is considered a highly endemic area for valley fever. When soil containing this fungus is disturbed by ground-disturbing activities such as digging or grading, by vehicles raising dust, or by the wind, the fungal spores get into the air. When people breathe the spores into their lungs, they may get valley fever. Fungal spores are small particles that can grow and reproduce in the body. The highest infection period for valley fever occurs during the driest months in California, between June and November. Infection from valley fever during ground-disturbing activities can be partially mitigated through the control of Project-generated dust. As noted, Project-generated dust would be controlled by adhering to SJVAPCD dust-reducing measures (Regulation VIII), which includes the preparation of a SJVAPCD-approved dust control plan describing all fugitive dust control measures that are to be implemented before, during, and after any dust-generating activity.

With minimal site grading and conformance with SJVAPCD Regulation VIII, dust from the construction of the Project would not add significantly to the existing exposure level of people to this fungus, including construction workers.

#### Operational Air Contaminants

Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract additional heavy-duty trucks that spend long periods queuing and idling at the site. Onsite Project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. The maximum operation-related emissions of exhaust PM<sub>2.5</sub>, considered a surrogate for DPM, would be 0.09 pounds per day, produced by the estimated 860 additional one-way vehicle trips per day on Saturdays, 625 additional one-way vehicle trips per day on Sundays, and 858 additional one-way vehicle trips per day on weekdays. Therefore, the Project would not be a source of TACs and there would be no impact as a result of the Project during operations. The Project would not have a high carcinogenic or non-carcinogenic risk during operation.

#### *Carbon Monoxide Hot Spots*

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. In 1993, much of the state was designated nonattainment under the CAAQS and NAAQS for CO. Currently, the allowable CO emissions standard in



California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration across the entire state is now designated as attainment. Detailed modeling of Project-specific CO “hot spots” is not necessary and thus this potential impact is addressed qualitatively.

A CO “hot spot” would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. A study conducted in Los Angeles County by the South Coast Air Quality Management District (SCAQMD) is helpful in showing the amount of traffic necessary to result in a CO Hotspot, and can be used to demonstrate the traffic necessary to create a hot spot anywhere in California, including the Central Valley. The SCAQMD analysis prepared for CO attainment in the SCAQMD’s *1992 Federal Attainment Plan for Carbon Monoxide* in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 Air Quality Management Plan can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). To establish a more accurate record of baseline CO concentrations affecting the SoCAB, a CO “hot spot” analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This “hot spot” analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

Furthermore, the SJVAPCD Guidance for Assessing and Mitigating Impacts (2015b) includes the following CO hot spot criteria:

If neither of the following criteria are met at all intersections affected by the developmental project, the project will result in no potential to create a violation of the CO standard:

- A traffic study for the project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F; or
- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at more or more intersections in the project vicinity.

According to the Traffic Study prepared for the Project, LOS at the SR 198 (Sierra Drive) and Project Driveway and SR 198 (Sierra Drive) and Old 3 Rivers Road intersections would not exceed target LOS 'D' for all the study scenarios. In addition, the Project is expected to generate 860 trips generated per day on Saturdays and the estimated 625 trips generated per day on Sundays (VRPA Technologies, Inc. 2020). Using CalEEMod trip generation defaults for Tulare County, 858 trips are anticipated to be generated on weekdays. Thus, based on Project traffic generation and resultant LOS on affected roadways, it can be determined that the Project would not result in CO hotspots.

It is acknowledged that the Project site is located relatively close to the entrance of the Sequoia National Park entrance. Historically, there have been instances when a substantial amount of automobiles are queued for entrance into the park and idling along the road as far out as to Three Rivers. However, such instances are uncommon and very unlikely to result in traffic volumes of over 100,000 vehicles per day. Thus, neither the Proposed Project nor the cumulative park plus Project traffic would not generate traffic volumes of more than 100,000 vehicles per day, there is no likelihood of the Project traffic exceeding CO values.

### **Odors**

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants,

composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not include any uses considered to be associated with odors.

In addition, per the SJVAPCD's Guidance to Conduct Detailed Analysis for Assessing Odor Impacts to Sensitive Receptors, this analysis of potential odor impacts contains a review of odor complaints for "similar facilities". Specifically, a records request for odor complaints submitted within the last three years involving the adjacent Comfort Inn and Suites was submitted on October 12, 2020. The SJVAPCD confirmed no odor complaints were found to be on file for the Three Rivers Comfort Inn and Suites within the last three years (SJVAPCD 2020b). As such, it is also expected that substantial odors would not be generated by the proposed hotel Project.

### **3.0 GREENHOUSE GAS EMISSIONS**

#### **3.1 Greenhouse Gas Setting**

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are CO<sub>2</sub>, methane (CH<sub>4</sub>), and N<sub>2</sub>O. Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together (Intergovernmental Panel on Climate Change [IPCC] 2014).

Table 3-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH<sub>4</sub> traps over 25 times more heat per molecule than CO<sub>2</sub>, and N<sub>2</sub>O absorbs 298 times more heat per molecule than CO<sub>2</sub> (IPCC 2014). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO<sub>2</sub>e), which weight each gas by its global warming potential. Expressing GHG emissions in CO<sub>2</sub>e takes the contribution of all GHG emissions to the greenhouse effect

and converts them to a single unit equivalent to the effect that would occur if only CO<sub>2</sub> were being emitted.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO<sub>2</sub> is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Of the total annual human-caused CO<sub>2</sub> emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO<sub>2</sub> emissions remains stored in the atmosphere (IPCC 2013).

<b>Table 3-1. Greenhouse Gases</b>	
<b>Greenhouse Gas</b>	<b>Description</b>
CO <sub>2</sub>	Carbon dioxide is a colorless, odorless gas. CO <sub>2</sub> is emitted in a number of ways, both naturally and through human activities. The largest source of CO <sub>2</sub> emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO <sub>2</sub> emissions. The atmospheric lifetime of CO <sub>2</sub> is variable because it is so readily exchanged in the atmosphere. <sup>1</sup>
CH <sub>4</sub>	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH <sub>4</sub> to the atmosphere. Natural sources of CH <sub>4</sub> include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH <sub>4</sub> is about 12 years. <sup>2</sup>
N <sub>2</sub> O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N <sub>2</sub> O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N <sub>2</sub> O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N <sub>2</sub> O is approximately 120 years. <sup>3</sup>

Sources: <sup>1</sup>USEPA 2016a, <sup>2</sup>USEPA 2016b, <sup>3</sup>USEPA 2016c

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; it is sufficient to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

### 3.1.1 Sources of Greenhouse Gas Emissions

In 2019, CARB released the 2019 edition of the California GHG inventory covering calendar year 2017 emissions. In 2017, California emitted 424.1 million gross metric tons of CO<sub>2</sub>e including from imported electricity. Combustion of fossil fuel in the transportation sector was the single largest source of

California's GHG emissions in 2017, accounting for approximately 41 percent of total GHG emissions in the state. This sector was followed by the industrial sector (24 percent) and the electric power sector including both in- and out-of-state sources (15 percent) (CARB 2019b). Emissions of CO<sub>2</sub> are by-products of fossil fuel combustion. CH<sub>4</sub>, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. N<sub>2</sub>O is also largely attributable to agricultural practices and soil management. CO<sub>2</sub> sinks, or reservoirs, include vegetation and the ocean, which absorb CO<sub>2</sub> through sequestration and dissolution (CO<sub>2</sub> dissolving into the water), respectively, two of the most common processes for removing CO<sub>2</sub> from the atmosphere.

## **3.2 Regulatory Framework**

### **3.2.1 State**

#### **Executive Order S-3-05**

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

While dated, this EO remains relevant because a more recent California Appellate Court decision, *Cleveland National Forest Foundation v. San Diego Association of Governments* (November 24, 2014) 231 Cal.App.4th 1056, examined whether it should be viewed as having the equivalent force of a legislative mandate for specific emissions reductions. While the California Supreme Court ruled that the San Diego Association of Governments did not abuse its discretion by declining to adopt the 2050 goal as a measure of significance in light of the fact that the EO does not specify any plan or implementation measures to achieve its goal, the decision also recognized that the goal of a 40 percent reduction in 1990 GHG levels by 2030 is "widely acknowledged" as a "necessary interim target to ensure that California meets its longer-range goal of reducing GHG emissions 80 percent below 1990 levels by the year 2050.

#### **Assembly Bill 32 Climate Change Scoping Plan and Updates**

In 2006, the California legislature passed Assembly Bill (AB) 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. CARB has identified a GHG reduction target of 15 percent from current levels for local governments and notes that successful implementation relies on local governments' land use planning and urban growth decisions.

Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which was re-approved by CARB on August 24, 2011, that outlines measures to meet the 2020 GHG reduction goals. To meet these goals,

California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from today's levels. The Scoping Plan recommends measures for further study and possible state implementation, such as new fuel regulations. It estimates that a reduction of 174 million metric tons of CO<sub>2</sub>e (about 191 million U.S. tons) from the transportation, energy, agriculture, and forestry sectors and other sources could be achieved should the State implement all of the measures in the Scoping Plan.

The Scoping Plan is required by AB 32 to be updated at least every five years. The first update to the AB 32 Scoping Plan was approved on May 22, 2014 by CARB. The 2017 Scoping Plan Update was adopted on December 14, 2017. The Scoping Plan Update addresses the 2030 target established by SB 32 as discussed below and establishes a proposed framework of action for California to meet a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels. The key programs that the Scoping Plan Update builds on include: increasing the use of renewable energy in the state, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of methane emissions from agricultural and other wastes.

### **Executive Order B-30-15**

On April 20, 2015 Governor Edmund (Jerry) Brown, Jr., signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's EO aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2°C, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

### **Senate Bill 32 and Assembly Bill 197 of 2016**

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

### **Senate Bill X1-2 of 2011, Senate Bill 350 of 2015, and Senate Bill 100 of 2018**

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met

increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California.

In October 2015, SB 350 was signed by Governor Brown, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable resources by 2030. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

### **2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings**

The Building and Efficiency Standards (Energy Standards) were first adopted and put into effect in 1978 and have been updated periodically in the intervening years. These standards are a unique California asset that have placed the State on the forefront of energy efficiency, sustainability, energy independence and climate change issues. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The 2019 standards are a major step toward meeting Zero Net Energy. According to the California Energy Commission, single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards and nonresidential buildings will use about 30 percent less energy (due mainly to lighting upgrades) (CEC 2018). The most significant efficiency improvement to the residential Standards include the introduction of photovoltaic into the perspective package, improvements for attics, walls, water heating and lighting. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. These new standards apply only to certain nonresidential building types, as specified in the requirements.

### **3.2.2 Local**

#### **San Joaquin Valley Air Pollution Control District Climate Change Climate Action Plan**

The SJVAPCD has adopted guidance and policy for implementation of the Climate Change Climate Action Plan (CCAP). The guidance and policy rely on the use of performance-based standards, otherwise known as Best Performance Standards (BPS) to assess significance of project specific greenhouse gas emissions on global climate change during the environmental review process, as required by CEQA. Use of BPS is a method of streamlining the CEQA process of determining significance and is not a required emission reduction measure. Projects implementing BPS would be determined to have a less than cumulatively significant impact. Otherwise, demonstration of a 29 percent reduction in GHG emissions, from business-as-usual (BAU), is required to determine that a project would have a less than cumulatively significant impact. The guidance does not limit a lead agency's authority in establishing its own process and guidance for determining significance of project related impacts on global climate change.

However, the BAU portion of the tiered approach is problematic based on the 2015 California Supreme Court Newhall Ranch decision, which stated that an GHG-related impact determination based on the BAU approach is "not supported by a reasoned explanation based on substantial evidence."

## **Tulare County Climate Action Plan**

Tulare County adopted the Tulare County Climate Action Plan (CAP) in 2012. Since then, the CAP was updated in 2018 to establish GHG reduction targets which support the SB 32 2030 target signed by Governor Brown in 2016.

The 2018 CAP Update incorporates new baseline and future year inventories to reflect the latest information and updates the County's strategy to address the SB 32 2030 target. The 2030 target requires the State to reduce emissions by 40 percent below 1990 levels from the 2017 Scoping Plan and County data. The CAP identifies the County's fair share of reductions required to maintain consistency with the State target.

The CAP provides a CEQA consistency checklist for project review of projects below a certain size limit. Proposed development projects that are consistent with the emission reduction and adaptation measures included in the CAP and the programs that are developed as a result of the CAP, would be considered to have a less than significant cumulative impact on climate change and emissions consistent with CEQA Guidelines Section 15064(h)(3) (as amended to comply with SB 97).

## **Tulare County 2030 General Plan**

The Tulare County General Plan contains numerous policies aimed at reducing GHG emissions. The 2018 CAP Update incorporates new baseline and future year inventories to reflect the latest information and updates the County's strategy to address the SB 32 2030 target. The 2030 target requires the State to reduce emissions by 40 percent below 1990 levels from the 2017 Scoping Plan and County data. The CAP identifies the County's fair share of reductions required to maintain consistency with the state target.

The CAP references the General Plan policies as tools for reducing GHG emissions. These policies are divided into the categories of Transportation Strategies, Building Energy Efficiency, Water Conservation Energy Savings, Solid Waste Reduction and Recycling, and Agricultural Programs and Incentives. The policies are aimed at County action and do not specifically mandate action at the project level.

## **3.3 Greenhouse Gas Emissions Impact Assessment**

### **3.3.1 Thresholds of Significance**

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to GHG emissions if it would:

- 1) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases or
- 2) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

The Appendix G thresholds for GHG's do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the



appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines § 15064.4(a) states that lead agencies “shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate” GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project’s GHG emissions or rely on a “qualitative analysis or other performance-based standards.” (14 California Code of Regulations [CCR] 15064.4(b)). A lead agency may use a “model or methodology” to estimate GHG emissions and has the discretion to select the model or methodology it considers “most appropriate to enable decision makers to intelligently take into account the project’s incremental contribution to climate change.” (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that “[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence” (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA’s requirements for cumulative impact analysis (see CEQA Guidelines § 15130(f)). As a note, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines § 15064(h)(3), a project’s incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions.” Put another way, CEQA Guidelines § 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines § 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The Tulare County CAP aims to reduce GHG emissions from development projects in Tulare County. The CAP builds on state and regional policies aimed at reducing GHG emissions consistent with the SB 32 2030 GHG reduction target. The CAP relies on policies of the Tulare County General Plan to guide development projects. In addition, the Project provides specific guidelines for determining if new development projects are consistent with the CAP. The CAP includes a progress report with metrics and benchmarks for tracking progress toward meeting the GHG reduction targets. The County's progress is on track for all metrics.

The CAP is utilized to evaluate the significance of the Project GHG emissions.

### **3.3.2 Methodology**

Project GHG emissions were quantified using CalEEMod, version 2016.3.2. Project construction generated GHG emissions were primarily calculated using CalEEMod model defaults for Tulare County and the Project site plans. Operational GHG emissions were calculated based on the Project site plans, the estimated weekend traffic trip generation rates from VRPA Technologies, Inc. (2020), and the CalEEMod default traffic trips for Tulare County for weekday traffic trips. The Project is anticipated to generate 860 additional one-way vehicle trips per day on Saturdays, 625 additional one-way vehicle trips per day on Sundays, and 858 additional one-way vehicle trips per day on weekdays.

The traffic fleet mix defaults contained in the CalEEMod model are based on the average fleet mix of Tulare County.

### **3.3.3 Impact Analysis**

#### **Contribution of Greenhouse Gas Emissions at a Level that would Conflict with an Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases**

Project GHG emissions were quantified for disclosure purposes. The Tulare County CAP does not require quantification of emissions for projects less intense than a 500-unit subdivision or 100,000 square feet of retail or equivalent intensity for other uses. The Proposed Project would include approximately 72,000 square feet of commercial hotel space, and this is less intense than the threshold requiring GHG emissions quantification. However, the anticipated GHG emissions for the Project are quantified for disclosure purposes. The GHG emissions represent Project emissions prior to implementation of mitigation measures GHG-1 and GHG-2 (explained below), as the specific energy use offset from these measures cannot be determined until the scale and specifications of the renewable energy generation and electric vehicle (EV) charging are known.

### Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 3-2 illustrates the specific construction generated GHG emissions that would result from construction of the Project.

<b>Table 3-2. Construction-Related Greenhouse Gas Emissions</b>	
<b>Emissions Source</b>	<b>CO<sub>2</sub>e (Metric Tons/ Year)</b>
Year One Construction (2021)	420
Year Two Construction (2022)	126
<b>Total Emissions</b>	<b>546</b>

Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs.

As shown in Table 3-2, Project construction would result in the generation of approximately 546 metric tons of CO<sub>2</sub>e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. The amortized construction emissions are added to the annual average operational emissions.

### Operations

Operation of the Project would result in GHG emissions predominantly associated with motor vehicle use. Long-term operational GHG emissions attributable to the Project are identified in Table 3-3.

<b>Table 3-3. Operational-Related GHG Emissions</b>	
<b>Emissions Source</b>	<b>CO<sub>2</sub>e (Metric Tons/ Year)</b>
Construction Emissions (amortized over the 30-year life of the Project)	18
Area Source Emissions	0
Energy Source Emissions	295
Mobile Source Emissions	842
Solid Waste Emissions	31
Water Emissions	6
<b>Total Emissions</b>	<b>1,175</b>

Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs.

As shown in Table 3-3, Project operations would result in the generation of approximately 1,175 metric tons of CO<sub>2</sub>e annually.

The Tulare County CAP (2018) is a strategic planning document that identifies sources of GHG emissions within the County, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic policies and actions to reduce emissions from the development

project subject to CEQA. The GHG-reduction strategies in the Plan build key opportunities prioritized by County staff and members of the public.

To be consistent with the CAP, development projects less intense than a 500-unit subdivision or 100,000 square feet of retail or equivalent intensity for other uses can use the CAP consistency checklist. The checklist contains design features and measures that are used to determine consistency. The overarching CAP consistency requirements for all projects are outlined in Table 3-4.

<b>Table 3-4. CEQA Project Requirements for Consistency with CAP</b>	
<b>Item</b>	<b>Project Compliance?</b>
Project helps to meet the density goals from the Tulare Blueprint	Yes
Consistency with General Plan policies	Yes
Consistency with Rural Valley Land Plans or Foothill Growth Management Plan development criteria	Yes
Consistency with Urban Growth Boundary expansion criteria	Yes
Consistency for development within Rural Community Urban Development Boundaries (UDB) and Hamlet Development Boundaries HDB, and Legacy Development Boundaries (LDB)	Yes

Source: Tulare County 2018

Note: Criteria as identified in the General Plan Planning Framework

The Project would comply with all applicable General Plan policies intended to reduce GHG emissions. The Project site in the community of Three Rivers and is covered by the Foothill Growth Management Plan of the 2030 General Plan (County of Tulare 2012). The Project would not conflict with the applicable policies of the Foothill Growth Management Plan. Furthermore, the Project would comply with the Land Use and Urban Policies of the 2030 General Plan. Finally, for the Project to be approved for development by the County of Tulare they would require the Project to meet the development requirements as they pertain to Rural Community Urban Development Boundaries and/or Hamlet Development Boundaries. The Project site is located within the Three Rivers Urban Development Boundary depicted within the 2030 General Plan. In addition, the Project is consistent with the 2009 Tulare County Regional Blueprint goals and objectives.

Furthermore, both the existing and the projected GHG inventories in the CAP were derived based on the land use designations and associated densities defined in the County's General Plan. The Proposed Project is consistent with the land use designation and development density presented in the General Plan. As previously stated, the Project site is designated by the 2030 General Plan as *Urban Development Boundaries* (zoned for commercial use). Since the Project is consistent with the General Plan, it is consistent with the urban development types, intensity, and patterns of land use envisioned for the site vicinity in the General Plan. As a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by the County to develop the CAP.

A more detailed review for compliance with CAP measures is required to ensure that a project is doing its part in reducing emissions. Table 3-5 provides a checklist containing all applicable measures that will provide reductions necessary to achieve CAP consistency.

<b>Table 3-5. CAP Consistency Checklist (Applicable to the Project)</b>		
<b>CAP Measure</b>	<b>Compliance</b>	<b>Project Compliant Prior to Mitigation?</b>
<b>Land Use:</b> Project is consistent with the Tulare County General Plan policies listed in the CAP applicable to GHG emissions and sustainability.	Review for compliance during project review process.	Yes
<b>Energy Efficiency:</b> Project complies with current version of Title 24	Provide copy of the Title 24 Report demonstrating compliance with the applicable standards with Building Permit application.	Yes
<b>Renewable Energy:</b> Project includes solar panels or other alternative energy source meeting County Solar Ordinance or new Title 24 standards whichever is more stringent.	Include solar on building plans and provide Title 24 compliance reports with Building Permit applications.	No
<b>EV Charging:</b> Project meets charging installation/charging ready requirements of the CalGreen Code.	Include charging in building plans.	No
<b>CalGreen Building Code Water:</b> Project complies with indoor and outdoor water conservation measures.	Provide copy of report showing code compliance.	Yes
<b>Water Conservation Landscaping:</b>	Project complies with County water conservation ordinance requirements for landscaping.	Yes
<b>Solid Waste:</b> Project has access to recycling service for homes and businesses meeting CalRecycle requirements.	County verify that providers are in compliance with CalRecycle regulations regarding recycling and diversion of solid waste.	Yes

Source: Tulare County 2018

As shown in Table 3-4, the Project is consistent with the applicable General Plan Policies. In addition, the Project is required by California state law to meet the Title 24 energy efficiency requirements, comply with the CALGreen Building Water Code (California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations), and meet the California Model Water Efficient Landscape Ordinance (MWELO) requirements. Furthermore, the County mandates that applicable codified County standards are met by the Project and will enforce the implementation of these standards as a condition of approval. During the design review process, the County will mandate that the Project not only meets state MWELO standards, but complies with the specific requirements of the County water conservation ordinance requirements for landscaping. The County will also review the trash enclosure design to ensure solid waste pick-up is feasible and will ensure the Project meets the CalRecycle requirements. Further, the County must verify the Project is consistent with the General Plan policies, and the County requires all feasible GHG-reducing strategies of the CAP are incorporated into projects and their permits through development review and application of conditions of approval as applicable.

As shown in Table 3-5, the Project Preliminary Concept Design does not specify that the Project design includes EV charging and a renewable energy source. As such, mitigation measures GHG-1 and GHG-2 are required to for the Project to be consistent with the CAP.

#### Mitigation Measures

**GHG-1** The Project must provide an onsite renewable energy system(s). The Project shall include solar panels or other alternative energy source meeting the County Solar Ordinance or new Title 24 standards, whichever is more stringent. The onsite renewable

energy system(s) must be installed as part of the construction process and be functional upon commencement of Project operation. The Project Proponent must include solar on building plans and provide Title 24 compliance reports with Building Permit applications to the County.

*Timing/Implementation:*                      *During the construction period*

*Monitoring/Enforcement:*                      *County of Tulare Planning and Building Department*

**GHG-2**

The Project shall meet the charging installation/charging ready requirements of the CALGreen Code. The Project Proponent shall include EV charging accommodations as specified in the CALGreen Code in building plans for review and approval by the County, prior to commencement of Project construction.

*Timing/Implementation:*                      *During the construction period*

*Monitoring/Enforcement:*                      *County of Tulare Planning and Building Department*

Following implementation of mitigation measures GHG-1 and GHG-2, the Project would be consistent with the Tulare County CAP for the purpose of meeting 2030 GHG emission reduction targets in compliance with SB 32.

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## **LIST OF ATTACHMENTS**

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Attachment A – CalEEMod Output Files

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**ATTACHMENT A**

CalEEMod Output Files

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

## Three Rivers Hampton Inn & Suites

### Tulare County, Annual

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	108.00	Space	0.97	43,200.00	0
Hotel	105.00	Room	1.81	72,364.00	0
Recreational Swimming Pool	0.80	1000sqft	0.02	800.00	0

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	51
Climate Zone	7			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	549	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

Project Characteristics - Southern California Edison improved their CO2 emissions to 549 lb/MWh in 2017.

Land Use - Project information is derived from the project feasibility study (HVS Consulting & Valuation 2020) , preliminary design (DVB Architecture 2020), and traffic study (VRPA Technologies, Inc. 2020).

Construction Phase - Building construction, paving, and painting will occur simultaneously.

Vehicle Trips - All trips attributed to hotel use. Traffic Impact Study Report (VRPA Technologies, Inc. 2020).

Energy Use -

Construction Off-road Equipment Mitigation - SJVAPCD Rule VII Fugitive PM10 prohibitions, rules 8021-8071. Required clean fleet is a MM aimed to reduce NOx and comply with Rule 9510.

Energy Mitigation - Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018).

Water Mitigation - CA water efficient appliance requirements.

Fleet Mix -

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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstructionPhase	NumDays	10.00	220.00
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tblProjectCharacteristics	CO2IntensityFactor	702.44	549
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	33.82	0.00

## 2.0 Emissions Summary

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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.7116	2.6512	2.6238	4.8500e-003	0.0824	0.1301	0.2126	0.0267	0.1231	0.1498	0.0000	418.6831	418.6831	0.0829	0.0000	420.7563
2022	0.2086	0.7157	0.7842	1.4600e-003	0.0186	0.0333	0.0519	5.0200e-003	0.0316	0.0366	0.0000	126.2786	126.2786	0.0245	0.0000	126.8915
Maximum	0.7116	2.6512	2.6238	4.8500e-003	0.0824	0.1301	0.2126	0.0267	0.1231	0.1498	0.0000	418.6831	418.6831	0.0829	0.0000	420.7563

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.4734	0.6119	2.7621	4.8500e-003	0.0690	6.6600e-003	0.0757	0.0203	6.6100e-003	0.0270	0.0000	418.6827	418.6827	0.0829	0.0000	420.7559
2022	0.1453	0.1844	0.8330	1.4600e-003	0.0186	1.9900e-003	0.0206	5.0200e-003	1.9700e-003	6.9900e-003	0.0000	126.2785	126.2785	0.0245	0.0000	126.8914
Maximum	0.4734	0.6119	2.7621	4.8500e-003	0.0690	6.6600e-003	0.0757	0.0203	6.6100e-003	0.0270	0.0000	418.6827	418.6827	0.0829	0.0000	420.7559

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	32.76	76.35	-5.49	0.00	13.31	94.71	63.61	19.95	94.45	81.79	0.00	0.00	0.00	0.00	0.00	0.00

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2021	6-30-2021	0.7932	0.2364
2	7-1-2021	9-30-2021	1.2779	0.4220
3	10-1-2021	12-31-2021	1.2789	0.4230
4	1-1-2022	3-31-2022	0.9403	0.3360
		Highest	1.2789	0.4230

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3368	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8200e-003	3.8200e-003	1.0000e-005	0.0000	4.0700e-003
Energy	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	356.8381	356.8381	0.0143	4.9100e-003	358.6578
Mobile	0.2432	2.0511	2.2490	9.0900e-003	0.5924	7.8000e-003	0.6002	0.1592	7.3500e-003	0.1665	0.0000	841.8615	841.8615	0.0420	0.0000	842.9121
Waste						0.0000	0.0000		0.0000	0.0000	12.5956	0.0000	12.5956	0.7444	0.0000	31.2050
Water						0.0000	0.0000		0.0000	0.0000	0.8600	3.9359	4.7960	0.0885	2.1300e-003	7.6438
<b>Total</b>	<b>0.5938</b>	<b>2.1764</b>	<b>2.3562</b>	<b>9.8400e-003</b>	<b>0.5924</b>	<b>0.0173</b>	<b>0.6098</b>	<b>0.1592</b>	<b>0.0169</b>	<b>0.1761</b>	<b>13.4556</b>	<b>1,202.6394</b>	<b>1,216.0950</b>	<b>0.8892</b>	<b>7.0400e-003</b>	<b>1,240.4229</b>



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3368	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8200e-003	3.8200e-003	1.0000e-005	0.0000	4.0700e-003
Energy	9.8900e-003	0.0899	0.0755	5.4000e-004		6.8300e-003	6.8300e-003		6.8300e-003	6.8300e-003	0.0000	293.7170	293.7170	0.0122	3.9300e-003	295.1951
Mobile	0.2432	2.0511	2.2490	9.0900e-003	0.5924	7.8000e-003	0.6002	0.1592	7.3500e-003	0.1665	0.0000	841.8615	841.8615	0.0420	0.0000	842.9121
Waste						0.0000	0.0000		0.0000	0.0000	12.5956	0.0000	12.5956	0.7444	0.0000	31.2050
Water						0.0000	0.0000		0.0000	0.0000	0.6880	3.2054	3.8934	0.0708	1.7000e-003	6.1720
<b>Total</b>	<b>0.5899</b>	<b>2.1410</b>	<b>2.3265</b>	<b>9.6300e-003</b>	<b>0.5924</b>	<b>0.0146</b>	<b>0.6071</b>	<b>0.1592</b>	<b>0.0142</b>	<b>0.1734</b>	<b>13.2836</b>	<b>1,138.7877</b>	<b>1,152.0713</b>	<b>0.8695</b>	<b>5.6300e-003</b>	<b>1,175.4883</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.66</b>	<b>1.63</b>	<b>1.26</b>	<b>2.13</b>	<b>0.00</b>	<b>15.57</b>	<b>0.44</b>	<b>0.00</b>	<b>15.99</b>	<b>1.53</b>	<b>1.28</b>	<b>5.31</b>	<b>5.26</b>	<b>2.22</b>	<b>20.03</b>	<b>5.23</b>

**3.0 Construction Detail****Construction Phase**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2021	5/3/2021	5	3	
2	Grading	Grading	5/4/2021	5/11/2021	5	6	
3	Building Construction	Building Construction	5/12/2021	3/15/2022	5	220	
4	Paving	Paving	5/12/2021	3/15/2022	5	220	
5	Architectural Coating	Architectural Coating	5/12/2021	3/15/2022	5	220	

**Acres of Grading (Site Preparation Phase): 4.5**

**Acres of Grading (Grading Phase): 3**

**Acres of Paving: 0.97**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 108,546; Non-Residential Outdoor: 36,182; Striped Parking Area: 2,592 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	49.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3200e-003	0.0274	0.0161	4.0000e-005		1.0500e-003	1.0500e-003		9.7000e-004	9.7000e-004	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
<b>Total</b>	<b>2.3200e-003</b>	<b>0.0274</b>	<b>0.0161</b>	<b>4.0000e-005</b>	<b>2.3900e-003</b>	<b>1.0500e-003</b>	<b>3.4400e-003</b>	<b>2.6000e-004</b>	<b>9.7000e-004</b>	<b>1.2300e-003</b>	<b>0.0000</b>	<b>3.2290</b>	<b>3.2290</b>	<b>1.0400e-003</b>	<b>0.0000</b>	<b>3.2551</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.2 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0796	0.0796	0.0000	0.0000	0.0796
<b>Total</b>	<b>5.0000e-005</b>	<b>3.0000e-005</b>	<b>3.4000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0796</b>	<b>0.0796</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0796</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.3000e-004	0.0000	9.3000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	1.9600e-003	0.0178	4.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
<b>Total</b>	<b>4.5000e-004</b>	<b>1.9600e-003</b>	<b>0.0178</b>	<b>4.0000e-005</b>	<b>9.3000e-004</b>	<b>6.0000e-005</b>	<b>9.9000e-004</b>	<b>1.0000e-004</b>	<b>6.0000e-005</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>3.2290</b>	<b>3.2290</b>	<b>1.0400e-003</b>	<b>0.0000</b>	<b>3.2551</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.2 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0796	0.0796	0.0000	0.0000	0.0796
<b>Total</b>	<b>5.0000e-005</b>	<b>3.0000e-005</b>	<b>3.4000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0796</b>	<b>0.0796</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0796</b>

**3.3 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4800e-003	0.0606	0.0293	6.0000e-005		2.7500e-003	2.7500e-003		2.5300e-003	2.5300e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
<b>Total</b>	<b>5.4800e-003</b>	<b>0.0606</b>	<b>0.0293</b>	<b>6.0000e-005</b>	<b>0.0197</b>	<b>2.7500e-003</b>	<b>0.0224</b>	<b>0.0101</b>	<b>2.5300e-003</b>	<b>0.0126</b>	<b>0.0000</b>	<b>5.4312</b>	<b>5.4312</b>	<b>1.7600e-003</b>	<b>0.0000</b>	<b>5.4751</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.3 Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	8.6000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.1989	0.1989	1.0000e-005	0.0000	0.1990
<b>Total</b>	<b>1.3000e-004</b>	<b>8.0000e-005</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.1989</b>	<b>0.1989</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1990</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.6700e-003	0.0000	7.6700e-003	3.9400e-003	0.0000	3.9400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6000e-004	3.2800e-003	0.0327	6.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
<b>Total</b>	<b>7.6000e-004</b>	<b>3.2800e-003</b>	<b>0.0327</b>	<b>6.0000e-005</b>	<b>7.6700e-003</b>	<b>1.0000e-004</b>	<b>7.7700e-003</b>	<b>3.9400e-003</b>	<b>1.0000e-004</b>	<b>4.0400e-003</b>	<b>0.0000</b>	<b>5.4312</b>	<b>5.4312</b>	<b>1.7600e-003</b>	<b>0.0000</b>	<b>5.4751</b>

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**3.3 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	8.6000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.1989	0.1989	1.0000e-005	0.0000	0.1990
<b>Total</b>	<b>1.3000e-004</b>	<b>8.0000e-005</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.1989</b>	<b>0.1989</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1990</b>

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1718	1.3463	1.2233	2.1000e-003		0.0687	0.0687		0.0658	0.0658	0.0000	174.4249	174.4249	0.0343	0.0000	175.2828
<b>Total</b>	<b>0.1718</b>	<b>1.3463</b>	<b>1.2233</b>	<b>2.1000e-003</b>		<b>0.0687</b>	<b>0.0687</b>		<b>0.0658</b>	<b>0.0658</b>	<b>0.0000</b>	<b>174.4249</b>	<b>174.4249</b>	<b>0.0343</b>	<b>0.0000</b>	<b>175.2828</b>



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**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1300e-003	0.1767	0.0337	4.5000e-004	0.0106	5.2000e-004	0.0111	3.0500e-003	4.9000e-004	3.5400e-003	0.0000	42.4268	42.4268	1.8800e-003	0.0000	42.4737
Worker	0.0178	0.0115	0.1181	3.0000e-004	0.0328	2.2000e-004	0.0330	8.7200e-003	2.0000e-004	8.9200e-003	0.0000	27.2845	27.2845	7.8000e-004	0.0000	27.3040
<b>Total</b>	<b>0.0230</b>	<b>0.1882</b>	<b>0.1518</b>	<b>7.5000e-004</b>	<b>0.0433</b>	<b>7.4000e-004</b>	<b>0.0441</b>	<b>0.0118</b>	<b>6.9000e-004</b>	<b>0.0125</b>	<b>0.0000</b>	<b>69.7113</b>	<b>69.7113</b>	<b>2.6600e-003</b>	<b>0.0000</b>	<b>69.7777</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0277	0.3251	1.2546	2.1000e-003		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	174.4247	174.4247	0.0343	0.0000	175.2826
<b>Total</b>	<b>0.0277</b>	<b>0.3251</b>	<b>1.2546</b>	<b>2.1000e-003</b>		<b>2.9500e-003</b>	<b>2.9500e-003</b>		<b>2.9500e-003</b>	<b>2.9500e-003</b>	<b>0.0000</b>	<b>174.4247</b>	<b>174.4247</b>	<b>0.0343</b>	<b>0.0000</b>	<b>175.2826</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1300e-003	0.1767	0.0337	4.5000e-004	0.0106	5.2000e-004	0.0111	3.0500e-003	4.9000e-004	3.5400e-003	0.0000	42.4268	42.4268	1.8800e-003	0.0000	42.4737
Worker	0.0178	0.0115	0.1181	3.0000e-004	0.0328	2.2000e-004	0.0330	8.7200e-003	2.0000e-004	8.9200e-003	0.0000	27.2845	27.2845	7.8000e-004	0.0000	27.3040
<b>Total</b>	<b>0.0230</b>	<b>0.1882</b>	<b>0.1518</b>	<b>7.5000e-004</b>	<b>0.0433</b>	<b>7.4000e-004</b>	<b>0.0441</b>	<b>0.0118</b>	<b>6.9000e-004</b>	<b>0.0125</b>	<b>0.0000</b>	<b>69.7113</b>	<b>69.7113</b>	<b>2.6600e-003</b>	<b>0.0000</b>	<b>69.7777</b>

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0482	0.3797	0.3732	6.5000e-004		0.0183	0.0183		0.0175	0.0175	0.0000	53.9968	53.9968	0.0104	0.0000	54.2573
<b>Total</b>	<b>0.0482</b>	<b>0.3797</b>	<b>0.3732</b>	<b>6.5000e-004</b>		<b>0.0183</b>	<b>0.0183</b>		<b>0.0175</b>	<b>0.0175</b>	<b>0.0000</b>	<b>53.9968</b>	<b>53.9968</b>	<b>0.0104</b>	<b>0.0000</b>	<b>54.2573</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4700e-003	0.0519	9.6300e-003	1.4000e-004	3.2700e-003	1.4000e-004	3.4000e-003	9.4000e-004	1.3000e-004	1.0800e-003	0.0000	13.0155	13.0155	5.6000e-004	0.0000	13.0294
Worker	5.1000e-003	3.1600e-003	0.0332	9.0000e-005	0.0102	7.0000e-005	0.0102	2.7000e-003	6.0000e-005	2.7600e-003	0.0000	8.1458	8.1458	2.1000e-004	0.0000	8.1512
<b>Total</b>	<b>6.5700e-003</b>	<b>0.0551</b>	<b>0.0428</b>	<b>2.3000e-004</b>	<b>0.0134</b>	<b>2.1000e-004</b>	<b>0.0136</b>	<b>3.6400e-003</b>	<b>1.9000e-004</b>	<b>3.8400e-003</b>	<b>0.0000</b>	<b>21.1612</b>	<b>21.1612</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>21.1806</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.5700e-003	0.1006	0.3883	6.5000e-004		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	53.9968	53.9968	0.0104	0.0000	54.2572
<b>Total</b>	<b>8.5700e-003</b>	<b>0.1006</b>	<b>0.3883</b>	<b>6.5000e-004</b>		<b>9.1000e-004</b>	<b>9.1000e-004</b>		<b>9.1000e-004</b>	<b>9.1000e-004</b>	<b>0.0000</b>	<b>53.9968</b>	<b>53.9968</b>	<b>0.0104</b>	<b>0.0000</b>	<b>54.2572</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4700e-003	0.0519	9.6300e-003	1.4000e-004	3.2700e-003	1.4000e-004	3.4000e-003	9.4000e-004	1.3000e-004	1.0800e-003	0.0000	13.0155	13.0155	5.6000e-004	0.0000	13.0294
Worker	5.1000e-003	3.1600e-003	0.0332	9.0000e-005	0.0102	7.0000e-005	0.0102	2.7000e-003	6.0000e-005	2.7600e-003	0.0000	8.1458	8.1458	2.1000e-004	0.0000	8.1512
<b>Total</b>	<b>6.5700e-003</b>	<b>0.0551</b>	<b>0.0428</b>	<b>2.3000e-004</b>	<b>0.0134</b>	<b>2.1000e-004</b>	<b>0.0136</b>	<b>3.6400e-003</b>	<b>1.9000e-004</b>	<b>3.8400e-003</b>	<b>0.0000</b>	<b>21.1612</b>	<b>21.1612</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>21.1806</b>

**3.5 Paving - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0893	0.8944	0.9892	1.5000e-003		0.0489	0.0489		0.0451	0.0451	0.0000	130.2403	130.2403	0.0413	0.0000	131.2722
Paving	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0903</b>	<b>0.8944</b>	<b>0.9892</b>	<b>1.5000e-003</b>		<b>0.0489</b>	<b>0.0489</b>		<b>0.0451</b>	<b>0.0451</b>	<b>0.0000</b>	<b>130.2403</b>	<b>130.2403</b>	<b>0.0413</b>	<b>0.0000</b>	<b>131.2722</b>

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**3.5 Paving - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4600e-003	3.5100e-003	0.0362	9.0000e-005	0.0100	7.0000e-005	0.0101	2.6700e-003	6.0000e-005	2.7300e-003	0.0000	8.3524	8.3524	2.4000e-004	0.0000	8.3584
<b>Total</b>	<b>5.4600e-003</b>	<b>3.5100e-003</b>	<b>0.0362</b>	<b>9.0000e-005</b>	<b>0.0100</b>	<b>7.0000e-005</b>	<b>0.0101</b>	<b>2.6700e-003</b>	<b>6.0000e-005</b>	<b>2.7300e-003</b>	<b>0.0000</b>	<b>8.3524</b>	<b>8.3524</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>8.3584</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0177	0.0766	1.0898	1.5000e-003		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	130.2401	130.2401	0.0413	0.0000	131.2720
Paving	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0186</b>	<b>0.0766</b>	<b>1.0898</b>	<b>1.5000e-003</b>		<b>2.3600e-003</b>	<b>2.3600e-003</b>		<b>2.3600e-003</b>	<b>2.3600e-003</b>	<b>0.0000</b>	<b>130.2401</b>	<b>130.2401</b>	<b>0.0413</b>	<b>0.0000</b>	<b>131.2720</b>

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**3.5 Paving - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4600e-003	3.5100e-003	0.0362	9.0000e-005	0.0100	7.0000e-005	0.0101	2.6700e-003	6.0000e-005	2.7300e-003	0.0000	8.3524	8.3524	2.4000e-004	0.0000	8.3584
<b>Total</b>	<b>5.4600e-003</b>	<b>3.5100e-003</b>	<b>0.0362</b>	<b>9.0000e-005</b>	<b>0.0100</b>	<b>7.0000e-005</b>	<b>0.0101</b>	<b>2.6700e-003</b>	<b>6.0000e-005</b>	<b>2.7300e-003</b>	<b>0.0000</b>	<b>8.3524</b>	<b>8.3524</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>8.3584</b>

**3.5 Paving - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0245	0.2426	0.3041	4.6000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	40.3261	40.3261	0.0128	0.0000	40.6456
Paving	3.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0248</b>	<b>0.2426</b>	<b>0.3041</b>	<b>4.6000e-004</b>		<b>0.0127</b>	<b>0.0127</b>		<b>0.0117</b>	<b>0.0117</b>	<b>0.0000</b>	<b>40.3261</b>	<b>40.3261</b>	<b>0.0128</b>	<b>0.0000</b>	<b>40.6456</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.5 Paving - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5600e-003	9.7000e-004	0.0102	3.0000e-005	3.1100e-003	2.0000e-005	3.1300e-003	8.3000e-004	2.0000e-005	8.4000e-004	0.0000	2.4936	2.4936	7.0000e-005	0.0000	2.4953
<b>Total</b>	<b>1.5600e-003</b>	<b>9.7000e-004</b>	<b>0.0102</b>	<b>3.0000e-005</b>	<b>3.1100e-003</b>	<b>2.0000e-005</b>	<b>3.1300e-003</b>	<b>8.3000e-004</b>	<b>2.0000e-005</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>2.4936</b>	<b>2.4936</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>2.4953</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.4700e-003	0.0237	0.3373	4.6000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	40.3261	40.3261	0.0128	0.0000	40.6456
Paving	3.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.7700e-003</b>	<b>0.0237</b>	<b>0.3373</b>	<b>4.6000e-004</b>		<b>7.3000e-004</b>	<b>7.3000e-004</b>		<b>7.3000e-004</b>	<b>7.3000e-004</b>	<b>0.0000</b>	<b>40.3261</b>	<b>40.3261</b>	<b>0.0128</b>	<b>0.0000</b>	<b>40.6456</b>

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**3.5 Paving - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5600e-003	9.7000e-004	0.0102	3.0000e-005	3.1100e-003	2.0000e-005	3.1300e-003	8.3000e-004	2.0000e-005	8.4000e-004	0.0000	2.4936	2.4936	7.0000e-005	0.0000	2.4953
<b>Total</b>	<b>1.5600e-003</b>	<b>9.7000e-004</b>	<b>0.0102</b>	<b>3.0000e-005</b>	<b>3.1100e-003</b>	<b>2.0000e-005</b>	<b>3.1300e-003</b>	<b>8.3000e-004</b>	<b>2.0000e-005</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>2.4936</b>	<b>2.4936</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>2.4953</b>

**3.6 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3911					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0184	0.1283	0.1527	2.5000e-004		7.9000e-003	7.9000e-003		7.9000e-003	7.9000e-003	0.0000	21.4473	21.4473	1.4700e-003	0.0000	21.4841
<b>Total</b>	<b>0.4095</b>	<b>0.1283</b>	<b>0.1527</b>	<b>2.5000e-004</b>		<b>7.9000e-003</b>	<b>7.9000e-003</b>		<b>7.9000e-003</b>	<b>7.9000e-003</b>	<b>0.0000</b>	<b>21.4473</b>	<b>21.4473</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>21.4841</b>



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**3.6 Architectural Coating - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6400e-003	2.3400e-003	0.0241	6.0000e-005	6.6900e-003	5.0000e-005	6.7400e-003	1.7800e-003	4.0000e-005	1.8200e-003	0.0000	5.5683	5.5683	1.6000e-004	0.0000	5.5723
<b>Total</b>	<b>3.6400e-003</b>	<b>2.3400e-003</b>	<b>0.0241</b>	<b>6.0000e-005</b>	<b>6.6900e-003</b>	<b>5.0000e-005</b>	<b>6.7400e-003</b>	<b>1.7800e-003</b>	<b>4.0000e-005</b>	<b>1.8200e-003</b>	<b>0.0000</b>	<b>5.5683</b>	<b>5.5683</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>5.5723</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3911					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5000e-003	0.0108	0.1539	2.5000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	21.4473	21.4473	1.4700e-003	0.0000	21.4841
<b>Total</b>	<b>0.3936</b>	<b>0.0108</b>	<b>0.1539</b>	<b>2.5000e-004</b>		<b>3.3000e-004</b>	<b>3.3000e-004</b>		<b>3.3000e-004</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>21.4473</b>	<b>21.4473</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>21.4841</b>

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**3.6 Architectural Coating - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6400e-003	2.3400e-003	0.0241	6.0000e-005	6.6900e-003	5.0000e-005	6.7400e-003	1.7800e-003	4.0000e-005	1.8200e-003	0.0000	5.5683	5.5683	1.6000e-004	0.0000	5.5723
<b>Total</b>	<b>3.6400e-003</b>	<b>2.3400e-003</b>	<b>0.0241</b>	<b>6.0000e-005</b>	<b>6.6900e-003</b>	<b>5.0000e-005</b>	<b>6.7400e-003</b>	<b>1.7800e-003</b>	<b>4.0000e-005</b>	<b>1.8200e-003</b>	<b>0.0000</b>	<b>5.5683</b>	<b>5.5683</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>5.5723</b>

**3.6 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1211					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3200e-003	0.0366	0.0472	8.0000e-005		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	6.6385	6.6385	4.3000e-004	0.0000	6.6493
<b>Total</b>	<b>0.1264</b>	<b>0.0366</b>	<b>0.0472</b>	<b>8.0000e-005</b>		<b>2.1200e-003</b>	<b>2.1200e-003</b>		<b>2.1200e-003</b>	<b>2.1200e-003</b>	<b>0.0000</b>	<b>6.6385</b>	<b>6.6385</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>6.6493</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.6 Architectural Coating - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	6.5000e-004	6.7700e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6624	1.6624	4.0000e-005	0.0000	1.6635
<b>Total</b>	<b>1.0400e-003</b>	<b>6.5000e-004</b>	<b>6.7700e-003</b>	<b>2.0000e-005</b>	<b>2.0700e-003</b>	<b>1.0000e-005</b>	<b>2.0800e-003</b>	<b>5.5000e-004</b>	<b>1.0000e-005</b>	<b>5.6000e-004</b>	<b>0.0000</b>	<b>1.6624</b>	<b>1.6624</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.6635</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1211					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7000e-004	3.3500e-003	0.0476	8.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	6.6385	6.6385	4.3000e-004	0.0000	6.6493
<b>Total</b>	<b>0.1218</b>	<b>3.3500e-003</b>	<b>0.0476</b>	<b>8.0000e-005</b>		<b>1.0000e-004</b>	<b>1.0000e-004</b>		<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>6.6385</b>	<b>6.6385</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>6.6493</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.6 Architectural Coating - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	6.5000e-004	6.7700e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6624	1.6624	4.0000e-005	0.0000	1.6635
<b>Total</b>	<b>1.0400e-003</b>	<b>6.5000e-004</b>	<b>6.7700e-003</b>	<b>2.0000e-005</b>	<b>2.0700e-003</b>	<b>1.0000e-005</b>	<b>2.0800e-003</b>	<b>5.5000e-004</b>	<b>1.0000e-005</b>	<b>5.6000e-004</b>	<b>0.0000</b>	<b>1.6624</b>	<b>1.6624</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.6635</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2432	2.0511	2.2490	9.0900e-003	0.5924	7.8000e-003	0.6002	0.1592	7.3500e-003	0.1665	0.0000	841.8615	841.8615	0.0420	0.0000	842.9121
Unmitigated	0.2432	2.0511	2.2490	9.0900e-003	0.5924	7.8000e-003	0.6002	0.1592	7.3500e-003	0.1665	0.0000	841.8615	841.8615	0.0420	0.0000	842.9121

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	857.85	859.95	624.75	1,567,158	1,567,158
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	857.85	859.95	624.75	1,567,158	1,567,158

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

## 4.4 Fleet Mix

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710
Parking Lot	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710
Recreational Swimming Pool	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	195.8250	195.8250	0.0103	2.1400e-003	196.7213
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	220.3685	220.3685	0.0116	2.4100e-003	221.3773
NaturalGas Mitigated	9.8900e-003	0.0899	0.0755	5.4000e-004		6.8300e-003	6.8300e-003		6.8300e-003	6.8300e-003	0.0000	97.8920	97.8920	1.8800e-003	1.7900e-003	98.4738
NaturalGas Unmitigated	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	136.4696	136.4696	2.6200e-003	2.5000e-003	137.2806

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	2.55734e+006	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	136.4696	136.4696	2.6200e-003	2.5000e-003	137.2806
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0138</b>	<b>0.1254</b>	<b>0.1053</b>	<b>7.5000e-004</b>		<b>9.5300e-003</b>	<b>9.5300e-003</b>		<b>9.5300e-003</b>	<b>9.5300e-003</b>	<b>0.0000</b>	<b>136.4696</b>	<b>136.4696</b>	<b>2.6200e-003</b>	<b>2.5000e-003</b>	<b>137.2806</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	1.83443e+006	9.8900e-003	0.0899	0.0755	5.4000e-004		6.8300e-003	6.8300e-003		6.8300e-003	6.8300e-003	0.0000	97.8920	97.8920	1.8800e-003	1.7900e-003	98.4738
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>9.8900e-003</b>	<b>0.0899</b>	<b>0.0755</b>	<b>5.4000e-004</b>		<b>6.8300e-003</b>	<b>6.8300e-003</b>		<b>6.8300e-003</b>	<b>6.8300e-003</b>	<b>0.0000</b>	<b>97.8920</b>	<b>97.8920</b>	<b>1.8800e-003</b>	<b>1.7900e-003</b>	<b>98.4738</b>

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**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	869815	216.6033	0.0114	2.3700e-003	217.5948
Parking Lot	15120	3.7652	2.0000e-004	4.0000e-005	3.7825
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>220.3685</b>	<b>0.0116</b>	<b>2.4100e-003</b>	<b>221.3773</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	771256	192.0598	0.0102	2.1000e-003	192.9389
Parking Lot	15120	3.7652	2.0000e-004	4.0000e-005	3.7825
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>195.8250</b>	<b>0.0104</b>	<b>2.1400e-003</b>	<b>196.7213</b>

**6.0 Area Detail**



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**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3368	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8200e-003	3.8200e-003	1.0000e-005	0.0000	4.0700e-003
Unmitigated	0.3368	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8200e-003	3.8200e-003	1.0000e-005	0.0000	4.0700e-003

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0512					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2854					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8200e-003	3.8200e-003	1.0000e-005	0.0000	4.0700e-003
<b>Total</b>	<b>0.3368</b>	<b>2.0000e-005</b>	<b>1.9700e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>3.8200e-003</b>	<b>3.8200e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.0700e-003</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0512					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2854					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8200e-003	3.8200e-003	1.0000e-005	0.0000	4.0700e-003
<b>Total</b>	<b>0.3368</b>	<b>2.0000e-005</b>	<b>1.9700e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>3.8200e-003</b>	<b>3.8200e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.0700e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.8934	0.0708	1.7000e-003	6.1720
Unmitigated	4.7960	0.0885	2.1300e-003	7.6438

## 7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.66351 / 0.295946	4.6919	0.0870	2.0900e-003	7.4900
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.0473145 / 0.0289992	0.1040	1.5500e-003	4.0000e-005	0.1538
<b>Total</b>		<b>4.7960</b>	<b>0.0885</b>	<b>2.1300e-003</b>	<b>7.6438</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.13081 / 0.295946	3.8051	0.0696	1.6700e-003	6.0438
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.0378516 / 0.0289992	0.0883	1.2400e-003	3.0000e-005	0.1282
<b>Total</b>		<b>3.8934</b>	<b>0.0708</b>	<b>1.7000e-003</b>	<b>6.1720</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	12.5956	0.7444	0.0000	31.2050
Unmitigated	12.5956	0.7444	0.0000	31.2050

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	57.49	11.6700	0.6897	0.0000	28.9118
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	4.56	0.9256	0.0547	0.0000	2.2932
<b>Total</b>		<b>12.5956</b>	<b>0.7444</b>	<b>0.0000</b>	<b>31.2050</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	57.49	11.6700	0.6897	0.0000	28.9118
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	4.56	0.9256	0.0547	0.0000	2.2932
<b>Total</b>		<b>12.5956</b>	<b>0.7444</b>	<b>0.0000</b>	<b>31.2050</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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Three Rivers Hampton Inn & Suites - Tulare County, Annual

## **11.0 Vegetation**

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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

### Three Rivers Hampton Inn & Suites Tulare County, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	108.00	Space	0.97	43,200.00	0
Hotel	105.00	Room	1.81	72,364.00	0
Recreational Swimming Pool	0.80	1000sqft	0.02	800.00	0

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	51
Climate Zone	7			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	549	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

Project Characteristics - Southern California Edison improved their CO2 emissions to 549 lb/MWh in 2017.

Land Use - Project information is derived from the project feasibility study (HVS Consulting & Valuation 2020) , preliminary design (DVB Architecture 2020), and traffic study (VRPA Technologies, Inc. 2020).

Construction Phase - Building construction, paving, and painting will occur simultaneously.

Vehicle Trips - All trips attributed to hotel use. Traffic Impact Study Report (VRPA Technologies, Inc. 2020).

Energy Use -

Construction Off-road Equipment Mitigation - SJVAPCD Rule VII Fugitive PM10 prohibitions, rules 8021-8071. Required clean fleet is a MM aimed to reduce NOx and comply with Rule 9510.

Energy Mitigation - Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018).

Water Mitigation - CA water efficient appliance requirements.

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	220.00
tblConstructionPhase	NumDays	10.00	220.00
tblLandUse	LandUseSquareFeet	152,460.00	72,364.00
tblLandUse	LotAcreage	3.50	1.81
tblProjectCharacteristics	CO2IntensityFactor	702.44	549
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	33.82	0.00

## 2.0 Emissions Summary

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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	8.4211	30.4703	30.9998	0.0572	6.6345	1.5040	7.5508	3.3893	1.4237	4.2323	0.0000	5,436.713 3	5,436.713 3	1.0519	0.0000	5,463.011 8
2022	8.0626	27.4889	30.4532	0.0569	0.7367	1.2808	2.0175	0.1983	1.2133	1.4117	0.0000	5,411.634 8	5,411.634 8	1.0397	0.0000	5,437.627 0
Maximum	8.4211	30.4703	30.9998	0.0572	6.6345	1.5040	7.5508	3.3893	1.4237	4.2323	0.0000	5,436.713 3	5,436.713 3	1.0519	0.0000	5,463.011 8

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	5.6634	7.1791	32.5854	0.0572	2.6376	0.0772	2.6717	1.3351	0.0766	1.3692	0.0000	5,436.713 3	5,436.713 3	1.0519	0.0000	5,463.011 8
2022	5.6310	7.0552	32.3310	0.0569	0.7367	0.0763	0.8130	0.1983	0.0757	0.2741	0.0000	5,411.634 8	5,411.634 8	1.0397	0.0000	5,437.627 0
Maximum	5.6634	7.1791	32.5854	0.0572	2.6376	0.0772	2.6717	1.3351	0.0766	1.3692	0.0000	5,436.713 3	5,436.713 3	1.0519	0.0000	5,463.011 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	31.48	75.44	-5.64	0.00	54.22	94.49	63.58	57.26	94.22	70.88	0.00	0.00	0.00	0.00	0.00	0.00

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
Energy	0.0756	0.6869	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.2849	824.2849	0.0158	0.0151	829.1832
Mobile	1.7186	11.6150	13.9082	0.0552	3.4972	0.0442	3.5414	0.9372	0.0416	0.9788		5,633.7136	5,633.7136	0.2628		5,640.2830
<b>Total</b>	<b>3.6407</b>	<b>12.3021</b>	<b>14.5071</b>	<b>0.0594</b>	<b>3.4972</b>	<b>0.0965</b>	<b>3.5937</b>	<b>0.9372</b>	<b>0.0939</b>	<b>1.0311</b>		<b>6,458.0452</b>	<b>6,458.0452</b>	<b>0.2787</b>	<b>0.0151</b>	<b>6,469.5161</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
Energy	0.0542	0.4927	0.4139	2.9600e-003		0.0375	0.0375		0.0375	0.0375		591.2739	591.2739	0.0113	0.0108	594.7876
Mobile	1.7186	11.6150	13.9082	0.0552	3.4972	0.0442	3.5414	0.9372	0.0416	0.9788		5,633.7136	5,633.7136	0.2628		5,640.2830
<b>Total</b>	<b>3.6194</b>	<b>12.1079</b>	<b>14.3440</b>	<b>0.0582</b>	<b>3.4972</b>	<b>0.0817</b>	<b>3.5789</b>	<b>0.9372</b>	<b>0.0791</b>	<b>1.0163</b>		<b>6,225.0343</b>	<b>6,225.0343</b>	<b>0.2742</b>	<b>0.0108</b>	<b>6,235.1205</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.59	1.58	1.12	1.95	0.00	15.29	0.41	0.00	15.71	1.43	0.00	3.61	3.61	1.60	28.26	3.62

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2021	5/3/2021	5	3	
2	Grading	Grading	5/4/2021	5/11/2021	5	6	
3	Building Construction	Building Construction	5/12/2021	3/15/2022	5	220	
4	Paving	Paving	5/12/2021	3/15/2022	5	220	
5	Architectural Coating	Architectural Coating	5/12/2021	3/15/2022	5	220	

**Acres of Grading (Site Preparation Phase): 4.5****Acres of Grading (Grading Phase): 3****Acres of Paving: 0.97****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 108,546; Non-Residential Outdoor: 36,182; Striped Parking Area: 2,592 (Architectural Coating – sqft)****OffRoad Equipment**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	49.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.883 2	2,372.883 2	0.7674		2,392.069 2
<b>Total</b>	<b>1.5463</b>	<b>18.2862</b>	<b>10.7496</b>	<b>0.0245</b>	<b>1.5908</b>	<b>0.7019</b>	<b>2.2926</b>	<b>0.1718</b>	<b>0.6457</b>	<b>0.8175</b>		<b>2,372.883 2</b>	<b>2,372.883 2</b>	<b>0.7674</b>		<b>2,392.069 2</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.2 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0396	0.0208	0.2671	6.4000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		64.1367	64.1367	1.8600e-003		64.1833
<b>Total</b>	<b>0.0396</b>	<b>0.0208</b>	<b>0.2671</b>	<b>6.4000e-004</b>	<b>0.0657</b>	<b>4.3000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>64.1367</b>	<b>64.1367</b>	<b>1.8600e-003</b>		<b>64.1833</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	0.3008	1.3034	11.8595	0.0245		0.0401	0.0401		0.0401	0.0401	0.0000	2,372.883 2	2,372.883 2	0.7674		2,392.069 2
<b>Total</b>	<b>0.3008</b>	<b>1.3034</b>	<b>11.8595</b>	<b>0.0245</b>	<b>0.6204</b>	<b>0.0401</b>	<b>0.6605</b>	<b>0.0670</b>	<b>0.0401</b>	<b>0.1071</b>	<b>0.0000</b>	<b>2,372.883 2</b>	<b>2,372.883 2</b>	<b>0.7674</b>		<b>2,392.069 2</b>



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.2 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0396	0.0208	0.2671	6.4000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		64.1367	64.1367	1.8600e-003		64.1833
<b>Total</b>	<b>0.0396</b>	<b>0.0208</b>	<b>0.2671</b>	<b>6.4000e-004</b>	<b>0.0657</b>	<b>4.3000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>64.1367</b>	<b>64.1367</b>	<b>1.8600e-003</b>		<b>64.1833</b>

**3.3 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
<b>Total</b>	<b>1.8271</b>	<b>20.2135</b>	<b>9.7604</b>	<b>0.0206</b>	<b>6.5523</b>	<b>0.9158</b>	<b>7.4681</b>	<b>3.3675</b>	<b>0.8425</b>	<b>4.2100</b>		<b>1,995.6114</b>	<b>1,995.6114</b>	<b>0.6454</b>		<b>2,011.7470</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.3 Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0495	0.0260	0.3339	8.1000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		80.1709	80.1709	2.3300e-003		80.2291
<b>Total</b>	<b>0.0495</b>	<b>0.0260</b>	<b>0.3339</b>	<b>8.1000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>80.1709</b>	<b>80.1709</b>	<b>2.3300e-003</b>		<b>80.2291</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	0.2522	1.0927	10.9071	0.0206		0.0336	0.0336		0.0336	0.0336	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
<b>Total</b>	<b>0.2522</b>	<b>1.0927</b>	<b>10.9071</b>	<b>0.0206</b>	<b>2.5554</b>	<b>0.0336</b>	<b>2.5890</b>	<b>1.3133</b>	<b>0.0336</b>	<b>1.3469</b>	<b>0.0000</b>	<b>1,995.6114</b>	<b>1,995.6114</b>	<b>0.6454</b>		<b>2,011.7470</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.3 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0495	0.0260	0.3339	8.1000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		80.1709	80.1709	2.3300e-003		80.2291
<b>Total</b>	<b>0.0495</b>	<b>0.0260</b>	<b>0.3339</b>	<b>8.1000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>80.1709</b>	<b>80.1709</b>	<b>2.3300e-003</b>		<b>80.2291</b>

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
<b>Total</b>	<b>2.0451</b>	<b>16.0275</b>	<b>14.5629</b>	<b>0.0250</b>		<b>0.8173</b>	<b>0.8173</b>		<b>0.7831</b>	<b>0.7831</b>		<b>2,288.9355</b>	<b>2,288.9355</b>	<b>0.4503</b>		<b>2,300.1935</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0600	2.0760	0.3728	5.3800e-003	0.1288	6.0500e-003	0.1348	0.0371	5.7800e-003	0.0429		563.9543	563.9543	0.0234		564.5399
Worker	0.2427	0.1272	1.6361	3.9500e-003	0.4025	2.6300e-003	0.4052	0.1068	2.4300e-003	0.1092		392.8375	392.8375	0.0114		393.1224
<b>Total</b>	<b>0.3028</b>	<b>2.2033</b>	<b>2.0090</b>	<b>9.3300e-003</b>	<b>0.5313</b>	<b>8.6800e-003</b>	<b>0.5400</b>	<b>0.1439</b>	<b>8.2100e-003</b>	<b>0.1521</b>		<b>956.7918</b>	<b>956.7918</b>	<b>0.0348</b>		<b>957.6623</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	3.8705	14.9355	0.0250		0.0352	0.0352		0.0352	0.0352	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
<b>Total</b>	<b>0.3296</b>	<b>3.8705</b>	<b>14.9355</b>	<b>0.0250</b>		<b>0.0352</b>	<b>0.0352</b>		<b>0.0352</b>	<b>0.0352</b>	<b>0.0000</b>	<b>2,288.9355</b>	<b>2,288.9355</b>	<b>0.4503</b>		<b>2,300.1935</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0600	2.0760	0.3728	5.3800e-003	0.1288	6.0500e-003	0.1348	0.0371	5.7800e-003	0.0429		563.9543	563.9543	0.0234		564.5399
Worker	0.2427	0.1272	1.6361	3.9500e-003	0.4025	2.6300e-003	0.4052	0.1068	2.4300e-003	0.1092		392.8375	392.8375	0.0114		393.1224
<b>Total</b>	<b>0.3028</b>	<b>2.2033</b>	<b>2.0090</b>	<b>9.3300e-003</b>	<b>0.5313</b>	<b>8.6800e-003</b>	<b>0.5400</b>	<b>0.1439</b>	<b>8.2100e-003</b>	<b>0.1521</b>		<b>956.7918</b>	<b>956.7918</b>	<b>0.0348</b>		<b>957.6623</b>

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230
<b>Total</b>	<b>1.8555</b>	<b>14.6040</b>	<b>14.3533</b>	<b>0.0250</b>		<b>0.7022</b>	<b>0.7022</b>		<b>0.6731</b>	<b>0.6731</b>		<b>2,289.2813</b>	<b>2,289.2813</b>	<b>0.4417</b>		<b>2,300.3230</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0557	1.9731	0.3437	5.3300e-003	0.1288	5.2500e-003	0.1340	0.0371	5.0300e-003	0.0421		559.0002	559.0002	0.0226		559.5638
Worker	0.2241	0.1133	1.4870	3.8100e-003	0.4025	2.5300e-003	0.4051	0.1068	2.3300e-003	0.1091		378.8999	378.8999	0.0101		379.1530
<b>Total</b>	<b>0.2799</b>	<b>2.0865</b>	<b>1.8307</b>	<b>9.1400e-003</b>	<b>0.5313</b>	<b>7.7800e-003</b>	<b>0.5391</b>	<b>0.1439</b>	<b>7.3600e-003</b>	<b>0.1512</b>		<b>937.9000</b>	<b>937.9000</b>	<b>0.0327</b>		<b>938.7168</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	3.8705	14.9355	0.0250		0.0352	0.0352		0.0352	0.0352	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230
<b>Total</b>	<b>0.3296</b>	<b>3.8705</b>	<b>14.9355</b>	<b>0.0250</b>		<b>0.0352</b>	<b>0.0352</b>		<b>0.0352</b>	<b>0.0352</b>	<b>0.0000</b>	<b>2,289.2813</b>	<b>2,289.2813</b>	<b>0.4417</b>		<b>2,300.3230</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0557	1.9731	0.3437	5.3300e-003	0.1288	5.2500e-003	0.1340	0.0371	5.0300e-003	0.0421		559.0002	559.0002	0.0226		559.5638
Worker	0.2241	0.1133	1.4870	3.8100e-003	0.4025	2.5300e-003	0.4051	0.1068	2.3300e-003	0.1091		378.8999	378.8999	0.0101		379.1530
<b>Total</b>	<b>0.2799</b>	<b>2.0865</b>	<b>1.8307</b>	<b>9.1400e-003</b>	<b>0.5313</b>	<b>7.7800e-003</b>	<b>0.5391</b>	<b>0.1439</b>	<b>7.3600e-003</b>	<b>0.1512</b>		<b>937.9000</b>	<b>937.9000</b>	<b>0.0327</b>		<b>938.7168</b>

**3.5 Paving - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0749</b>	<b>10.6478</b>	<b>11.7756</b>	<b>0.0178</b>		<b>0.5826</b>	<b>0.5826</b>		<b>0.5371</b>	<b>0.5371</b>		<b>1,709.1107</b>	<b>1,709.1107</b>	<b>0.5417</b>		<b>1,722.6524</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.5 Paving - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0743	0.0390	0.5009	1.2100e-003	0.1232	8.1000e-004	0.1240	0.0327	7.4000e-004	0.0334		120.2564	120.2564	3.4900e-003		120.3436
<b>Total</b>	<b>0.0743</b>	<b>0.0390</b>	<b>0.5009</b>	<b>1.2100e-003</b>	<b>0.1232</b>	<b>8.1000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.4000e-004</b>	<b>0.0334</b>		<b>120.2564</b>	<b>120.2564</b>	<b>3.4900e-003</b>		<b>120.3436</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2104	0.9117	12.9737	0.0178		0.0281	0.0281		0.0281	0.0281	0.0000	1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2219</b>	<b>0.9117</b>	<b>12.9737</b>	<b>0.0178</b>		<b>0.0281</b>	<b>0.0281</b>		<b>0.0281</b>	<b>0.0281</b>	<b>0.0000</b>	<b>1,709.1107</b>	<b>1,709.1107</b>	<b>0.5417</b>		<b>1,722.6524</b>



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.5 Paving - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0743	0.0390	0.5009	1.2100e-003	0.1232	8.1000e-004	0.1240	0.0327	7.4000e-004	0.0334		120.2564	120.2564	3.4900e-003		120.3436
<b>Total</b>	<b>0.0743</b>	<b>0.0390</b>	<b>0.5009</b>	<b>1.2100e-003</b>	<b>0.1232</b>	<b>8.1000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.4000e-004</b>	<b>0.0334</b>		<b>120.2564</b>	<b>120.2564</b>	<b>3.4900e-003</b>		<b>120.3436</b>

**3.5 Paving - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9527</b>	<b>9.3322</b>	<b>11.6970</b>	<b>0.0179</b>		<b>0.4879</b>	<b>0.4879</b>		<b>0.4500</b>	<b>0.4500</b>		<b>1,709.6892</b>	<b>1,709.6892</b>	<b>0.5419</b>		<b>1,723.2356</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.5 Paving - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0686	0.0347	0.4552	1.1700e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		115.9898	115.9898	3.1000e-003		116.0673
<b>Total</b>	<b>0.0686</b>	<b>0.0347</b>	<b>0.4552</b>	<b>1.1700e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>115.9898</b>	<b>115.9898</b>	<b>3.1000e-003</b>		<b>116.0673</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2104	0.9117	12.9737	0.0179		0.0281	0.0281		0.0281	0.0281	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2219</b>	<b>0.9117</b>	<b>12.9737</b>	<b>0.0179</b>		<b>0.0281</b>	<b>0.0281</b>		<b>0.0281</b>	<b>0.0281</b>	<b>0.0000</b>	<b>1,709.6892</b>	<b>1,709.6892</b>	<b>0.5419</b>		<b>1,723.2356</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.5 Paving - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0686	0.0347	0.4552	1.1700e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		115.9898	115.9898	3.1000e-003		116.0673
<b>Total</b>	<b>0.0686</b>	<b>0.0347</b>	<b>0.4552</b>	<b>1.1700e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>115.9898</b>	<b>115.9898</b>	<b>3.1000e-003</b>		<b>116.0673</b>

**3.6 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>4.8746</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.6 Architectural Coating - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0495	0.0260	0.3339	8.1000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		80.1709	80.1709	2.3300e-003		80.2291
<b>Total</b>	<b>0.0495</b>	<b>0.0260</b>	<b>0.3339</b>	<b>8.1000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>80.1709</b>	<b>80.1709</b>	<b>2.3300e-003</b>		<b>80.2291</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>4.6854</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.6 Architectural Coating - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0495	0.0260	0.3339	8.1000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		80.1709	80.1709	2.3300e-003		80.2291
<b>Total</b>	<b>0.0495</b>	<b>0.0260</b>	<b>0.3339</b>	<b>8.1000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>80.1709</b>	<b>80.1709</b>	<b>2.3300e-003</b>		<b>80.2291</b>

**3.6 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>4.8602</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.6 Architectural Coating - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0457	0.0231	0.3035	7.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		77.3265	77.3265	2.0700e-003		77.3782
<b>Total</b>	<b>0.0457</b>	<b>0.0231</b>	<b>0.3035</b>	<b>7.8000e-004</b>	<b>0.0822</b>	<b>5.2000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.8000e-004</b>	<b>0.0223</b>		<b>77.3265</b>	<b>77.3265</b>	<b>2.0700e-003</b>		<b>77.3782</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>4.6854</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.6 Architectural Coating - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0457	0.0231	0.3035	7.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		77.3265	77.3265	2.0700e-003		77.3782
<b>Total</b>	<b>0.0457</b>	<b>0.0231</b>	<b>0.3035</b>	<b>7.8000e-004</b>	<b>0.0822</b>	<b>5.2000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.8000e-004</b>	<b>0.0223</b>		<b>77.3265</b>	<b>77.3265</b>	<b>2.0700e-003</b>		<b>77.3782</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7186	11.6150	13.9082	0.0552	3.4972	0.0442	3.5414	0.9372	0.0416	0.9788		5,633.7136	5,633.7136	0.2628		5,640.2830
Unmitigated	1.7186	11.6150	13.9082	0.0552	3.4972	0.0442	3.5414	0.9372	0.0416	0.9788		5,633.7136	5,633.7136	0.2628		5,640.2830

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	857.85	859.95	624.75	1,567,158	1,567,158
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	857.85	859.95	624.75	1,567,158	1,567,158

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

## 4.4 Fleet Mix



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710
Parking Lot	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710
Recreational Swimming Pool	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0542	0.4927	0.4139	2.9600e-003		0.0375	0.0375		0.0375	0.0375		591.2739	591.2739	0.0113	0.0108	594.7876
NaturalGas Unmitigated	0.0756	0.6869	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.2849	824.2849	0.0158	0.0151	829.1832

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	7006.42	0.0756	0.6869	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.2849	824.2849	0.0158	0.0151	829.1832
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0756</b>	<b>0.6869</b>	<b>0.5770</b>	<b>4.1200e-003</b>		<b>0.0522</b>	<b>0.0522</b>		<b>0.0522</b>	<b>0.0522</b>		<b>824.2849</b>	<b>824.2849</b>	<b>0.0158</b>	<b>0.0151</b>	<b>829.1832</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	5.02583	0.0542	0.4927	0.4139	2.9600e-003		0.0375	0.0375		0.0375	0.0375		591.2739	591.2739	0.0113	0.0108	594.7876
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0542</b>	<b>0.4927</b>	<b>0.4139</b>	<b>2.9600e-003</b>		<b>0.0375</b>	<b>0.0375</b>		<b>0.0375</b>	<b>0.0375</b>		<b>591.2739</b>	<b>591.2739</b>	<b>0.0113</b>	<b>0.0108</b>	<b>594.7876</b>

**6.0 Area Detail**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
Unmitigated	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0300e-003	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
<b>Total</b>	<b>1.8465</b>	<b>2.0000e-004</b>	<b>0.0219</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>0.0468</b>	<b>0.0468</b>	<b>1.2000e-004</b>		<b>0.0499</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0300e-003	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
<b>Total</b>	<b>1.8465</b>	<b>2.0000e-004</b>	<b>0.0219</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>0.0468</b>	<b>0.0468</b>	<b>1.2000e-004</b>		<b>0.0499</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

## Three Rivers Hampton Inn & Suites

### Tulare County, Winter

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	108.00	Space	0.97	43,200.00	0
Hotel	105.00	Room	1.81	72,364.00	0
Recreational Swimming Pool	0.80	1000sqft	0.02	800.00	0

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	51
Climate Zone	7			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	549	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

Project Characteristics - Southern California Edison improved their CO2 emissions to 549 lb/MWh in 2017.

Land Use - Project information is derived from the project feasibility study (HVS Consulting & Valuation 2020) , preliminary design (DVB Architecture 2020), and traffic study (VRPA Technologies, Inc. 2020).

Construction Phase - Building construction, paving, and painting will occur simultaneously.

Vehicle Trips - All trips attributed to hotel use. Traffic Impact Study Report (VRPA Technologies, Inc. 2020).

Energy Use -

Construction Off-road Equipment Mitigation - SJVAPCD Rule VII Fugitive PM10 prohibitions, rules 8021-8071. Required clean fleet is a MM aimed to reduce NOx and comply with Rule 9510.

Energy Mitigation - Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018).

Water Mitigation - CA water efficient appliance requirements.

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	220.00
tblConstructionPhase	NumDays	10.00	220.00
tblLandUse	LandUseSquareFeet	152,460.00	72,364.00
tblLandUse	LotAcreage	3.50	1.81
tblProjectCharacteristics	CO2IntensityFactor	702.44	549
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	33.82	0.00

## 2.0 Emissions Summary

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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	8.3962	30.5264	30.6734	0.0563	6.6345	1.5042	7.5508	3.3893	1.4240	4.2323	0.0000	5,345.568 2	5,345.568 2	1.0526	0.0000	5,371.882 5
2022	8.0401	27.5373	30.1507	0.0560	0.7367	1.2811	2.0178	0.1983	1.2135	1.4119	0.0000	5,323.153 9	5,323.153 9	1.0405	0.0000	5,349.166 2
Maximum	8.3962	30.5264	30.6734	0.0563	6.6345	1.5042	7.5508	3.3893	1.4240	4.2323	0.0000	5,345.568 2	5,345.568 2	1.0526	0.0000	5,371.882 5

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	5.6386	7.2351	32.2590	0.0563	2.6376	0.0775	2.6717	1.3351	0.0769	1.3692	0.0000	5,345.568 2	5,345.568 2	1.0526	0.0000	5,371.882 5
2022	5.6086	7.1036	32.0285	0.0560	0.7367	0.0765	0.8132	0.1983	0.0760	0.2743	0.0000	5,323.153 9	5,323.153 9	1.0405	0.0000	5,349.166 2
Maximum	5.6386	7.2351	32.2590	0.0563	2.6376	0.0775	2.6717	1.3351	0.0769	1.3692	0.0000	5,345.568 2	5,345.568 2	1.0526	0.0000	5,371.882 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	31.57	75.31	-5.69	0.00	54.22	94.47	63.58	57.26	94.21	70.88	0.00	0.00	0.00	0.00	0.00	0.00

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
Energy	0.0756	0.6869	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.2849	824.2849	0.0158	0.0151	829.1832
Mobile	1.3017	11.7853	13.3078	0.0504	3.4972	0.0455	3.5427	0.9372	0.0429	0.9801		5,146.001 1	5,146.001 1	0.2768		5,152.921 7
<b>Total</b>	<b>3.2238</b>	<b>12.4724</b>	<b>13.9067</b>	<b>0.0545</b>	<b>3.4972</b>	<b>0.0978</b>	<b>3.5950</b>	<b>0.9372</b>	<b>0.0952</b>	<b>1.0324</b>		<b>5,970.332 7</b>	<b>5,970.332 7</b>	<b>0.2927</b>	<b>0.0151</b>	<b>5,982.154 7</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
Energy	0.0542	0.4927	0.4139	2.9600e-003		0.0375	0.0375		0.0375	0.0375		591.2739	591.2739	0.0113	0.0108	594.7876
Mobile	1.3017	11.7853	13.3078	0.0504	3.4972	0.0455	3.5427	0.9372	0.0429	0.9801		5,146.001 1	5,146.001 1	0.2768		5,152.921 7
<b>Total</b>	<b>3.2024</b>	<b>12.2782</b>	<b>13.7436</b>	<b>0.0534</b>	<b>3.4972</b>	<b>0.0830</b>	<b>3.5803</b>	<b>0.9372</b>	<b>0.0804</b>	<b>1.0176</b>		<b>5,737.321 8</b>	<b>5,737.321 8</b>	<b>0.2883</b>	<b>0.0108</b>	<b>5,747.759 2</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.66	1.56	1.17	2.13	0.00	15.08	0.41	0.00	15.50	1.43	0.00	3.90	3.90	1.53	28.26	3.92

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2021	5/3/2021	5	3	
2	Grading	Grading	5/4/2021	5/11/2021	5	6	
3	Building Construction	Building Construction	5/12/2021	3/15/2022	5	220	
4	Paving	Paving	5/12/2021	3/15/2022	5	220	
5	Architectural Coating	Architectural Coating	5/12/2021	3/15/2022	5	220	

**Acres of Grading (Site Preparation Phase): 4.5****Acres of Grading (Grading Phase): 3****Acres of Paving: 0.97****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 108,546; Non-Residential Outdoor: 36,182; Striped Parking Area: 2,592 (Architectural Coating – sqft)****OffRoad Equipment**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	49.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.883 2	2,372.883 2	0.7674		2,392.069 2
<b>Total</b>	<b>1.5463</b>	<b>18.2862</b>	<b>10.7496</b>	<b>0.0245</b>	<b>1.5908</b>	<b>0.7019</b>	<b>2.2926</b>	<b>0.1718</b>	<b>0.6457</b>	<b>0.8175</b>		<b>2,372.883 2</b>	<b>2,372.883 2</b>	<b>0.7674</b>		<b>2,392.069 2</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.2 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0366	0.0244	0.2247	5.6000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		56.1353	56.1353	1.6300e-003		56.1761
<b>Total</b>	<b>0.0366</b>	<b>0.0244</b>	<b>0.2247</b>	<b>5.6000e-004</b>	<b>0.0657</b>	<b>4.3000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>56.1353</b>	<b>56.1353</b>	<b>1.6300e-003</b>		<b>56.1761</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	0.3008	1.3034	11.8595	0.0245		0.0401	0.0401		0.0401	0.0401	0.0000	2,372.883 2	2,372.883 2	0.7674		2,392.069 2
<b>Total</b>	<b>0.3008</b>	<b>1.3034</b>	<b>11.8595</b>	<b>0.0245</b>	<b>0.6204</b>	<b>0.0401</b>	<b>0.6605</b>	<b>0.0670</b>	<b>0.0401</b>	<b>0.1071</b>	<b>0.0000</b>	<b>2,372.883 2</b>	<b>2,372.883 2</b>	<b>0.7674</b>		<b>2,392.069 2</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.2 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0366	0.0244	0.2247	5.6000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		56.1353	56.1353	1.6300e-003		56.1761
<b>Total</b>	<b>0.0366</b>	<b>0.0244</b>	<b>0.2247</b>	<b>5.6000e-004</b>	<b>0.0657</b>	<b>4.3000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>56.1353</b>	<b>56.1353</b>	<b>1.6300e-003</b>		<b>56.1761</b>

**3.3 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
<b>Total</b>	<b>1.8271</b>	<b>20.2135</b>	<b>9.7604</b>	<b>0.0206</b>	<b>6.5523</b>	<b>0.9158</b>	<b>7.4681</b>	<b>3.3675</b>	<b>0.8425</b>	<b>4.2100</b>		<b>1,995.6114</b>	<b>1,995.6114</b>	<b>0.6454</b>		<b>2,011.7470</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.3 Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0458	0.0305	0.2809	7.0000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		70.1692	70.1692	2.0400e-003		70.2201
<b>Total</b>	<b>0.0458</b>	<b>0.0305</b>	<b>0.2809</b>	<b>7.0000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>70.1692</b>	<b>70.1692</b>	<b>2.0400e-003</b>		<b>70.2201</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	0.2522	1.0927	10.9071	0.0206		0.0336	0.0336		0.0336	0.0336	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
<b>Total</b>	<b>0.2522</b>	<b>1.0927</b>	<b>10.9071</b>	<b>0.0206</b>	<b>2.5554</b>	<b>0.0336</b>	<b>2.5890</b>	<b>1.3133</b>	<b>0.0336</b>	<b>1.3469</b>	<b>0.0000</b>	<b>1,995.6114</b>	<b>1,995.6114</b>	<b>0.6454</b>		<b>2,011.7470</b>



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.3 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0458	0.0305	0.2809	7.0000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		70.1692	70.1692	2.0400e-003		70.2201
<b>Total</b>	<b>0.0458</b>	<b>0.0305</b>	<b>0.2809</b>	<b>7.0000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>70.1692</b>	<b>70.1692</b>	<b>2.0400e-003</b>		<b>70.2201</b>

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
<b>Total</b>	<b>2.0451</b>	<b>16.0275</b>	<b>14.5629</b>	<b>0.0250</b>		<b>0.8173</b>	<b>0.8173</b>		<b>0.7831</b>	<b>0.7831</b>		<b>2,288.9355</b>	<b>2,288.9355</b>	<b>0.4503</b>		<b>2,300.1935</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0631	2.0985	0.4390	5.2200e-003	0.1288	6.2800e-003	0.1351	0.0371	6.0100e-003	0.0431		546.8221	546.8221	0.0262		547.4772
Worker	0.2242	0.1495	1.3762	3.4500e-003	0.4025	2.6300e-003	0.4052	0.1068	2.4300e-003	0.1092		343.8289	343.8289	9.9700e-003		344.0783
<b>Total</b>	<b>0.2873</b>	<b>2.2480</b>	<b>1.8152</b>	<b>8.6700e-003</b>	<b>0.5313</b>	<b>8.9100e-003</b>	<b>0.5402</b>	<b>0.1439</b>	<b>8.4400e-003</b>	<b>0.1523</b>		<b>890.6510</b>	<b>890.6510</b>	<b>0.0362</b>		<b>891.5555</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	3.8705	14.9355	0.0250		0.0352	0.0352		0.0352	0.0352	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
<b>Total</b>	<b>0.3296</b>	<b>3.8705</b>	<b>14.9355</b>	<b>0.0250</b>		<b>0.0352</b>	<b>0.0352</b>		<b>0.0352</b>	<b>0.0352</b>	<b>0.0000</b>	<b>2,288.9355</b>	<b>2,288.9355</b>	<b>0.4503</b>		<b>2,300.1935</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0631	2.0985	0.4390	5.2200e-003	0.1288	6.2800e-003	0.1351	0.0371	6.0100e-003	0.0431		546.8221	546.8221	0.0262		547.4772
Worker	0.2242	0.1495	1.3762	3.4500e-003	0.4025	2.6300e-003	0.4052	0.1068	2.4300e-003	0.1092		343.8289	343.8289	9.9700e-003		344.0783
<b>Total</b>	<b>0.2873</b>	<b>2.2480</b>	<b>1.8152</b>	<b>8.6700e-003</b>	<b>0.5313</b>	<b>8.9100e-003</b>	<b>0.5402</b>	<b>0.1439</b>	<b>8.4400e-003</b>	<b>0.1523</b>		<b>890.6510</b>	<b>890.6510</b>	<b>0.0362</b>		<b>891.5555</b>

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230
<b>Total</b>	<b>1.8555</b>	<b>14.6040</b>	<b>14.3533</b>	<b>0.0250</b>		<b>0.7022</b>	<b>0.7022</b>		<b>0.6731</b>	<b>0.6731</b>		<b>2,289.2813</b>	<b>2,289.2813</b>	<b>0.4417</b>		<b>2,300.3230</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0586	1.9917	0.4055	5.1700e-003	0.1288	5.4800e-003	0.1343	0.0371	5.2400e-003	0.0423		541.8875	541.8875	0.0253		542.5195
Worker	0.2073	0.1331	1.2458	3.3300e-003	0.4025	2.5300e-003	0.4051	0.1068	2.3300e-003	0.1091		331.6425	331.6425	8.8500e-003		331.8638
<b>Total</b>	<b>0.2660</b>	<b>2.1248</b>	<b>1.6513</b>	<b>8.5000e-003</b>	<b>0.5313</b>	<b>8.0100e-003</b>	<b>0.5393</b>	<b>0.1439</b>	<b>7.5700e-003</b>	<b>0.1514</b>		<b>873.5300</b>	<b>873.5300</b>	<b>0.0341</b>		<b>874.3833</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	3.8705	14.9355	0.0250		0.0352	0.0352		0.0352	0.0352	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230
<b>Total</b>	<b>0.3296</b>	<b>3.8705</b>	<b>14.9355</b>	<b>0.0250</b>		<b>0.0352</b>	<b>0.0352</b>		<b>0.0352</b>	<b>0.0352</b>	<b>0.0000</b>	<b>2,289.2813</b>	<b>2,289.2813</b>	<b>0.4417</b>		<b>2,300.3230</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0586	1.9917	0.4055	5.1700e-003	0.1288	5.4800e-003	0.1343	0.0371	5.2400e-003	0.0423		541.8875	541.8875	0.0253		542.5195
Worker	0.2073	0.1331	1.2458	3.3300e-003	0.4025	2.5300e-003	0.4051	0.1068	2.3300e-003	0.1091		331.6425	331.6425	8.8500e-003		331.8638
<b>Total</b>	<b>0.2660</b>	<b>2.1248</b>	<b>1.6513</b>	<b>8.5000e-003</b>	<b>0.5313</b>	<b>8.0100e-003</b>	<b>0.5393</b>	<b>0.1439</b>	<b>7.5700e-003</b>	<b>0.1514</b>		<b>873.5300</b>	<b>873.5300</b>	<b>0.0341</b>		<b>874.3833</b>

**3.5 Paving - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0749</b>	<b>10.6478</b>	<b>11.7756</b>	<b>0.0178</b>		<b>0.5826</b>	<b>0.5826</b>		<b>0.5371</b>	<b>0.5371</b>		<b>1,709.1107</b>	<b>1,709.1107</b>	<b>0.5417</b>		<b>1,722.6524</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.5 Paving - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0686	0.0458	0.4213	1.0600e-003	0.1232	8.1000e-004	0.1240	0.0327	7.4000e-004	0.0334		105.2538	105.2538	3.0500e-003		105.3301
<b>Total</b>	<b>0.0686</b>	<b>0.0458</b>	<b>0.4213</b>	<b>1.0600e-003</b>	<b>0.1232</b>	<b>8.1000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.4000e-004</b>	<b>0.0334</b>		<b>105.2538</b>	<b>105.2538</b>	<b>3.0500e-003</b>		<b>105.3301</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2104	0.9117	12.9737	0.0178		0.0281	0.0281		0.0281	0.0281	0.0000	1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2219</b>	<b>0.9117</b>	<b>12.9737</b>	<b>0.0178</b>		<b>0.0281</b>	<b>0.0281</b>		<b>0.0281</b>	<b>0.0281</b>	<b>0.0000</b>	<b>1,709.1107</b>	<b>1,709.1107</b>	<b>0.5417</b>		<b>1,722.6524</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.5 Paving - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0686	0.0458	0.4213	1.0600e-003	0.1232	8.1000e-004	0.1240	0.0327	7.4000e-004	0.0334		105.2538	105.2538	3.0500e-003		105.3301
<b>Total</b>	<b>0.0686</b>	<b>0.0458</b>	<b>0.4213</b>	<b>1.0600e-003</b>	<b>0.1232</b>	<b>8.1000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.4000e-004</b>	<b>0.0334</b>		<b>105.2538</b>	<b>105.2538</b>	<b>3.0500e-003</b>		<b>105.3301</b>

**3.5 Paving - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9527</b>	<b>9.3322</b>	<b>11.6970</b>	<b>0.0179</b>		<b>0.4879</b>	<b>0.4879</b>		<b>0.4500</b>	<b>0.4500</b>		<b>1,709.6892</b>	<b>1,709.6892</b>	<b>0.5419</b>		<b>1,723.2356</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.5 Paving - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0635	0.0407	0.3814	1.0200e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		101.5232	101.5232	2.7100e-003		101.5910
<b>Total</b>	<b>0.0635</b>	<b>0.0407</b>	<b>0.3814</b>	<b>1.0200e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>101.5232</b>	<b>101.5232</b>	<b>2.7100e-003</b>		<b>101.5910</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2104	0.9117	12.9737	0.0179		0.0281	0.0281		0.0281	0.0281	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2219</b>	<b>0.9117</b>	<b>12.9737</b>	<b>0.0179</b>		<b>0.0281</b>	<b>0.0281</b>		<b>0.0281</b>	<b>0.0281</b>	<b>0.0000</b>	<b>1,709.6892</b>	<b>1,709.6892</b>	<b>0.5419</b>		<b>1,723.2356</b>



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.5 Paving - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0635	0.0407	0.3814	1.0200e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		101.5232	101.5232	2.7100e-003		101.5910
<b>Total</b>	<b>0.0635</b>	<b>0.0407</b>	<b>0.3814</b>	<b>1.0200e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>101.5232</b>	<b>101.5232</b>	<b>2.7100e-003</b>		<b>101.5910</b>

**3.6 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>4.8746</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.6 Architectural Coating - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0458	0.0305	0.2809	7.0000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		70.1692	70.1692	2.0400e-003		70.2201
<b>Total</b>	<b>0.0458</b>	<b>0.0305</b>	<b>0.2809</b>	<b>7.0000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>70.1692</b>	<b>70.1692</b>	<b>2.0400e-003</b>		<b>70.2201</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>4.6854</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.6 Architectural Coating - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0458	0.0305	0.2809	7.0000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		70.1692	70.1692	2.0400e-003		70.2201
<b>Total</b>	<b>0.0458</b>	<b>0.0305</b>	<b>0.2809</b>	<b>7.0000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>70.1692</b>	<b>70.1692</b>	<b>2.0400e-003</b>		<b>70.2201</b>

**3.6 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>4.8602</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.6 Architectural Coating - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0423	0.0272	0.2542	6.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		67.6822	67.6822	1.8100e-003		67.7273
<b>Total</b>	<b>0.0423</b>	<b>0.0272</b>	<b>0.2542</b>	<b>6.8000e-004</b>	<b>0.0822</b>	<b>5.2000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.8000e-004</b>	<b>0.0223</b>		<b>67.6822</b>	<b>67.6822</b>	<b>1.8100e-003</b>		<b>67.7273</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>4.6854</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.6 Architectural Coating - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0423	0.0272	0.2542	6.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		67.6822	67.6822	1.8100e-003		67.7273
<b>Total</b>	<b>0.0423</b>	<b>0.0272</b>	<b>0.2542</b>	<b>6.8000e-004</b>	<b>0.0822</b>	<b>5.2000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.8000e-004</b>	<b>0.0223</b>		<b>67.6822</b>	<b>67.6822</b>	<b>1.8100e-003</b>		<b>67.7273</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3017	11.7853	13.3078	0.0504	3.4972	0.0455	3.5427	0.9372	0.0429	0.9801		5,146.001 1	5,146.001 1	0.2768		5,152.921 7
Unmitigated	1.3017	11.7853	13.3078	0.0504	3.4972	0.0455	3.5427	0.9372	0.0429	0.9801		5,146.001 1	5,146.001 1	0.2768		5,152.921 7

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	857.85	859.95	624.75	1,567,158	1,567,158
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	857.85	859.95	624.75	1,567,158	1,567,158

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

## 4.4 Fleet Mix

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710
Parking Lot	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710
Recreational Swimming Pool	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710

## 5.0 Energy Detail

---

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0542	0.4927	0.4139	2.9600e-003		0.0375	0.0375		0.0375	0.0375		591.2739	591.2739	0.0113	0.0108	594.7876
NaturalGas Unmitigated	0.0756	0.6869	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.2849	824.2849	0.0158	0.0151	829.1832

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	7006.42	0.0756	0.6869	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.2849	824.2849	0.0158	0.0151	829.1832
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0756</b>	<b>0.6869</b>	<b>0.5770</b>	<b>4.1200e-003</b>		<b>0.0522</b>	<b>0.0522</b>		<b>0.0522</b>	<b>0.0522</b>		<b>824.2849</b>	<b>824.2849</b>	<b>0.0158</b>	<b>0.0151</b>	<b>829.1832</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	5.02583	0.0542	0.4927	0.4139	2.9600e-003		0.0375	0.0375		0.0375	0.0375		591.2739	591.2739	0.0113	0.0108	594.7876
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0542</b>	<b>0.4927</b>	<b>0.4139</b>	<b>2.9600e-003</b>		<b>0.0375</b>	<b>0.0375</b>		<b>0.0375</b>	<b>0.0375</b>		<b>591.2739</b>	<b>591.2739</b>	<b>0.0113</b>	<b>0.0108</b>	<b>594.7876</b>

**6.0 Area Detail**



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
Unmitigated	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0300e-003	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
<b>Total</b>	<b>1.8465</b>	<b>2.0000e-004</b>	<b>0.0219</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>0.0468</b>	<b>0.0468</b>	<b>1.2000e-004</b>		<b>0.0499</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0300e-003	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
<b>Total</b>	<b>1.8465</b>	<b>2.0000e-004</b>	<b>0.0219</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>0.0468</b>	<b>0.0468</b>	<b>1.2000e-004</b>		<b>0.0499</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# **Biological Resources Assessment**

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## **Hampton Inn and Suites Three Rivers**

Tulare County, California

### **Prepared for:**

Ineffable Hospitality, Inc

**August 19, 2020**



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS

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## **LIST OF ATTACHMENTS**

Attachment A – Special-Status Species Searches (9-Quad CNPS Search, CNNDDB Search, and Study Area IPaC Search)

Attachment B – Representative Site Photographs

Attachment C – Aquatic Resources Delineation Data Sheets

## **LIST OF ACRONYMS AND ABBREVIATIONS**

BA	Biological assessment
BCC	Birds of conservation concern
BIOS	Biogeographic Information and Observation System
BO	Biological opinion
BRA	Biological resources assessment
CARI	California Aquatic Resources Inventory
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Community Plan	Three Rivers Community Plan
CRPR	California Rare Plant Rank
CWA	Clean Water Act
ESA	Endangered Species Act
MBTA	Migratory Bird Treaty Act
MSL	Mean sea level
NAD	North American Datum
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
Project	Hampton Inn and Suites Three Rivers Project
RMA	Resource Management Agency
RWQCB	Regional Water Quality Control Board
SFEI	San Francisco Estuary Institute
SSC	CDFW Species of Special Concern
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group

## 1.0 INTRODUCTION

On behalf of Ineffable Hospitality, Inc., ECorp Consulting, Inc. conducted a biological resources assessment (BRA) for the approximately 4.57-acre Hampton Inn and Suites Three Rivers Project (Project) located in the community of Three Rivers in Tulare County, California. The purpose of the BRA was to collect information on the biological resources present or with the potential to occur in the Project Study Area, assess potential biological impacts related to Project activities, and identify potential mitigation measures to inform and support the Project's California Environmental Quality Act (CEQA) documentation for biological resources.

### 1.1 Project Location

The Project is located in the community of Three Rivers, California east of State Highway 198 (Sierra Drive), approximately 1,000 feet north of the Old Three Rivers Road intersection, and immediately south of the Comfort Inn and Suites (Figure 1. *Project Location and Vicinity*). The site corresponds to a portion of Section 26, Township 17 south, Range 28 (Mount Diablo Base and Meridian) east of the "Kaweah, California" 7.5-minute quadrangles (North American Datum [NAD]27) (U.S. Geological Survey [USGS] 1993). The approximate center of the site is located at latitude 36.424827° (NAD83) and longitude -118.914718° (NAD83) within the Upper Kaweah Watershed (Hydrologic Unit Code #180300007) Watershed (Natural Resources Conservation Service [NRCS] et al. 2019).

### 1.2 Project Description

The proposed Project entails the development of a 105-room hotel to be located off State Route 198 (Sierra Drive), approximately 1,100 feet north of Old Three Rivers Road.

### 1.3 Purpose of this Biological Resources Assessment

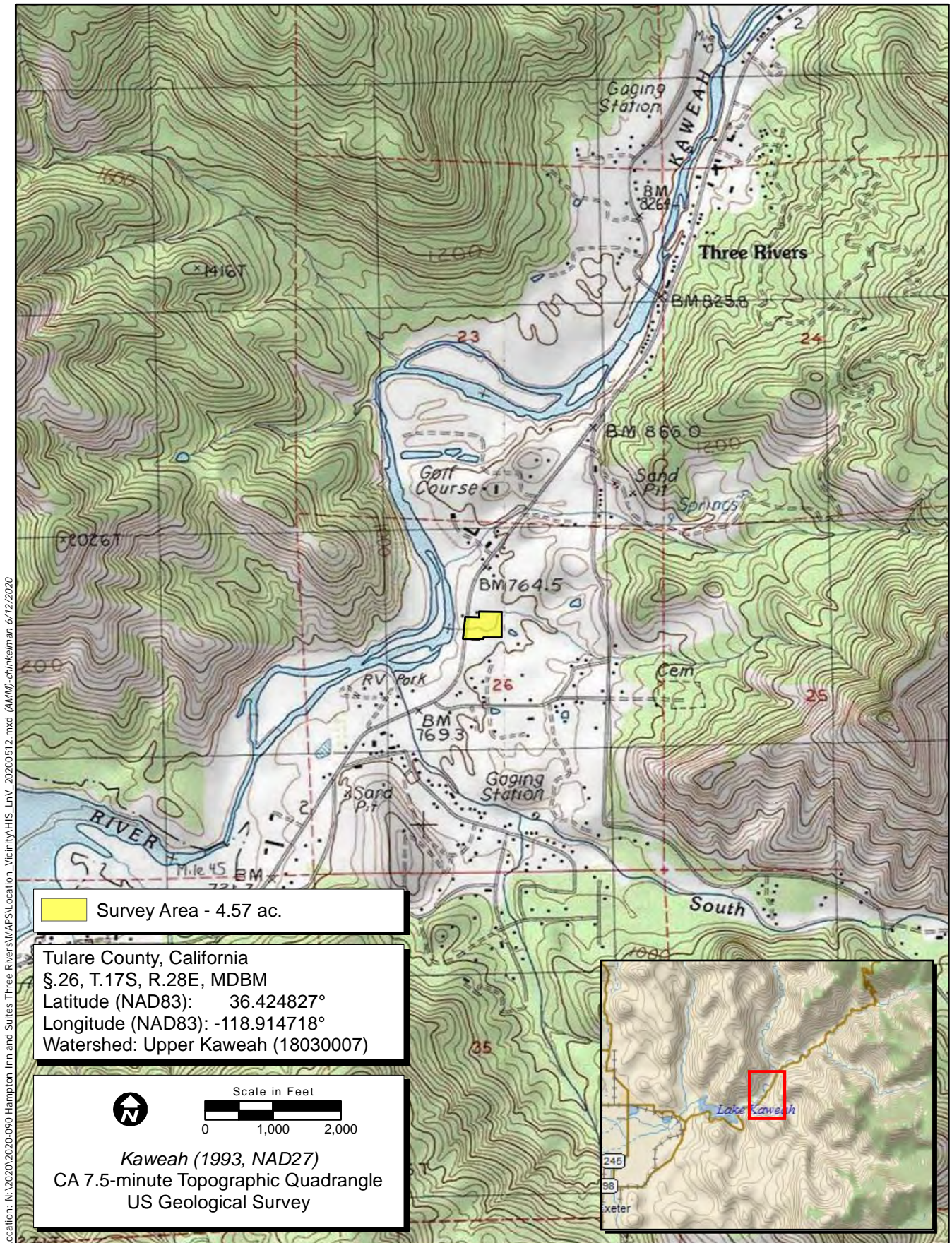
The purpose of this BRA is to assess the potential for occurrence of special-status plant and animal species and their habitats, and sensitive habitats such as wetlands and riparian communities within the Project Study Area. This assessment includes information generated from the reconnaissance-level site assessment and does not include a wetland delineation performed according to U.S. Army Corps of Engineers' (USACE's) standards, nor does it include determinate field surveys for special-status plant and animal species.

This assessment includes a preliminary analysis of impacts on biological resources anticipated to result from the Project as presently defined. The mitigation recommendations presented in this assessment are based on a preliminary impact analysis, a review of existing literature, and the results of the site reconnaissance survey.

For the purposes of this assessment, special-status species are defined as plants or animals that:

- are listed, proposed for listing, or candidates for future listing as threatened or endangered under the federal Endangered Species Act (ESA);





Location: N:\2020\2020-090 Hampton Inn and Suites Three Rivers\MAPS\Location\_Vicinity\HIS\_LnV\_20200512.mxd (AMM)-chinkelman 6/12/2020

Map Date: 6/12/2020  
 iService Layer Credits: Copyright© 2013 National Geographic Society, i-cubed  
 Copyright:(c) 2018 Garmin



**Figure 1. Project Location and Vicinity**

*2020-090 Hampton Inn and Suites in Three Rivers*



- are listed or candidates for future listing as threatened or endangered under the California ESA;
- meet the definitions of endangered or rare under § 15380 of the CEQA Guidelines;
- are identified as a species of special concern (SSC) by the California Department of Fish and Wildlife (CDFW);
- are birds identified as birds of conservation concern (BCC) by the U.S. Fish and Wildlife Service (USFWS);
- are considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered in California," "plants about which more information is needed," or "plants of limited distribution – a watch list" (i.e., species with a California Rare Plant Rank [CRPR] of 1B, 2, 3, or 4);
- are plants listed as rare under the California Native Plant Protection Act (NPPA) (California Fish and Game Code, § 1900 et seq.); or
- are fully protected in California in accordance with the California Fish and Game Code, § 3511 (birds), § 4700 (mammals), § 5050 (amphibians and reptiles), and § 5515 (fishes).

## **2.0 REGULATORY SETTING**

### **2.1 Federal Regulations**

#### **2.1.1 Endangered Species Act**

The ESA protects plants and animals that are listed as endangered or threatened by USFWS and the National Marine Fisheries Service (NMFS). Section 9 of the ESA prohibits, without authorization, the taking of listed wildlife, where take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant under federal jurisdiction and removing, cutting, digging up, damaging, or destroying any listed plant in any other area in knowing violation of state law (16 U.S. Code [USC] 1538).

Under Section 7 of the ESA, federal agencies are required to consult with USFWS and/or NMFS if their actions, including permit approvals and funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion (BO), USFWS and NMFS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of the ESA provides for the issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

### **Section 7 Consultation**

Section 7 of the ESA mandates that all federal agencies consult with USFWS and/or NMFS to ensure that federal agencies' actions do not jeopardize the continued existence of a listed species or adversely modify

critical habitat for listed species. If direct and/or indirect effects will occur to critical habitat that appreciably diminish the value of critical habitat for both the survival and recovery of a species, the adverse modifications will require formal consultation with USFWS or NMFS. If adverse effects are likely, the federal lead agency must prepare a biological assessment (BA) for the purpose of analyzing the potential effects of the proposed Project on listed species and critical habitat to establish and justify an "effect determination." Often a third-party, non-federal applicant drafts the BA for the lead federal agencies. The USFWS/NMFS reviews the BA; if it concludes that the Project may adversely affect a listed species or its habitat, it prepares a BO. The BO may recommend "reasonable and prudent alternatives" to the Project to avoid jeopardizing or adversely modifying habitat.

### **Critical Habitat**

Critical Habitat is defined in Section 3 of the ESA as:

1. the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the ESA, on which are found those physical or biological features essential to the conservation of the species and that may require special management considerations or protection; and
2. specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

For inclusion in a Critical Habitat designation, habitat within the geographical area occupied by the species at the time it was listed must first have features essential to the conservation of the species (16 USC 1533). Critical Habitat designations identify, to the extent known and using the best scientific data available, habitat areas that provide essential life cycle needs of the species (areas on which are found the primary constituent elements). Primary constituent elements are the physical and biological features that are essential to the conservation of the species and that may require special management considerations or protection. These include but are not limited to the following:

1. Space for individual and population growth and for normal behavior.
2. Food, water, air, light, minerals, or other nutritional or physiological requirements.
3. Cover or shelter.
4. Sites for breeding, reproduction, or rearing (or development) of offspring.
5. Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

#### **2.1.2 Migratory Bird Treaty Act**

The Migratory Bird Treaty Act (MBTA) implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations

or by permit. As authorized under the MBTA, USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of nongame birds in § 3800, migratory birds in § 3513, and birds of prey in § 3503.5 of the California Fish and Game Code.

### **2.1.3 Clean Water Act**

The purpose of the federal Clean Water Act (CWA) is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Section 404 of the CWA prohibits the discharge of dredged or fill material into “Waters of the United States” without a permit from the USACE. The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas “that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (USEPA) also has authority over wetlands, including the authority to veto permits issued by USACE under CWA Section 404(c).

Projects involving activities that have no more than minimal individual and cumulative adverse environmental effects may meet the conditions of one of the Nationwide Permits already issued by USACE (Federal Register 82:1860, January 6, 2017). If impacts on wetlands could be substantial, an individual permit is required. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

## **2.2 State and Local Regulations**

### **2.2.1 California Endangered Species Act**

The California ESA (California Fish and Game Code §§ 2050-2116) protects species of fish, wildlife, and plants listed by the State as endangered or threatened. Species identified as candidates for listing may also receive protection. Section 2080 of the California ESA prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit. Take is defined in Section 86 of the California Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The California ESA allows for take incidental to otherwise lawful projects under permits issued by the CDFW.

### **2.2.2 Fully Protected Species**

The State of California first began to designate species as “fully protected” prior to the creation of the federal and the California ESAs. Lists of fully protected species were initially developed to provide

protection to those animals that were rare or faced possible extinction and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESAs. Fully protected species are identified in the California Fish and Game Code § 4700 for mammals, § 3511 for birds, § 5050 for reptiles and amphibians, and § 5515 for fish.

These sections of the California Fish and Game Code provide that fully protected species may not be taken or possessed at any time, including prohibition of the CDFW from issuing incidental take permits for fully protected species under the California ESA. The CDFW will issue licenses or permits for take of these species for necessary scientific research or live capture and relocation pursuant to the permit, and may allow incidental take for lawful activities carried out under an approved Natural Community Conservation Plan within which such species are covered.

### **2.2.3 Native Plant Protection Act**

The NPPA of 1977 (California Fish and Game Code §§ 1900-1913) was established with the intent to “preserve, protect and enhance rare and endangered plants in this state.” The NPPA is administered by CDFW. The Fish and Game Commission has the authority to designate native plants as “endangered” or “rare.” The NPPA prohibits the take of plants listed under the NPPA, but the NPPA contains a number of exemptions to this prohibition that have not been clarified by regulation or judicial rule. In 1984, the California ESA brought under its protection all plants previously listed as endangered under the NPPA. Plants listed as rare under the NPPA are not protected under the California ESA, but are still protected under the provisions of NPPA. The Fish and Game Commission no longer lists plants under the NPPA, referring all listings to the California ESA.

### **2.2.4 California Fish and Game Code Special Protections for Birds**

In addition to protections contained within the California ESA and California Fish and Game Code § 3511 described above, the California Fish and Game Code includes a number of sections that specifically protect certain birds.

Section 3800 states that it is unlawful to take nongame birds, such as those occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds, except when in accordance with regulations of the California Fish and Game Commission or a mitigation plan approved by CDFW for mining operations.

Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird.

Section 3503.5 protects birds of prey (which includes eagles, hawks, falcons, kites, ospreys, and owls) and prohibits the take, possession, or destruction of any birds and their nests

Section 3505 makes it unlawful to take, sell, or purchase egrets, ospreys, and several exotic non-native species, or any part of these birds.

Section 3513 specifically prohibits the take or possession of any migratory nongame bird as designated in the MBTA.

### **2.2.5 Lake or Streambed Alteration Agreements**

Section 1602 of the California Fish and Game Code requires individuals or agencies to provide a Notification of Lake or Streambed Alteration to the CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.” The CDFW reviews the proposed actions and, if necessary, proposed measures to protect affected fish and wildlife resources. The final proposal mutually agreed upon by the CDFW and the applicant is the Lake or Streambed Alteration Agreement.

### **2.2.6 Porter-Cologne Water Quality Act**

The RWQCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of stormwater runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Storm Water Pollution Prevention Plan. Under the Porter-Cologne Water Quality Act, the RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, with any region that could affect the water of the state” [Water Code 13260(a)]. Waters of the State are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” [Water Code 13050 (e)]. The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State, that are not regulated by USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of a Waste Discharge Requirements for these activities.

### **2.2.7 California Environmental Quality Act**

In accordance with CEQA Guidelines § 15380, a species or subspecies not specifically protected under the federal or California ESAs or NPPA may be considered endangered, rare, or threatened for CEQA review purposes if the species meets certain criteria specified in the Guidelines. These criteria include definitions similar to definitions used in the ESA, the California ESA, and the NPPA. Section 15380 was included in the CEQA Guidelines primarily to address situations in which a project under review may have a significant effect on a species that has not been listed under the ESA, the California ESA, or the NPPA, but that may meet the definition of endangered, rare, or threatened. Animal species identified as SSC by CDFW and plants identified by the CNPS as rare, threatened, or endangered may meet the CEQA definition of rare or endangered.

## Species of Special Concern

SSC are defined by the CDFW as a species, subspecies, or distinct population of an animal native to California that are not legally protected under the federal ESA, California ESA, or California Fish and Game Code, but currently satisfies one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role.
- The species is listed as federally (but not State) threatened or endangered, or meets the State definition of threatened or endangered but has not formally been listed.
- The species has or is experiencing serious (nonscyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status.
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for State threatened or endangered status.
- SSC are typically associated with habitats that are threatened.

Depending on the policy of the lead agency, projects that result in substantial impacts to SSC may be considered significant under CEQA.

## U.S. Fish and Wildlife Service Birds of Conservation Concern

The 1988 amendment to the Fish and Wildlife Conservation Act mandates USFWS “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under ESA.” To meet this requirement, USFWS published a list of BCC for the U.S. (USFWS 2008) The list identifies the migratory and nonmigratory bird species (beyond those already designated as federally threatened or endangered) that represent USFWS’ highest conservation priorities. Depending on the policy of the lead agency, projects that result in substantial impacts to BCC may be considered significant under CEQA.

## California Rare Plant Ranks

The CNPS maintains the Inventory of Rare and Endangered Plants of California (CNPS 2020), which provides a list of plant species native to California that are threatened with extinction, have limited distributions, and/or low populations. Plant species meeting one of these criteria are assigned to one of six CRPRs. The rank system was developed in collaboration with government, academia, non-governmental organizations, and private sector botanists, and is jointly managed by CDFW and the CNPS. The CRPRs are currently recognized in the California Natural Diversity Database (CNDDDB). The following are definitions of the CNPS CRPRs:

- Rare Plant Rank 1A – presumed extirpated in California and either rare or extinct elsewhere.

- Rare Plant Rank 1B – rare, threatened, or endangered in California and elsewhere.
- Rare Plant Rank 2A – presumed extirpated in California, but more common elsewhere.
- Rare Plant Rank 2B – rare, threatened, or endangered in California but more common elsewhere.
- Rare Plant Rank 3 – a review list of plants about which more information is needed.
- Rare Plant Rank 4 – a watch list of plants of limited distribution.

Additionally, CNPS has defined Threat Ranks that are added to the CRPR as an extension. Threat Ranks designate the level of threat on a scale of 1 through 3, with 1 being the most threatened and 3 being the least threatened. Threat Ranks are generally present for all plants ranked 1B, 2B, or 4, and for the majority of plants ranked 3. Plant species ranked 1A and 2A (presumed extirpated in California), and some species ranked 3, which lack threat information, do not typically have a Threat Rank extension. The following are definitions of the CNPS Threat Ranks:

- Threat Rank 0.1 – Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat).
- Threat Rank 0.2 – Moderately threatened in California (20-80 percent of occurrences threatened/moderate degree and immediacy of threat).
- Threat Rank 0.3 – Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known).

Factors such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Rank; and differences in Threat Ranks do not constitute additional or different protection (CNPS 2018).

Depending on the policy of the lead agency, substantial impacts to plants ranked 1A, 1B, or 2, and 3 are typically considered significant under CEQA Guidelines § 15380. Significance under CEQA is typically evaluated on a case-by-case basis for plants ranked 4 and at the discretion of the CEQA lead agency.

### **California Environmental Quality Act Significance Criteria**

Sections 15063-15065 of the CEQA Guidelines address how an impact is identified as significant. Generally, impacts to listed (rare, threatened, or endangered) species are considered significant. Assessment of "impact significance" to populations of non-listed species (e.g., SSC) usually considers the proportion of the species' range that will be affected by a project, impacts to habitat, and the regional and population level effects.

Specifically, § 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant.



An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant under CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.

### **2.2.8 Tulare County General Plan/Three Rivers Community Plan**

In 2012, the Tulare County General Plan 2030 Update (Tulare County 2012) was approved. The General Plan provides guidance for the protection of natural and cultural resources and the protection of the health and safety of county residents with an emphasis on enhancing scenic landscapes, reducing pollutants, minimizing the threat of manmade natural hazards, and maintaining adequate water supplies.

The Biological Resources section of the Environmental Resource Management Element of the Tulare County General Plan includes the following goals that are pertinent to development of the Survey Area:

- ERM-1.1            Protection of Rare and Endangered Species, and
- ERM- 1.12        Management of Oak Woodland Communities.

Since 2013, the Tulare County Resource Management Agency (RMA) has intensified outreach efforts and reached out to the Three Rivers community by holding public meetings. Through various meetings, RMA staff has discussed various County policies, programs, processes, and procedures with its residents to further define the Three Rivers Community Plan (Community Plan; Tulare County 2018a). The vision for the Community Plan comprises the multitude of viewpoints from and throughout the community. The vision includes 22 key statements, as included below, which will provide appropriate direction to help guide public and private decisions affecting the community, including provisions for the overall direction, density, type of growth and protection of the natural environment that are consistent with the needs and desires of the Three Rivers community to maintain its rural character. These vision statements intensify what is already recognized throughout the state, that Three Rivers is a unique destination among Tulare County's rural foothill communities.

The purpose of the Community Plan (Tulare County 2018a) is to preserve and protect the values, character and assets of the community, including preservation of its historical rural character and valuable natural resources, while ensuring that economic growth remains vibrant and sustainable, consistent with the desired character of the community. Vision Statement 7 effectuates the desire of the community to "protect and preserve oak, sycamore and cottonwood woodlands." Goal 4 (Protection and Conservation of the Environment) of the Community Plan includes objectives that are pertinent to biological resources, including:

- 4.1.1 Preserving the Natural Environment
- 4.1.2 CEQA Compliance

As part of the Community Plan, a Voluntary Oak Woodlands Management Plan (Tulare County 2018b) has been adopted. If the County determines that a project will result in a significant effect to oak woodlands, the County shall require one or more oak woodland mitigation alternatives to mitigate for the significant effect associated with the conservation of oak woodlands.

### 3.0 METHODS

For the purposes of this assessment, special-status species are defined as plants or animals that:

- are listed, proposed for listing, or candidates for future listing as threatened or endangered under the ESA;
- are listed or candidates for future listing as threatened or endangered under the California ESA;
- meet the definitions of endangered or rare under Section 15380 of the CEQA Guidelines;
- are identified as an SSC by the CDFW;
- are plants considered by the California CNPS to be "rare, threatened, or endangered in California" (CRPR 1 and 2);
- are plants listed by CNPS as species about which more information is needed to determine their status (CRPR 3), and plants of limited distribution (CRPR 4);
- are plants listed as rare under the California NPPA, California Fish and Game Code, § 1900 et seq.; or
- are fully protected in California in accordance with the California Fish and Game Code, §§ 3511 (birds), 4700 (mammals), 5050 (amphibians and reptiles), and 5515 (fishes).

Only species that fall into one of the above-listed groups were considered for this assessment. Other species tracked by the CNDDDB but having no other special status were not considered to be special status and were not included within this analysis.

### 3.1 Literature Review

The following resources were reviewed to determine the special-status species that have been documented within or in the vicinity of the Study Area. Results of the species searches are included as Attachment A.

- CDFW CNDDDB data for the "Kaweah, California" 7.5-minute quadrangle as well as the eight surrounding USGS quadrangles (CDFW 2020a);
- USFWS Information, Planning, and Consultation System Resource Report List for the Project site (USFWS 2020a);

- CNPS' electronic Inventory of Rare and Endangered Plants of California was queried for the "Kaweah, California" 7.5-minute quadrangles and the eight surrounding quadrangles (CNPS 2020);
- CDFW Biogeographic Information and Observation System (BIOS) query of range maps for potentially occurring special-status species (CDFW 2020b); and
- USFWS Threatened & Endangered Species Active Critical Habitat Report (USFWS 2020b).

Additional background information was reviewed regarding the documented or potential occurrence of special-status species within or near the Project site from the following sources:

- The Status of Rare, Threatened, and Endangered Plants and Animals of California 2000-2004 (California Department of Fish and Game [CDFG] 2005);
- California Bird SSC (Shuford and Gardali 2008);
- Amphibian and Reptile SSC in California (Thompson et al. 2016);
- Mammalian SSC in California (Williams 1986);
- California's Wildlife, Volumes I-III (Zeiner, et al. 1988, 1990a, 1990b); and
- A Guide to Wildlife Habitats of California (Mayer and Laudenslayer Jr., eds. 1988).

### **3.2 Site Reconnaissance**

ECORP biologist Hannah Stone conducted a site assessment on May 15, 2020. During the field assessment, meandering transects were walked through the Study Area searching for aquatic resources, potential Waters of the U.S./State, and special-status species or their habitat. The findings of this site assessment have been incorporated into this BRA.

During the field survey, biological communities occurring onsite were characterized and the following biological resource information was collected:

- Vegetation communities within the Project site,
- Plant and animal species directly observed,
- Animal evidence (e.g., scat, tracks),
- Existing active raptor nest locations, and
- Burrows and any other special habitat features.

In addition, soil types were identified using the NRCS Web Soil Survey (NRCS 2020a).

An aquatic resources delineation was conducted within the Study Area on August 13, 2020 to identify any potential waters of the U.S./State. The field delineation was conducted by ECORP biologist Keith Kwan according to the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and

the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Arid West Manual) (USACE 2008).

### 3.3 Special-Status Species Considered for the Project

Special-status plant and animal species that resulted from database searches were evaluated for their potential to occur onsite. Species that are tracked in the CNDDDB but do not have any other special status, as defined above, were not included in this assessment. Species' potential to occur within the Project site was assessed based on the following criteria:

- **Present** - Species was observed during the site visit or is known to occur within the Project site based on documented occurrences within the CNDDDB or other literature.
- **Potential to Occur** - Habitat (including soils and elevation requirements) for the species occurs within the Project site.
- **Low Potential to Occur** - Marginal or limited amounts of habitat occur, and/or the species is not known to occur within the vicinity of the Project site based on CNDDDB records and other available documentation.
- **Absent** - No suitable habitat (including soils and elevation requirements) and/or the species is not known to occur within the vicinity of the Project site based on CNDDDB records and other documentation.

## 4.0 RESULTS

### 4.1 Site Characteristics and Land Use

The Study Area is currently undeveloped and is situated at an elevation range of approximately 750 to 775 feet above mean sea level (MSL) in the southern Sierra Nevada foothills subregion of the Sierra Nevada region of the California floristic province (Baldwin et. al. 2012). The Study Area appears to have been historically disturbed as remnant vehicles tracks are found throughout the site. According to Google Earth aerial photographs, an area of oak woodland was present in the eastern portion of the site through 2005 but had been cut down and removed by 2009. Remnants of the root balls can be found onsite in the form of shallow basins.

Representative photographs of the Study Area are provided in Attachment B.



The surrounding lands include undeveloped lands, the Comfort Inn and Suites, and rural residences.

### 4.2 Vegetation Communities and Land Cover Types


The Project is currently comprised primarily of annual grassland with remnant oak woodland and ruderal roadside areas along the boundaries (Figure 2. *Vegetation Communities and Land Cover Types/Aquatic Resources Delineation*).



### Map Features

-  Survey Area - 4.57 ac.
-  Reference Coordinates

### ARD Sample Points

-  Upland Sample Point

### Vegetation Communities and Land Cover Types




-  Annual Grassland
-  Oak Woodland
-  Ruderal/Developed

Photo Source: NAIP (2018)

Boundary Source: Cooper Aerial Surveys

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet

<sup>1</sup> Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.



**Figure 2. Vegetation Communities and Land Cover Types / Aquatic Resources Delineation**  
2020-090 Hampton Inn and Suites in Three Rivers

ECORP: N:\2020\2020-090 Hampton Inn and Suites Three Rivers\MAPS\Jurisdictional\_Delineation\HIS\_PWA\_Veg\_LC\_20200817.mxd (CCH)-chinkelman 8/17/2020

#### **4.2.1 Annual Grassland**

The annual grassland is dominated by ripgut brome (non-native, *Bromus diandrus*), rancher's fireweed (native, *Amsinckia menziesii*), white-stemmed filaree (non-native, *Erodium brachycarpum*), and yellow star-thistle (non-native, *Centaurea solstitialis*). Other plants found in the annual grassland include contorted primrose (native, *Camissonia strigulosa*), pink spineflower (native, *Chorizanthe membranacea*), cat's ear (non-native, *Hypochaeris* species), and ragweed (native, *Ambrosia* species). Scattered interior live oak (native, *Quercus wislizenii*) and elderberry (native, *Sambucus* sp.) are found within the annual grassland.

#### **Oak Woodland**

A small area of oak woodland is located in the southeastern corner of the Study Area. The oak woodland is largely situated on the adjacent property to the south but the dripline of the trees overlaps into the Study Area. The trees within the oak woodland include Valley oak (native, *Quercus lobata*) and interior live oak.

#### **Ruderal/Roadside**

The ruderal areas found at the property boundaries include weedy annual grassland species. The roadside along Sierra Drive includes a number of planted cottonwoods (non-native, *Populus* sp. cultivar) trees that have been topped.

### **4.3 Soils**

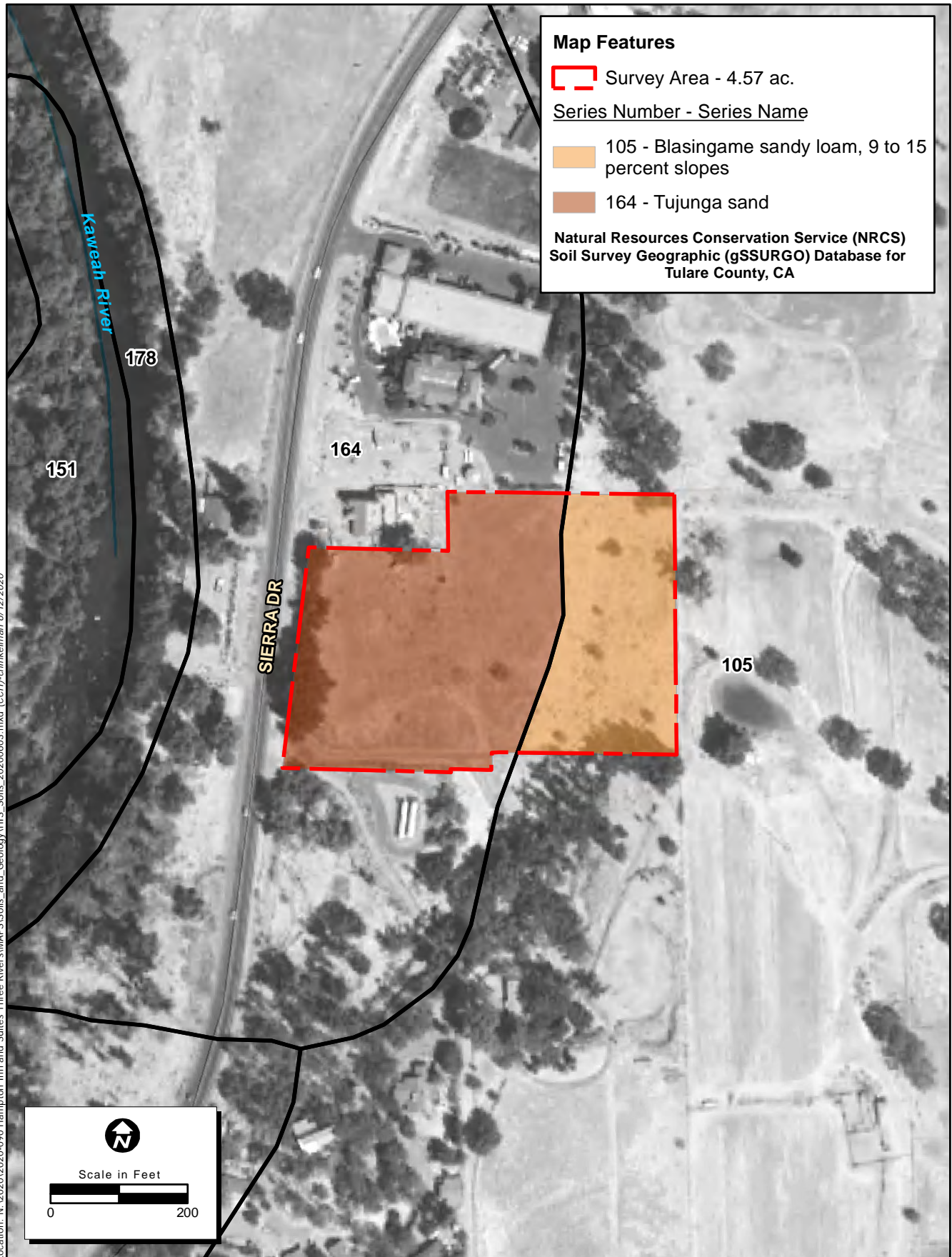
According to the *Web Soil Survey* (NRCS 2020a), there are two soil units mapped within the Study Area: (105) Blasingame sandy loam, 9 to 15 percent slopes and (164) Tujunga sand (Figure 3. *Natural Resources Conservation Service Soil Types*). Neither of these soil units are considered hydric (NRCS 2020b).

#### **4.3.1 Potential Aquatic Resources**

There are no aquatic features present onsite. An aquatic resources delineation was conducted on August 13, 2020. Three-parameter sample points were collected in the field according to USACE protocol, which confirmed the absence of hydrophytic vegetation, hydric soils, and wetland hydrology (Figure 2) (Attachment C). The sample points documented conditions in low-lying or suspect areas based on aerial photographs.

According to the California Aquatic Resources Inventory (CARI), there is one previously mapped aquatic resource for the Study Area (Figure 4. *California Aquatic Resources Inventory*). A "fluvial natural" linear feature was mapped from the northeastern corner to the southern central portion of the Study Area (San Francisco Estuary Institute [SFEI] 2017). It is worth noting that some CARI data contain "varying levels of detail, vintages, coverage, and classification" (SFEI 2020). Much of these data have not been ground-truthed. During the delineation, this area was dominated by weedy upland plants including ripgut brome and rancher's fireweed with no evidence of wetland soils or wetland hydrology, as documented by Sample Point 2 (Attachment C).





**Figure 3. Natural Resources Conservation Service Soil Types**





**Figure 4. California Aquatic Resources Inventory**



#### 4.4 Wildlife

Wildlife use onsite is expected to be minimal due to the close proximity of the Comfort Inn and Suites to the north, the highway to the west, surrounding rural residences and businesses, and the absence of significant onsite woodland or aquatic habitats. Several California ground squirrels (*Otospermophilus beecheyi*) and their burrows were found in scattered locations within the Study Area. Birds observed onsite during the May 2020 site visit included turkey vulture (*Cathartes aura*), acorn woodpecker (*Melanerpes formicivorus*), American crow (*Corvus brachyrhynchos*), tree swallow (*Tachycineta bicolor*), American robin (*Turdus migratorius*), and Brewer's blackbird (*Euphagus cyanocephalus*).

#### 4.5 Evaluation of Special-Status Species Identified in the Literature Search

A list of all special-status plant and wildlife species identified in the literature search as potentially occurring within the Project site is provided in Table 1. This table includes the listing status for each species, a brief habitat description, and a determination on the potential to occur in the Project site. The potential to occur is based upon species' known distribution, the vegetation communities and habitats present onsite, and the site elevation. Following the table is a brief description of each species with potential to occur. One special-status reptile, Blainville's horned lizard (*Phrynosoma blainvillii*), is included in this assessment even though it did not come up on the database searches because the Study Area is located within the known range of this species.

Species that were considered "Absent" included those not known to occur in the region and/or elevation of the Study Area or an absence of suitable habitat. These species are not discussed further in this assessment. The species identified through the database queries that are only tracked by the CNDDDB and possess no special status are not included in this assessment. Sensitive habitats that were identified through the database queries that are not located within the Study Area are not discussed in this assessment.

There are no special-status species previously documented within the Study Area, but several special-status species are known to occur within an approximate five-mile radius of the Project (see Attachment A).

Table 1. Potentially Occurring Special-Status Species						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Plants						
Abrams' onion <i>(Allium abramsii)</i>	–	–	1B.2	Lower montane coniferous forest, upper montane coniferous forest, on sandy soils derived from disintegrated granite (4,593'–6,562').	May–July	Absent-Suitable habitat is absent.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Call's angelica ( <i>Angelica callii</i> )	–	–	4.3	Mesic soils in cismontane woodland and lower montane coniferous forest (3,609'–6,562').	June–July	Absent-Suitable habitat is absent.
Kaweah brodiaea ( <i>Brodiaea insignis</i> )	–	CE	1B.2	Granitic or clay soils in cismontane woodland, meadows and seeps, and valley and foothill grassland (492'–4,594').	April–June	Potential-suitable habitat is present.
Shirley Meadows star-tulip ( <i>Calochortus westonii</i> )	–	–	1B.2	Granitic soils in broadleaved upland forest, lower montane coniferous forest, and meadows and seeps (4,921'–6,906').	May–June	Absent-Suitable habitat is absent.
Berry's morning-glory ( <i>Calystegia malacophylla</i> var. <i>berryi</i> )	–	–	3.3	Chaparral and lower montane coniferous forest (2,001'–8,005').	July–August	Absent-Suitable habitat is absent.
Bolander's woodreed ( <i>Cinna bolanderi</i> )	–	–	1B.2	Mesic soils and streamsides within meadows and seeps and upper montane coniferous forests (5,479'–8,005').	July–September	Absent-Suitable habitat is absent.
Springville clarkia ( <i>Clarkia springvillensis</i> )	FT	CE	1B.2	Granitic soils in chaparral, cismontane woodland, and valley and foothill grassland (803'–4003').	March–July	Potential-suitable habitat is present.
Marsh claytonia ( <i>Claytonia palustris</i> )	–	–	4.3	Meadows and seeps (mesic), marshes and swamps, and upper montane coniferous forest (3,280'–8,202').	May–October	Absent-Suitable habitat is absent.
Streambank spring beauty ( <i>Claytonia parviflora</i> ssp. <i>grandiflora</i> )	–	–	4.2	Occurs in rocky cismontane woodland (820'–3,937').	February–May	Low Potential-marginally suitable habitat is present.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Jepson's dodder ( <i>Cuscuta jepsonii</i> )	–	–	1B.2	Upper montane coniferous forest; lower montane coniferous forest; broadleaved upland forest; primary host species are <i>Ceanothus diversifolius</i> and <i>Ceanothus prostratus</i> (3,937'–7,546').	July–September	Absent-Suitable habitat is absent.
Rose-flowered larkspur ( <i>Delphinium purpusii</i> )	–	–	1B.3	Rocky, often carbonate soils in chaparral, cismontane woodland, pinyon and juniper woodland (984'–4,396').	April–May	Absent-Suitable habitat is absent.
Recurved larkspur ( <i>Delphinium recurvatum</i> )	–	–	1B.2	Chenopod scrub, cismontane woodland, and valley and foothill grasslands (10'–2,592').	March–June	Potential-suitable habitat is present.
Calico monkeyflower ( <i>Diplacus pictus</i> )	–	–	1B.2	Granitic, disturbed areas in broadleaf upland forest and cismontane woodland (328'–4,692').	March–May	Potential-suitable habitat is present.
Pierpoint Springs dudleya ( <i>Dudleya cymosa</i> ssp. <i>costatifolia</i> )	–	–	1B.2	Carbonate soils in chaparral and cismontane woodland (4,708'–5,249').	May–July	Absent-Suitable habitat is absent.
Mouse Buckwheat ( <i>Eriogonum nudum</i> var. <i>murinum</i> )	–	–	1B.2	Sandy soils in chaparral, cismontane woodland, and valley and foothill grassland (1,197'–3,707').	June–November	Potential-suitable habitat is present.
Spiny-sepaled button-celery ( <i>Eryngium spinosepalum</i> )	–	–	1B.2	Vernal pools and valley and foothill grassland (262'–3,199').	April–June	Absent-Suitable habitat is absent.
Kaweah monkeyflower ( <i>Erythranthe norrisii</i> )	–	–	1B.3	Carbonate, rocky soils in chaparral and cismontane woodland (1,197'–4,265').	March–May	Absent-Suitable habitat is absent.
Sierra Nevada monkeyflower ( <i>Erythranthe sierrae</i> )	–	–	4.2	Openings of cismontane woodland and lower montane coniferous forest or dry meadows and seeps (607'–7,497').	March–July	Low Potential-marginally suitable habitat is present.

Table 1. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Striped adobe-lily ( <i>Fritillaria striata</i> )	–	CT	1B.1	Cismontane woodland, valley and foothill grassland; heavy clay adobe soils in oak grassland (0'–3,281').	February–April	Absent-Suitable habitat is absent.
American manna grass ( <i>Glyceria grandis</i> )	–	–	2B.3	Bogs and fens, meadows and seeps, and streambanks and lake margins of marshes and swamps (49'–6,496').	June–August	Absent-Suitable habitat is absent. Absent-Suitable habitat is absent.
Winter's sunflower ( <i>Helianthus winteri</i> )	–	–	1B.2	Openings on relatively steep south-facing slopes, granitic, often rocky, often roadsides in cismontane woodland, and valley and foothill grassland (410'–8,415').	January–December	Absent-Suitable habitat is absent.
Munz's iris ( <i>Iris munzii</i> )	–	–	1B.3	Cismontane woodland (1,000'–2,625').	March–April	Potential-suitable habitat is present.
Madera leptosiphon ( <i>Leptosiphon serrulatus</i> )	–	–	1B.2	Cismontane woodland and lower montane coniferous forest (984'–4,265').	April–May	Potential-suitable habitat is present.
San Joaquin Valley Orcutt grass ( <i>Orcuttia inaequalis</i> )	FT	CE	1B.1	Vernal pools (33'–2,477').	April–September	Absent-Suitable habitat is absent.
San Joaquin adobe sunburst ( <i>Pseudobahia peirsonii</i> )	FT	CE	1B.1	Adobe clay soils in cismontane woodland and valley and foothill grassland (295'–2,625').	February–April	Low Potential-marginally suitable habitat is present.
Aromatic canyon gooseberry ( <i>Ribes menziesii</i> var. <i>nixoderm</i> )	–	–	1B.2	Chaparral and cismontane woodland (2,001'–3,806').	April	Absent-Suitable habitat is absent.
Sequoia gooseberry ( <i>Ribes tulareense</i> )	–	–	1B.3	Lower montane coniferous forest and upper montane coniferous forest (4,921'–6,808').	May	Absent-Suitable habitat is absent.
Greene's tuctoria ( <i>Tuctoria greenei</i> )	FE	CR	1B.1	Vernal pools (98'–3,510').	May–July	Absent-Suitable habitat is absent.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Invertebrates						
Vernal pool fairy shrimp <i>(Branchinecta lynchi)</i>	FT	-	-	Vernal pools/wetlands.	November-April	Absent-there is no suitable habitat onsite.
Crotch bumble bee <i>(Bombus crotchii)</i>	-	CC	-	Primarily nests underground in open grassland and scrub habitats from the California coast east to the Sierra Cascade and south to Mexico.	March–September	Potential
Western bumble bee <i>(Bombus occidentalis)</i>	-	CC	-	Meadows and grasslands with abundant floral resources. Primarily nests underground. Largely restricted to high elevation sites in the Sierra Nevada, although rarely detected on the California coast.	April–November	Potential
Valley elderberry longhorn beetle <i>(Desmocerus californicus dimorphus)</i>	FT	-	-	Elderberry shrubs.	Any season	Absent-Tulare County is south of the current range of this species.
Fish						
Delta smelt <i>(Hypomesus transpacificus)</i>	FT	CE	-	Sacramento-San Joaquin Delta.	N/A	Absent-there is no suitable habitat onsite.
Amphibians						
California red-legged frog <i>(Rana draytonii)</i>	FT	-	SSC	Lowlands or foothills at waters with dense shrubby or emergent riparian vegetation. Adults must have aestivation habitat to endure summer dry down.	May 1–November 1	Absent-there is no suitable habitat onsite.

Table 1. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
California tiger salamander (Central California DPS) <i>(Ambystoma californiense)</i>	FT	CT	SSC	Vernal pools, wetlands (breeding) and adjacent grassland or oak woodland; needs underground refuge (e.g., ground squirrel and/or gopher burrows). Largely terrestrial as adults.	March–May	Absent-there is no suitable habitat onsite.
Foothill yellow-legged frog <i>(Rana boylei)</i>	-	CT	SSC	Foothill yellow-legged frogs can be active all year in warmer locations but may become inactive or hibernate in colder climates. At lower elevations, foothill yellow-legged frogs likely spend most of the year in or near streams. Adult frogs, primarily males, will gather along main-stem rivers during spring to breed.	May–October	Absent-there is no suitable habitat onsite.
Mountain yellow-legged frog <i>(Rana muscosa)</i>	FE	CE	-	Lakes, ponds, marshes, meadows, and streams at elevations ranging from 4,500 to 12,000 feet, but can occur as low as 3,500 feet.	May 1– November 1	Absent-there is no suitable habitat onsite.
Western spadefoot <i>(Spea hammondi)</i>	-	-	SSC	California endemic species of vernal pools, swales, wetlands and adjacent grasslands throughout the Central Valley.	March–May	Absent-there is no suitable habitat onsite.
<b>Reptiles</b>						
Northern legless lizard <i>(Anniella pulchra)</i>	-	-	SSC	The most widespread of California's <i>Anniella</i> species. Occurs in sandy or loose soils under sparse vegetation from Antioch south coastally to Ventura. Bush lupine is often an indicator plant.	Generally spring, but depends on location and conditions	Low Potential-there is marginally suitable habitat onsite.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Blainville's ("Coast") horned lizard <i>(Phrynosoma blainvillii)</i>	-	-	SSC	Formerly a wide-spread horned lizard found in a wide variety of habitats, often in lower elevation areas with sandy washes and scattered low bushes. Also occurs in Sierra Nevada foothills. Requires open areas for basking, but with bushes or grass clumps for cover, patches of loamy soil or sand for burrowing and an abundance of ants (Stebbins and McGinnis 2012). In the northern Sacramento area, this species appears restricted to the foothills between 1,000 to 3,000 feet from Cameron Park (El Dorado County) north and west to Grass Valley and Nevada City.	April-October	Potential-suitable habitat is present onsite.
Western pond turtle <i>(Actinemys marmorata)</i>	-	-	SSC	Requires basking sites and upland habitats up to 0.5 km from water for egg laying. Uses ponds, streams, detention basins, and irrigation ditches.	April–September	Absent-there is no suitable habitat onsite.
<b>Birds</b>						
Clark's grebe <i>(Aechmophorus clarkii)</i>	-	-	BCC	Winters on salt or brackish bays, estuaries, sheltered seacoasts, freshwater lakes, and rivers. Breeds on freshwater to brackish marshes, lakes, reservoirs and ponds, with a preference for large stretches of open water fringed with emergent vegetation.	June–August (breeding)	Absent-there is no suitable nesting or foraging habitat onsite.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Black swift ( <i>Cypseloides niger</i> )	-	-	BCC, SSC	In California, nests from Cascade-Sierra Nevada region south to Tulare and Mono counties; coastal ranges (Santa Cruz south to San Luis Obispo counties), San Gabriel, San Bernardino, and San Jacinto mountains. Nests on ledges or shallow caves on steep rock faces, usually behind waterfalls. Winter range, unknown, but thought to be northern and western South America, and West Indies.	May– September	Absent-there is no suitable nesting habitat onsite.
Costa's hummingbird ( <i>Calypte costae</i> )	-	-	BCC	In California, breeds in coastal scrub and chaparral communities from Santa Barbara County south into Baja California; from Mexico north into Mojave Desert scrub of Eastern Sierra Nevada;	February–June	Absent-there is no suitable nesting habitat onsite.
Rufous hummingbird ( <i>Selasphorus rufus</i> )	-	-	BCC	Breeds in British Columbia and Alaska (does not breed in California). Winters in coastal Southern California south into Mexico. Common migrant during March-April in Sierra Nevada foothills and June-August in Lower Conifer to Alpine zone of Sierra Nevada. Nesting habitat includes secondary succession communities and openings, mature forests, parks and residential area.	April–July	Absent-this species does not nest in this region.



**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
California condor ( <i>Gymnogyps californianus</i> )	FE	CE	CFP	Nests on cliff ledges and rarely in large tree cavities; foraging occurs over vast expanses of coastline, grassland, meadows, savannahs	Non-migratory; can be observed during any season; nesting: eggs (late January-May), nestlings to fledge (March-December)	Absent-there is no suitable nesting or foraging habitat onsite.
Golden eagle ( <i>Aquila chrysaetos</i> )	-	-	BCC, CFP	Nesting habitat includes mountainous canyon land, rimrock terrain of open desert and grasslands, riparian, oak woodland/ savannah, and chaparral. Nesting occurs on cliff ledges, riverbanks, trees, and human-made structures (e.g., windmills, platforms, and transmission towers). Breeding occurs throughout California, except the immediate coast, Central Valley floor, Salton Sea region, and the Colorado River region, where they can be found during Winter.	Nest (February-August); winter CV (October-February)	Absent-there is no suitable nesting or foraging habitat onsite.
Northern goshawk ( <i>Accipiter gentilis</i> )	-	-	SSC	Nesting occurs in mature to old-growth forests composed primarily of large trees with high canopy closure. In California, nests are built primarily in conifer trees in the Sierra Nevada, Cascade and northwestern coastal Ranges.	March–August	Absent-there is no suitable nesting or foraging habitat onsite.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Bald eagle ( <i>Haliaeetus leucocephalus</i> )	Delisted	CE	CFP, BCC	Typically nests in forested areas near large bodies of water in the northern half of California; nest in trees and rarely on cliffs; wintering habitat includes forest and woodland communities near water bodies (e.g., rivers, lakes), wetlands, flooded agricultural fields, open grasslands	February–September (nesting); October–March (wintering)	Absent-there is no suitable nesting or foraging habitat onsite.
Lewis' woodpecker ( <i>Melanerpes lewis</i> )	-	-	BCC	In California, breeds in Siskiyou and Modoc counties, warmer mountains, inner coast ranges from Tehama to San Luis Obispo counties, San Bernardino Mountains, and Big Pine Mountain (Inyo County); nesting habitat includes open ponderosa pine forest, open riparian woodland, logged/burned forest, and oak woodlands. Does not breed on the west side of Sierran crest (Beedy and Pandalfino 2013).	April–September (breeding); September–March (winter in Central Valley).	Absent-this species does not nest in this region.
Nuttall's woodpecker ( <i>Dryobates nuttallii</i> )	-	-	BCC	Resident from northern California south to Baja California. Nests in tree cavities in oak woodlands and riparian woodlands.	April–July	Potential-suitable nesting habitat is present onsite.
Oak titmouse ( <i>Baeolophus inornatus</i> )			BCC	Nests in tree cavities within dry oak or oak-pine woodland and riparian; where oaks are absent, they nest in juniper woodland, open forests (gray, Jeffrey, Coulter, pinyon pines and Joshua tree)	March–July	Potential-suitable nesting habitat is present onsite.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Wrentit ( <i>Chamaea fasciata</i> )	-	-	BCC	Coastal sage scrub, northern coastal scrub, chaparral, dense understory of riparian woodlands, riparian scrub, coyote brush and blackberry thickets, and dense thickets in suburban parks and gardens.	March–August	Absent-there is no suitable nesting or foraging habitat onsite.
California thrasher ( <i>Toxostoma redivivum</i> )	-	-	BCC	Resident and endemic to coastal and Sierra Nevada-Cascade foothill areas of California. Nests are usually well hidden in dense shrubs, including scrub oak, California lilac, and chamise.	February–July	Absent-there is no suitable nesting or foraging habitat onsite.
Lawrence's goldfinch ( <i>Spinus lawrencei</i> )	-	-	BCC	Breeds in Sierra Nevada and inner Coast Range foothills surrounding the Central Valley and the southern Coast Range to Santa Barbara County east through southern California to the Mojave Desert and Colorado Desert into the Peninsular Range. Nests in arid and open woodlands with chaparral or other brushy areas, tall annual weed fields, and a water source (e.g., small stream, pond, lake), and to a lesser extent riparian woodland, coastal scrub, evergreen forests, pinyon-juniper woodland, planted conifers, and ranches or rural residences near weedy fields and water.	March–September	Potential-suitable nesting habitat is present onsite.
Song sparrow "Modesto" ( <i>Melospiza melodia heermanni</i> )	-	-	BCC, SSC	Resident in central and southwest California, including Central Valley; nests in marsh, scrub habitat	April–June	Absent-there is no suitable nesting or foraging habitat onsite.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
San Clemente spotted towhee ( <i>Pipilo maculatus clementae</i> )	-	-	BCC, SSC	Resident on Santa Catalina and Santa Rosa islands; extirpated on San Clemente Island, California. Breeds in dense, broadleaf shrubby brush, thickets, and tangles in chaparral, oak woodland, island woodland, and Bishop pine forest.	Year-round resident; breeding season is April–July	Absent-this subspecies is only found on the Channel Islands. It does not occur in the Project vicinity.
Tricolored blackbird ( <i>Agelaius tricolor</i> )	-	CT	BCC, SSC	Breeds locally west of Cascade-Sierra Nevada and southeastern deserts from Humboldt and Shasta counties south to San Bernardino, Riverside and San Diego counties. Central California, Sierra Nevada foothills and Central Valley, Siskiyou, Modoc and Lassen counties. Nests colonially in freshwater marsh, blackberry bramble, milk thistle, triticale fields, weedy (mustard, mallow) fields, giant cane, safflower, stinging nettles, tamarisk, riparian scrublands and forests, fiddleneck and fava bean fields.	March–August	Absent-there is no suitable nesting habitat onsite.
Saltmarsh common yellowthroat ( <i>Geothlypis trichas sinuosa</i> )	-	-	BCC, SSC	Breeds in salt marshes of San Francisco Bay; winters in San Francisco south along coast to San Diego County	March–July	Absent-this subspecies is only found nesting in the San Francisco Bay area. It does not occur in the Project vicinity.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Mammals						
Spotted bat <i>(Euderma maculatum)</i>	-	-	SSC	Roost in cracks, crevices, and caves, usually high in fractured rock cliffs. Found in desert, sub-alpine meadows, desert-scrub, pinyon-juniper woodland, ponderosa pine, mixed conifer forest, canyon bottoms, rims of cliffs, riparian areas, fields, and open pastures.	April–September	Absent-there is no suitable habitat onsite
Townsend's big-eared bat <i>(Corynorhinus townsendii)</i>	-	-	SSC	Caves, mines, buildings, rock crevices, trees.	April–September	Potential-Trees onsite represent potential roosting habitat.
Pallid bat <i>(Antrozous pallidus)</i>	-	-	SSC	Crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of redwoods, cavities of oaks, exfoliating pine and oak bark, deciduous trees in riparian areas, and fruit trees in orchards). Also roosts in various human structures such as bridges, barns, porches, bat boxes, and human-occupied as well as vacant buildings.	April–September	Potential-Trees onsite represent potential roosting habitat.
Greater mastiff bat <i>(Eumops perotis californicus)</i>	-	-	SSC	Primarily a cliff-dwelling species, found in similar crevices in large boulders and buildings.	April–September	Absent-no suitable habitat is present onsite.
San Joaquin kit fox <i>(Vulpes macrotis mutica)</i>	FE	CT	-	Grasslands, sagebrush scrub.	April 15–July 15, September 1–December 1	Absent-the Project is east of the known range of San Joaquin Kit Fox. Nearest CNDDB occurrence is 9 miles west of the Project.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Sierra Nevada red fox ( <i>Vulpes vulpes necator</i> )	FC	CT	-	Found in the Cascades in Siskiyou County, and from Lassen County south to Tulare County, rare in the Sierra Nevada. Sierra Nevada populations may be found in a variety of habitats, including alpine dwarf-shrub, wet meadow subalpine conifer, lodgepole pine, red fir, aspen, montane chaparral, montane riparian, mixed conifer, and ponderosa pine. Most sightings in Sierra Nevada area above 7,000' but range from 3,900' to 11,900'.	Any season	Absent-no suitable habitat is present onsite.
Fisher- West Coast DPS ( <i>Pekania pennanti</i> )	FPT	CT	SSC	Northern coniferous and mixed forests of Canada and northern United States.	Any season	Absent-no suitable habitat is present onsite.
California wolverine ( <i>Gulo gulo</i> )	FPT	CT	-	Scarce resident of North Coast mountains and Sierra Nevada. Wide variety of high elevation habitats.	Any season	Absent-no suitable habitat is present onsite.

**Status Codes:**

FESA	Federal Endangered Species Act
CESA	California Endangered Species Act
FE	FESA listed, Endangered.
FPT	Formally Proposed for FESA listing as Threatened.
FT	FESA listed, Threatened.
Delisted	Formally Delisted (delisted species are monitored for five years).
BCC	USFWS Bird of Conservation Concern (USFWS 2002).
CR	CESA- or NPPA-listed, Rare.
CT	CESA- or NPPA-listed, Threatened.
CC	Candidate for CESA listing as Endangered or Threatened.
CE	CESA or NPPA listed, Endangered.
CFP	California Fish and Game Code Fully Protected Species (§ 3511-birds, § 4700-mammals, §5 050-reptiles/amphibians).
SSC	CDFW Species of Special Concern (CDFW, updated July 2017).
1B	CRPR/Rare or Endangered in California and elsewhere.
3	CRPR/Plants About Which More Information is Needed – A Review List.
4	CRPR/Plants of Limited Distribution – A Watch List.
0.1	Threat Rank/Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2	Threat Rank/Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3	Threat Rank/Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

#### **4.5.1 Plants**

The following is a brief discussion of special-status plants with the potential to occur within the Study Area.

##### **Kaweah Brodiaea**

Kaweah brodiaea (*Brodiaea insignis*) is not listed pursuant to the federal ESA but is listed as endangered pursuant to the California ESA and is designated as a CRPR 1B.2 species. This species is a bulbiferous perennial herb that occurs in granitic or clay soils in cismontane woodland, meadows and seeps, and valley and foothill grassland (CNPS 2020). Kaweah brodiaea blooms from April through June and is known to occur at elevations ranging from 492 to 4,594 feet above MSL (CNPS 2020). Kaweah brodiaea is endemic to California; the current range of this species includes Tulare County (CNPS 2020). The nearest CNDDDB occurrence is located approximately 0.1 mile north of the Study Area (CNDDDB Occurrence #21) (CDFW 2020).

##### **Springville Clarkia**

Springville clarkia (*Clarkia springvillensis*) is listed as threatened pursuant to the federal ESA and endangered pursuant to the California ESA and is designated as a CRPR 1B.2 species. This species is an annual herb that occurs in granitic soils within chaparral, cismontane woodland, and valley and foothill grassland (CNPS 2020). Springville clarkia blooms from March through July and is known to occur at elevations ranging from 803 to 4,003 feet above MSL (CNPS 2020). Springville clarkia is endemic to California; the current range of this species includes Tulare county (CNPS 2020). The nearest CNDDDB occurrence is located approximately three miles at Case Mountain (CNDDDB Occurrence #2) (CDFW 2020).

##### **Streambank Spring Beauty**

Streambank spring beauty (*Claytonia parviflora* ssp. *grandiflora*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 4.2 species. This species is an herbaceous annual that occurs in rocky soils within cismontane woodland (CNPS 2020). Streambank spring beauty blooms from February through May and is known to occur at elevations ranging from 820 to 3,937 feet above MSL (CNPS 2020). Streambank spring beauty is endemic to California; the current range of this species includes Amador, Butte, Calaveras, El Dorado, Fresno, Kern, Placer, Tulare, and Tuolumne counties (CNPS 2020). There are no CNDDDB occurrences of this species within the five miles of the Study Area (CDFW 2020).

##### **Recurved Larkspur**

Recurved larkspur (*Delphinium recurvatum*) is not listed pursuant to either the federal or California ESAs but is designated a CRPR 1B.2 species. This species is an herbaceous perennial that occurs in alkaline substrates in chenopod scrub, cismontane woodland, and valley and foothill grasslands (CNPS 2020). Recurved larkspur blooms from March through June and is known to occur at elevations ranging from 9 to 2,592 feet above MSL (CNPS 2020). Recurved larkspur is endemic to California; the current range of this species includes Alameda, Butte, Contra Costa, Colusa, Fresno, Glenn, Kings, Kern, Madera, Merced,

Monterey, San Joaquin, San Luis Obispo, Solano, Sutter, and Tulare counties (CNPS 2020). The species is presumed extirpated from Butte and Colusa counties (CNPS 2020).

### **Calico Monkeyflower**

Calico monkeyflower (*Diplacus pictus*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 1B.2 species. This species is an herbaceous annual that occurs in granitic, disturbed areas in broadleaf upland forest and cismontane woodland (CNPS 2020). Calico monkeyflower blooms from March through May and is known to occur at elevations ranging from 328 to 4,692 feet above MSL (CNPS 2020). Calico monkeyflower is endemic to California; its current range includes Kern and Tulare counties (CNPS 2020). There are no CNDDDB occurrences of this species within the five miles of the Study Area (CDFW 2020).

### **Mouse Buckwheat**

Mouse buckwheat (*Eriogonum nudum* var. *murinum*) is not listed pursuant to either the federal or California ESAs but is designated as a CRPR 1B.2 species. This species is an herbaceous perennial that occurs in sandy soils in chaparral, cismontane woodland, and valley and foothill grassland. Mouse buckwheat blooms from June through November and is known to occur at elevations ranging from 1,197 to 3,707 feet above MSL (CNPS 2020). Mouse buckwheat is endemic to California; its current range includes Tulare County (CNPS 2020). The nearest CNDDDB occurrence is located approximately 0.7 mile east of the Study Area at Blossom Peak (CNDDDB Occurrence #3) (CDFW 2020).

### **Sierra Nevada Monkeyflower**

Sierra Nevada monkeyflower (*Erythranthe sierrae*) is not listed pursuant to either the federal or California ESAs but is designated as a CRPR 4.2 species. This species is an herbaceous annual that occurs in openings of cismontane woodland and lower montane coniferous forest or dry meadows and seeps, usually granitic, usually sandy, sometimes gravelly, vernal wet depressions, swales, and streambanks (CNPS 2020). Sierra Nevada monkeyflower blooms from March through July and is known to occur at elevations ranging from 607 to 7,497 feet above MSL (CNPS 2020). Sierra Nevada monkeyflower is endemic to California; the current range of this species is only in the southern portion of the Sierra Nevada mountain range in Fresno, Kern, and Tulare counties.

### **Munz's Iris**

Munz's iris (*Iris munzii*) is not listed pursuant to either the federal or California ESAs but is designated as a CRPR 1B.3 species. This species is a perennial rhizomatous herb that occurs in cismontane woodland (CNPS 2020). Munz's iris blooms from March through April and is known to occur at elevations ranging from 1,000 to 2,625 feet above MSL (CNPS 2020). Munz's iris is endemic to California; the current range of this species includes Tulare county (CNPS 2020). The nearest CNDDDB occurrence is located approximately three miles northeast of the Study Area near Hammond (CNDDDB Occurrence #13) (CDFW 2020).



### **Madera Leptosiphon**

Madera leptosiphon (*Leptosiphon serrulatus*) is not listed pursuant to either the federal or California ESAs but is designated as a CRPR 1B.2 species. This species is an herbaceous annual that occurs in cismontane woodland and lower montane coniferous forest (CNPS 2020). Madera leptosiphon blooms between April and May and is known to occur at elevations ranging from 984 to 4,265 feet above MSL (CNPS 2020). Madera leptosiphon is endemic to California; its current range includes Fresno, Kern, Madera, Mariposa, and Tulare counties (CNPS 2020). There is one CNDDDB record (Occurrence #16) of this species within five miles of the Study Area and is described as an unknown location near the community of Three Rivers from 1928 (CDFW 2020).

### **San Joaquin Adobe Sunburst**

San Joaquin adobe sunburst (*Pseudobahia peirsonii*) is listed as threatened pursuant to the federal ESA, endangered pursuant to the California ESA, and is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs on adobe clay in cismontane woodlands and valley and foothill grasslands (CNPS 2020). San Joaquin adobe sunburst blooms from February through April and is known to occur at elevations ranging from 295 to 2,625 feet above MSL (CNPS 2020). San Joaquin adobe sunburst is endemic to California; the current range of this species includes Fresno, Kern, and Tulare counties (CNPS 2020). There are no CNDDDB occurrences of this species within the five miles of the Study Area (CDFW 2020).

## **4.5.2 Reptiles**

The following is a brief discussion of special-status reptiles with the potential to occur within the Study Area.

### **Northern California Legless Lizard**

The Northern California legless lizard (*Anniella pulchra*) is not listed and protected under either federal or California ESAs but is considered a CDFW SSC. The Northern California legless lizard has the largest range of all California *Anniella*, ranging from sites in and around Antioch in the east bay, south to northern San Luis Obispo County. Two distinct segments of this species range occur: one in the eastern foothills of Tulare and Fresno counties, and another at the western edge of the Antelope Valley in Kern and Los Angeles counties. They are found in sparsely vegetated areas with loose, moist soil such as beach dunes, chaparral, pin-oak woodlands, desert scrub, sandy washes, and stream terraces. The grassland and oak woodland onsite represent marginally suitable habitat for this species.

### **Blainville's Horned Lizard**

Blainville's horned lizard is not listed and protected under either California or federal ESAs but is considered a CDFW SSC. This diurnal species can occur within a variety of habitats including scrubland, annual grassland, valley-foothill woodlands and coniferous forests, though it is most common along lowland desert sandy washes and chaparral (Stebbins 2003). In the Central Valley, the species ranges from southern Tehama County southward. In the Sierra Nevada it occurs from Butte County south to Tulare

County, and in the Coast Ranges it occurs from Sonoma County south into Baja California (CDFG 1988). It occurs from sea level to 8,000 feet MSL and an isolated population occurs in Siskiyou County (Stebbins 2003). The grassland and oak woodland onsite represent potential habitat for this species.

### **4.5.3 Birds**

The following is a brief discussion of special-status birds with the potential to occur within the Study Area.

#### **Nuttall's Woodpecker**

Nuttall's woodpecker (*Dryobates nuttalli*) is not listed and protected under either federal or California ESAs but is considered a USFWS BCC. They are resident from Siskiyou County south to Baja California. Nuttall's woodpeckers nest in tree cavities primarily within oak woodlands, but also can be found in riparian woodlands (Lowther et al. 2020). Breeding occurs during April through July. The trees onsite represent potential nesting habitat for this species.

#### **Oak Titmouse**

Oak titmouse (*Baeolophus inornatus*) are not listed and protected under either the federal or California ESAs but are considered a USFWS BCC. Oak titmouse breeding range includes southwestern Oregon south through California's Coast, Transverse and Peninsular ranges, western foothills of the Sierra Nevada, into Baja California; they are absent from the humid northwestern coastal region and the San Joaquin Valley (Cicero et al. 2020). They are found in dry oak or oak-pine woodlands but may also use scrub oaks or other brush near woodlands (Cicero et al. 2020). Nesting occurs during March through July. The trees onsite represent potential nesting habitat for this species.

#### **Lawrence's Goldfinch**

The Lawrence's goldfinch (*Spinus lawrencei*) is not listed pursuant to either the federal or California ESAs but is currently a BCC according to the USFWS. Lawrence's goldfinch breed west of the Sierra Nevada-Cascade axis from Tehama, Shasta, and Trinity counties south into the foothills surrounding the Central Valley to Kern County; and on the Coast Range from Contra Costa County to Santa Barbara County (Watt et al. 2020). Lawrence's goldfinch nest in arid woodlands usually with brushy areas, tall annual weeds, and a local water source (Watt et al. 2020). Nesting occurs during March through September. Weeds and small trees onsite represent potential nesting habitat for this species.

#### **Migratory Bird Treaty Act Protected Birds**

While not considered species status as previously defined, the Study Area supports potential nesting habitat for other, more common bird species that are protected under the MBTA and the Fish and Game Code of California. These could include common species such as northern mockingbird and house finch, among others. Trees, shrubs, and annual grassland onsite represents potential nesting habitat for protect birds.

#### **4.5.4 Mammals**

The following is a brief discussion of special-status mammals with the potential to occur within the Study Area.

##### **Townsend's Big-eared Bat**

The Townsend's big-eared bat (*Corynorhinus townsendii*) is not listed pursuant to either the California or federal ESAs; however, this species is considered an SSC by CDFW. Townsend's big-eared bat is a fairly large bat with prominent bilateral nose lumps and large rabbit-like ears. This species occurs throughout the west and ranges from the southern portion of British Columbia south along the Pacific coast to central Mexico and east into the Great Plains. This species has been reported from a wide variety of habitat types and elevations from sea level to 10,827 feet. Habitats used include coniferous forests, mixed meso-phytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Its distribution is strongly associated with the availability of caves and cave-like roosting habitat including abandoned mines, buildings, bridges, rock crevices, and hollow trees. This species is readily detectable when roosting due to their habit of roosting pendant-like on open surfaces. Townsend's big-eared bat is a moth specialist with over 90 percent of its diet composed of Lepidopterans. Foraging habitat is generally edge habitats along streams adjacent to and within a variety of wooded habitats. This species often travels long distances when foraging and large home ranges have been documented in California (Western Bat Working Group [WBWG] 2020).

The trees onsite represent marginally suitable roosting habitat for this species.

##### **Pallid Bat**

The pallid bat (*Antrozous pallidus*) is not listed pursuant to either the California or federal ESAs; however, this species is considered an SSC by CDFW. The pallid bat is a large, light-colored bat with long, prominent ears and pink, brown, or grey wing and tail membranes. This species ranges throughout North America from the interior of British Columbia, south to Mexico, and east to Texas. The pallid bat inhabits low elevation (below 6,000 feet) rocky arid deserts and canyonlands, shrub-steppe grasslands, karst formations, and higher elevation coniferous forest (above 7,000 feet). This species roosts alone or in groups in the crevices of rocky outcrops and cliffs, caves, mines, trees, and in various human structures such as bridges, and barns. Pallid bats are feeding generalists that glean a variety of arthropod prey from surfaces as well as capturing insects on the wing. Foraging occurs over grasslands, oak savannahs, ponderosa pine forests, talus slopes, gravel roads, lava flows, fruit orchards, and vineyards. Although this species utilizes echolocation to locate prey, often they use only passive acoustic cues. This species is not thought to migrate long distances between summer and winter sites (WBWG 2020).

The trees onsite represent marginally suitable roosting habitat for this species.

#### **4.6 Sensitive Natural Communities**

No sensitive natural communities were found onsite during the field assessment.

## **4.7 Wildlife Movement/Corridors**

Woodland habitat that was once found within the Study Area has been removed (circa 2005-2009). The Study Area is adjacent to an existing hotel and State Highway 198/Sierra Drive within a matrix of rural residences and farms. There are no significant habitat features (e.g., wetlands) within or adjacent to the Study Area. Project development is not expected to impact wildlife movement. The Survey Area does not support known nursery sites or mule deer fawning areas (CDFW 2020). No nursery sites were identified during the field assessment.

## **4.8 Critical Habitat**

There is no designated Critical Habitat within the Project.

## **5.0 RECOMMENDATIONS**

### **5.1 Waters of the U.S. and State**

There are no aquatic resources onsite. Therefore, there are no recommendations pertaining to potential waters of the U.S./State.

### **5.2 Special-Status Species**

#### **5.2.1 Plants**

The Survey Area supports potentially suitable habitat for special-status plants, including Kaweah brodiaea, Springville clarkia, recurved larkspur, streambank spring beauty, calico monkeyflower, mouse buckwheat, Sierra Nevada monkeyflower, Munz's iris, Madera leptosiphon, and San Joaquin adobe sunburst. The following measures are recommended to minimize potential impacts to special-status plants:

- Perform focused plant surveys according to USFWS, CDFW, and CNPS protocols. Surveys should be timed according to the blooming period for target species and known reference populations, if available, and/or local herbaria should be visited prior to surveys to confirm the appropriate phenological state of the target species.
- If special-status plant species are found during surveys within the Project and avoidance of the species is not possible, seed collection, transplantation, and/or other mitigation measures may be developed in consultation with appropriate resource agencies to reduce impacts to special-status plant populations.
- If no special-status plants are found within the Project Area, no further measures pertaining to special-status plants are necessary.

#### **5.2.2 Invertebrates**

The Project site does not provide suitable habitat for any special-status invertebrates species. No measures are recommended for special-status invertebrates.

### **5.2.3 Fish**

The Project site does not provide suitable habitat for any special-status fish species. No measures are recommended for special-status fish species.

### **5.2.4 Amphibians**

The Project site does not provide suitable habitat for any special-status amphibian species. No measures are recommended for special-status amphibian species.

### **5.2.5 Reptiles**

The Study Area supports potentially suitable habitat for Northern California legless lizard and Blainville's horned lizard. To ensure that there are no impacts to special-status reptiles, the following mitigation measure is recommended:

- A Northern California legless lizard and Blainville's horned lizard pre-construction survey will be conducted by a qualified biologist within 14 days prior to the initiation of ground disturbance (e.g., tree/vegetation removal, mass grading). The survey will consist of the entire Project footprint, including accessible areas within 100 feet.
- If individuals of either of these two special-status reptiles are found during the pre-construction survey, a qualified biologist with a CDFW Scientific Collecting Permit shall relocate the individuals, with the concurrence of CDFW, to a site with suitable habitat. Relocation methods shall be approved by CDFW.

### **5.2.6 Birds and Migratory Bird Treaty Act Protected Birds (including Raptors)**

The Survey Area supports suitable nesting and foraging habitat for a variety of special-status birds and birds protected under the MBTA. To minimize impacts to protected bird and active nests during construction, the following mitigation measure is recommended:

- Conduct a pre-construction nesting raptor and bird survey of all suitable habitat on the Project site within 14 days of the commencement ground disturbance (e.g., tree/vegetation removal, mass grading) during the nesting season (February 1 – August 31). Where accessible, surveys should be conducted within 300 feet of the Project site for nesting raptors, and 100 feet of the Project site for other nesting birds.
- If active nests are found, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist, in consultation with CDFW. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest tree, to be determined by a qualified biologist. Once the young are independent of the nest, no further measures are necessary.

### 5.2.7 Mammals

The Project site provides potential habitat for several special-status bats. To minimize potential impacts to special-status bats, the following measure is recommended.

- A qualified biologist will conduct a bat habitat assessment of all suitable roosting habitat (i.e., suitable trees) prior to the initiation of site disturbance (e.g., tree removal, mass grading). If the assessment identifies suitable roosting habitat, a qualified biologist will conduct an evening bat emergence survey that may include acoustic monitoring to determine whether or not bats are present. If special-status bats are found, consult with CDFW to develop avoidance and/or exclusion methods.
- If no suitable roosting habitat is found, or if no bats are not found during the emergence surveys, no further measures are necessary.

### 5.2.8 Oak Woodlands

There are two isolated small oak trees located within the annual grassland. The oaks that make up the oak woodland mapped in the Study Area are located on the adjacent property with only the dripline overlapping into the Study Area. Although direct impacts to the oak woodland is not anticipated, indirect impacts may occur. If impacts are considered significant, one or more of the following measures should be implemented to reduce the impact to oak woodlands (per the *Three Rivers Voluntary Oak Woodland Plan*):

- If feasible, avoid/conservate oak woodlands.
- If oak woodlands are proposed for impact, plant an appropriate number of trees, including maintain planting and replacing dead or diseased trees; this requirement to maintain trees pursuant to this paragraph terminates seven years after the trees are planted; mitigation pursuant to this paragraph shall not fulfill more than half of the mitigation requirements for the Project; the requirements imposed pursuant to this paragraph also may be used to restore former oak woodlands.
- Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of the Section 1363 of the California Fish and Game Code. A project applicant who contributes funds under this paragraph shall not receive a grant from the Oak Woodland Woodlands Conservation Fund as part of the mitigation for the Project.

and/or

- Other mitigation measures developed by Tulare County.

## 5.3 Sensitive Natural Communities

There are no sensitive natural communities onsite. No measures are recommended.

## **5.4 Wildlife Movement/Corridors and Nursery Sites**

Wildlife have potential to use the Project site for localized wildlife movement. However, Project development would not constitute a significant loss of the available wildlife habitat in the area. No measures are recommended.

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## **LIST OF ATTACHMENTS**

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Attachment A – Special-Status Species Searches (9-Quad CNPS Search, CNNDDB Search, and Study Area IPaC Search)

Attachment B – Representative Site Photographs

Attachment C – Aquatic Resources Delineation Data Sheets

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**ATTACHMENT A**

Special-Status Species Searches  
(9-Quad CNPS Search, CNNDB Search, and Study Area IPaC Search)

\*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

## Plant List

27 matches found. [Click on scientific name for details](#)

### Search Criteria

Found in Quads 3611951, 3611858, 3611857, 3611941, 3611848, 3611847, 3611931 3611838 and 3611837;

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
<a href="#">Angelica callii</a>	Call's angelica	Apiaceae	perennial herb	Jun-Jul	4.3	S3	G3
<a href="#">Brodiaea insignis</a>	Kaweah brodiaea	Themidaceae	perennial bulbiferous herb	Apr-Jun	1B.2	S1	G1
<a href="#">Calochortus westonii</a>	Shirley Meadows star-tulip	Liliaceae	perennial bulbiferous herb	May-Jun	1B.2	S3	G3
<a href="#">Calystegia malacophylla</a> <a href="#">var. berryi</a>	Berry's morning-glory	Convolvulaceae	perennial rhizomatous herb	Jul-Aug	3.3	S2	G4G5T2Q
<a href="#">Cinna bolanderi</a>	Bolander's woodreed	Poaceae	perennial herb	Jul-Sep	1B.2	S2S3	G2G3
<a href="#">Clarkia springvillensis</a>	Springville clarkia	Onagraceae	annual herb	(Mar)Apr-Jul	1B.2	S2	G2
<a href="#">Claytonia palustris</a>	marsh claytonia	Montiaceae	perennial herb	May-Oct	4.3	S4	G4
<a href="#">Claytonia parviflora</a> ssp. <a href="#">grandiflora</a>	streambank spring beauty	Montiaceae	annual herb	Feb-May	4.2	S3	G5T3
<a href="#">Delphinium purpusii</a>	rose-flowered larkspur	Ranunculaceae	perennial herb	(Mar)Apr-May	1B.3	S3	G3
<a href="#">Delphinium recurvatum</a>	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	1B.2	S2?	G2?
<a href="#">Diplacus pictus</a>	calico monkeyflower	Phrymaceae	annual herb	Mar-May	1B.2	S2	G2
<a href="#">Dudleya cymosa</a> ssp. <a href="#">costatifolia</a>	Pierpoint Springs dudleya	Crassulaceae	perennial herb	May-Jul	1B.2	S1	G5T1
<a href="#">Eriogonum nudum</a> var. <a href="#">murinum</a>	mouse buckwheat	Polygonaceae	perennial herb	Jun-Nov	1B.2	S2	G5T2
<a href="#">Eryngium spinosepalum</a>	spiny-sepaed button-celery	Apiaceae	annual / perennial herb	Apr-Jun	1B.2	S2	G2
<a href="#">Erythranthe norrisii</a>	Kaweah monkeyflower	Phrymaceae	annual herb	Mar-May	1B.3	S2	G2
<a href="#">Erythranthe sierrae</a>	Sierra Nevada monkeyflower	Phrymaceae	annual herb	Mar-Jul	4.2	S2	G2
<a href="#">Glyceria grandis</a>	American manna grass	Poaceae	perennial rhizomatous herb	Jun-Aug	2B.3	S3	G5

<a href="#"><u>Helianthus winteri</u></a>	Winter's sunflower	Asteraceae	perennial shrub	Jan-Dec	1B.2	S2?	G2?
<a href="#"><u>Iris munzii</u></a>	Munz's iris	Iridaceae	perennial rhizomatous herb	Mar-Apr(May)	1B.3	S2	G2
<a href="#"><u>Leptosiphon serrulatus</u></a>	Madera leptosiphon	Polemoniaceae	annual herb	Apr-May	1B.2	S3	G3
<a href="#"><u>Meesia triquetra</u></a>	three-ranked hump moss	Meesiaceae	moss	Jul	4.2	S4	G5
<a href="#"><u>Mielichhoferia elongata</u></a>	elongate copper moss	Mielichhoferiaceae	moss		4.3	S4	G5
<a href="#"><u>Orthotrichum holzingeri</u></a>	Holzinger's orthotrichum moss	Orthotrichaceae	moss		1B.3	S2	G3
<a href="#"><u>Pseudobahia peirsonii</u></a>	San Joaquin adobe sunburst	Asteraceae	annual herb	Feb-Apr	1B.1	S1	G1
<a href="#"><u>Ribes menziesii var. ixoderme</u></a>	aromatic canyon gooseberry	Grossulariaceae	perennial deciduous shrub	Apr	1B.2	S1	G4T1
<a href="#"><u>Ribes tulareense</u></a>	Sequoia gooseberry	Grossulariaceae	perennial deciduous shrub	May	1B.3	S1	G1
<a href="#"><u>Tuctoria greenei</u></a>	Greene's tuctoria	Poaceae	annual herb	May-Jul(Sep)	1B.1	S1	G1

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### Questions and Comments

[rareplants@cnps.org](mailto:rareplants@cnps.org)



# Selected Elements by Element Code

## California Department of Fish and Wildlife

### California Natural Diversity Database



**Query Criteria:** Quad<span style='color:Red'> IS </span>(Auckland (3611951)<span style='color:Red'> OR </span>Shadequarter Mtn. (3611858)<span style='color:Red'> OR </span>Giant Forest (3611857)<span style='color:Red'> OR </span>Woodlake (3611941)<span style='color:Red'> OR </span>Kaweah (3611848)<span style='color:Red'> OR </span>Case Mountain (3611847)<span style='color:Red'> OR </span>Rocky Hill (3611931)<span style='color:Red'> OR </span>Chickencoop Canyon (3611838)<span style='color:Red'> OR </span>Dennison Peak (3611837))

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AAAAD02140	<b><i>Batrachoseps regius</i></b> Kings River slender salamander	None	None	G2	S2S3	
AAAAD02200	<b><i>Batrachoseps altasierae</i></b> Greenhorn Mountains slender salamander	None	None	G4	S3S4	
AAABF02020	<b><i>Spea hammondi</i></b> western spadefoot	None	None	G3	S3	SSC
AAABH01050	<b><i>Rana boylei</i></b> foothill yellow-legged frog	None	Candidate Threatened	G3	S3	SSC
AAABH01330	<b><i>Rana muscosa</i></b> southern mountain yellow-legged frog	Endangered	Endangered	G1	S1	WL
ABNGA04010	<b><i>Ardea herodias</i></b> great blue heron	None	None	G5	S4	
ABNKA03010	<b><i>Gymnogyps californianus</i></b> California condor	Endangered	Endangered	G1	S1	FP
ABNKC10010	<b><i>Haliaeetus leucocephalus</i></b> bald eagle	Delisted	Endangered	G5	S3	FP
ABNKC12060	<b><i>Accipiter gentilis</i></b> northern goshawk	None	None	G5	S3	SSC
ABNUA01010	<b><i>Cypseloides niger</i></b> black swift	None	None	G4	S2	SSC
ABPBXB0020	<b><i>Agelaius tricolor</i></b> tricolored blackbird	None	Threatened	G2G3	S1S2	SSC
AMACC01070	<b><i>Myotis evotis</i></b> long-eared myotis	None	None	G5	S3	
AMACC01090	<b><i>Myotis thysanodes</i></b> fringed myotis	None	None	G4	S3	
AMACC01140	<b><i>Myotis ciliolabrum</i></b> western small-footed myotis	None	None	G5	S3	
AMACC07010	<b><i>Euderma maculatum</i></b> spotted bat	None	None	G4	S3	SSC
AMACC08010	<b><i>Corynorhinus townsendii</i></b> Townsend's big-eared bat	None	None	G3G4	S2	SSC
AMACC10010	<b><i>Antrozous pallidus</i></b> pallid bat	None	None	G5	S3	SSC
AMACD02011	<b><i>Eumops perotis californicus</i></b> western mastiff bat	None	None	G5T4	S3S4	SSC
AMAJA03012	<b><i>Vulpes vulpes necator</i></b> Sierra Nevada red fox	Candidate	Threatened	G5T1T2	S1	



Selected Elements by Element Code  
California Department of Fish and Wildlife  
California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AMAJA03041	<b><i>Vulpes macrotis mutica</i></b> San Joaquin kit fox	Endangered	Threatened	G4T2	S2	
AMAJF01021	<b><i>Pekania pennanti</i></b> fisher - West Coast DPS	None	Threatened	G5T2T3Q	S2S3	SSC
AMAJF03010	<b><i>Gulo gulo</i></b> California wolverine	Proposed Threatened	Threatened	G4	S1	FP
ARAAD02030	<b><i>Emys marmorata</i></b> western pond turtle	None	None	G3G4	S3	SSC
ARACC01020	<b><i>Anniella pulchra</i></b> northern California legless lizard	None	None	G3	S3	SSC
CARA2443CA	<b>Central Valley Drainage Hardhead/Squawfish Stream</b> Central Valley Drainage Hardhead/Squawfish Stream	None	None	GNR	SNR	
CTT44120CA	<b>Northern Claypan Vernal Pool</b> Northern Claypan Vernal Pool	None	None	G1	S1.1	
CTT62100CA	<b>Sycamore Alluvial Woodland</b> Sycamore Alluvial Woodland	None	None	G1	S1.1	
CTT84250CA	<b>Big Tree Forest</b> Big Tree Forest	None	None	G3	S3.2	
ICBRA03030	<b><i>Branchinecta lynchi</i></b> vernal pool fairy shrimp	Threatened	None	G3	S3	
ICMAL01210	<b><i>Bowmanasellus sequoiae</i></b> Sequoia cave isopod	None	None	G1	S1	
IICOL48011	<b><i>Desmocerus californicus dimorphus</i></b> valley elderberry longhorn beetle	Threatened	None	G3T2	S2	
IICOL4C020	<b><i>Lytta moesta</i></b> moestan blister beetle	None	None	G2	S2	
IICOL4C040	<b><i>Lytta morrisoni</i></b> Morrison's blister beetle	None	None	G1G2	S1S2	
IICOL58010	<b><i>Atractelmis wawona</i></b> Wawona riffle beetle	None	None	G1G3	S1S2	
IIHYM24250	<b><i>Bombus occidentalis</i></b> western bumble bee	None	Candidate Endangered	G2G3	S1	
IIHYM24380	<b><i>Bombus caliginosus</i></b> obscure bumble bee	None	None	G4?	S1S2	
IIHYM24480	<b><i>Bombus crotchii</i></b> Crotch bumble bee	None	Candidate Endangered	G3G4	S1S2	
IIHYM72010	<b><i>Chrysis tularensis</i></b> Tulare cuckoo wasp	None	None	G1G2	S1S2	
IITRI11030	<b><i>Cryptochia denningi</i></b> Denning's cryptic caddisfly	None	None	G1G2	S1S2	
ILARA98020	<b><i>Talanites moodyae</i></b> Moody's gnaphosid spider	None	None	G1G2	S1S2	





Selected Elements by Element Code  
California Department of Fish and Wildlife  
California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
ILARAU8090	<i>Calicina cloughensis</i> Clough Cave harvestman	None	None	G1	S1	
NBMUS4Q022	<i>Mielichhoferia elongata</i> elongate copper moss	None	None	G5	S3S4	4.3
NBMUS560E0	<i>Orthotrichum holzingeri</i> Holzinger's orthotrichum moss	None	None	G3G4	S2	1B.3
PDAP10Z0Y0	<i>Eryngium spinosepalum</i> spiny-sepaled button-celery	None	None	G2	S2	1B.2
PDAST4N260	<i>Helianthus winteri</i> Winter's sunflower	None	None	G2?	S2?	1B.2
PDAST7P030	<i>Pseudobahia peirsonii</i> San Joaquin adobe sunburst	Threatened	Endangered	G1	S1	1B.1
PDCON040K2	<i>Calystegia malacophylla</i> var. <i>berryi</i> Berry's morning-glory	None	None	G4G5T2Q	S2	3.3
PDCRA040A2	<i>Dudleya cymosa</i> ssp. <i>costatifolia</i> Pierpoint Springs dudleya	None	None	G5T1	S1	1B.2
PDCUS011T0	<i>Cuscuta jepsonii</i> Jepson's dodder	None	None	G1	S1	1B.2
PDGRO02104	<i>Ribes menziesii</i> var. <i>ixoderme</i> aromatic canyon gooseberry	None	None	G4T1	S1	1B.2
PDGRO021L0	<i>Ribes tulareense</i> Sequoia gooseberry	None	None	G1	S1	1B.3
PDONA05120	<i>Clarkia springvillensis</i> Springville clarkia	Threatened	Endangered	G2	S2	1B.2
PDPGN08495	<i>Eriogonum nudum</i> var. <i>murinum</i> mouse buckwheat	None	None	G5T2	S2	1B.2
PDPLM09130	<i>Leptosiphon serrulatus</i> Madera leptosiphon	None	None	G3	S3	1B.2
PDRAN0B1G0	<i>Delphinium purpusii</i> rose-flowered larkspur	None	None	G3	S3	1B.3
PDRAN0B1J0	<i>Delphinium recurvatum</i> recurved larkspur	None	None	G2?	S2?	1B.2
PDSCR1B240	<i>Diplacus pictus</i> calico monkeyflower	None	None	G2	S2	1B.2
PDSCR1B2Y0	<i>Erythranthe norrisii</i> Kaweah monkeyflower	None	None	G2	S2	1B.3
PMIRI090M0	<i>Iris munzii</i> Munz's iris	None	None	G2	S2	1B.3
PMLIL02360	<i>Allium abramsii</i> Abrams' onion	None	None	G3	S3	1B.2
PMLIL0C060	<i>Brodiaea insignis</i> Kaweah brodiaea	None	Endangered	G1	S1	1B.2



Selected Elements by Element Code  
California Department of Fish and Wildlife  
California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PMLIL0D1M0	<i>Calochortus westonii</i> Shirley Meadows star-tulip	None	None	G3	S3	1B.2
PMLIL0V0K0	<i>Fritillaria striata</i> striped adobe-lily	None	Threatened	G1	S1	1B.1
PMPOA1H040	<i>Cinna bolanderi</i> Bolander's woodreed	None	None	G2G3	S2S3	1B.2
PMPOA2Y080	<i>Glyceria grandis</i> American manna grass	None	None	G5	S3	2B.3
PMPOA4G060	<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	Threatened	Endangered	G1	S1	1B.1
PMPOA6N010	<i>Tuctoria greenei</i> Greene's tuctoria	Endangered	Rare	G1	S1	1B.1

Record Count: 67

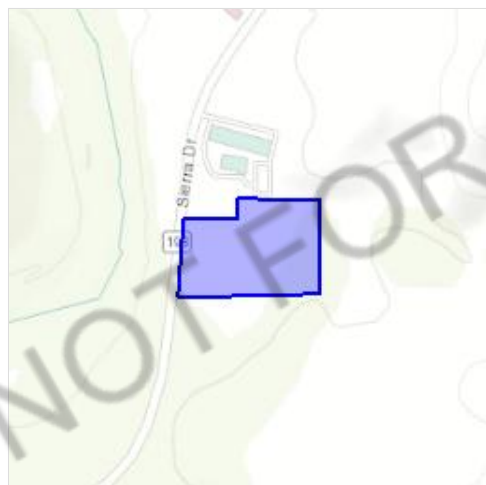
# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Tulare County, California



## Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME

STATUS

San Joaquin Kit Fox *Vulpes macrotis mutica*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/2873>

## Birds

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/8193">https://ecos.fws.gov/ecp/species/8193</a>	Endangered

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	Threatened

## Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A  
BREEDING SEASON IS INDICATED  
FOR A BIRD ON YOUR LIST, THE  
BIRD MAY BREED IN YOUR  
PROJECT AREA SOMETIME WITHIN  
THE TIMEFRAME SPECIFIED,  
WHICH IS A VERY LIBERAL  
ESTIMATE OF THE DATES INSIDE  
WHICH THE BIRD BREEDS  
ACROSS ITS ENTIRE RANGE.  
"BREEDS ELSEWHERE" INDICATES

THAT THE BIRD DOES NOT LIKELY  
BREED IN YOUR PROJECT AREA.)

**Bald Eagle** *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Aug 31

**Black Swift** *Cypseloides niger*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8878>

Breeds Jun 15 to Sep 10

**California Thrasher** *Toxostoma redivivum*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Jul 31

**Clark's Grebe** *Aechmophorus clarkii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Dec 31

**Common Yellowthroat** *Geothlypis trichas sinuosa*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/2084>

Breeds May 20 to Jul 31

**Costa's Hummingbird** *Calypte costae*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9470>

Breeds Jan 15 to Jun 10

**Golden Eagle** *Aquila chrysaetos*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Breeds Jan 1 to Aug 31

**Lawrence's Goldfinch** *Carduelis lawrencei*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9464>

Breeds Mar 20 to Sep 20

**Lewis's Woodpecker** *Melanerpes lewis*

Breeds Apr 20 to Sep 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9408>

**Nuttall's Woodpecker** *Picoides nuttallii*

Breeds Apr 1 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9410>

**Oak Titmouse** *Baeolophus inornatus*

Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9656>

**Rufous Hummingbird** *Selasphorus rufus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

**Song Sparrow** *Melospiza melodia*

Breeds Feb 20 to Sep 5

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

**Spotted Towhee** *Pipilo maculatus clementae*

Breeds Apr 15 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/4243>

**Wrentit** *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.



How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

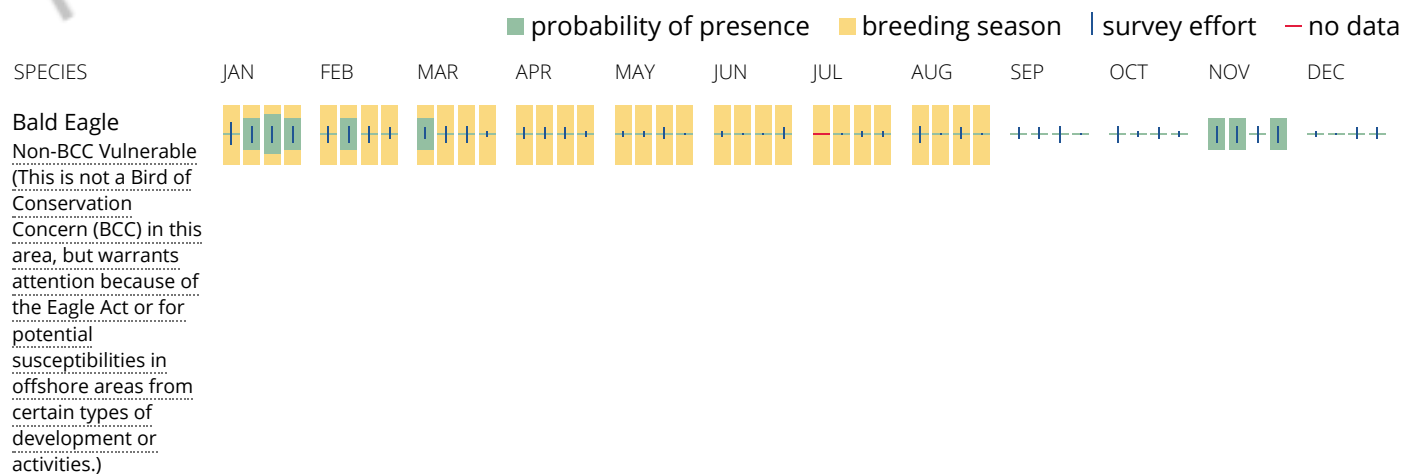
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

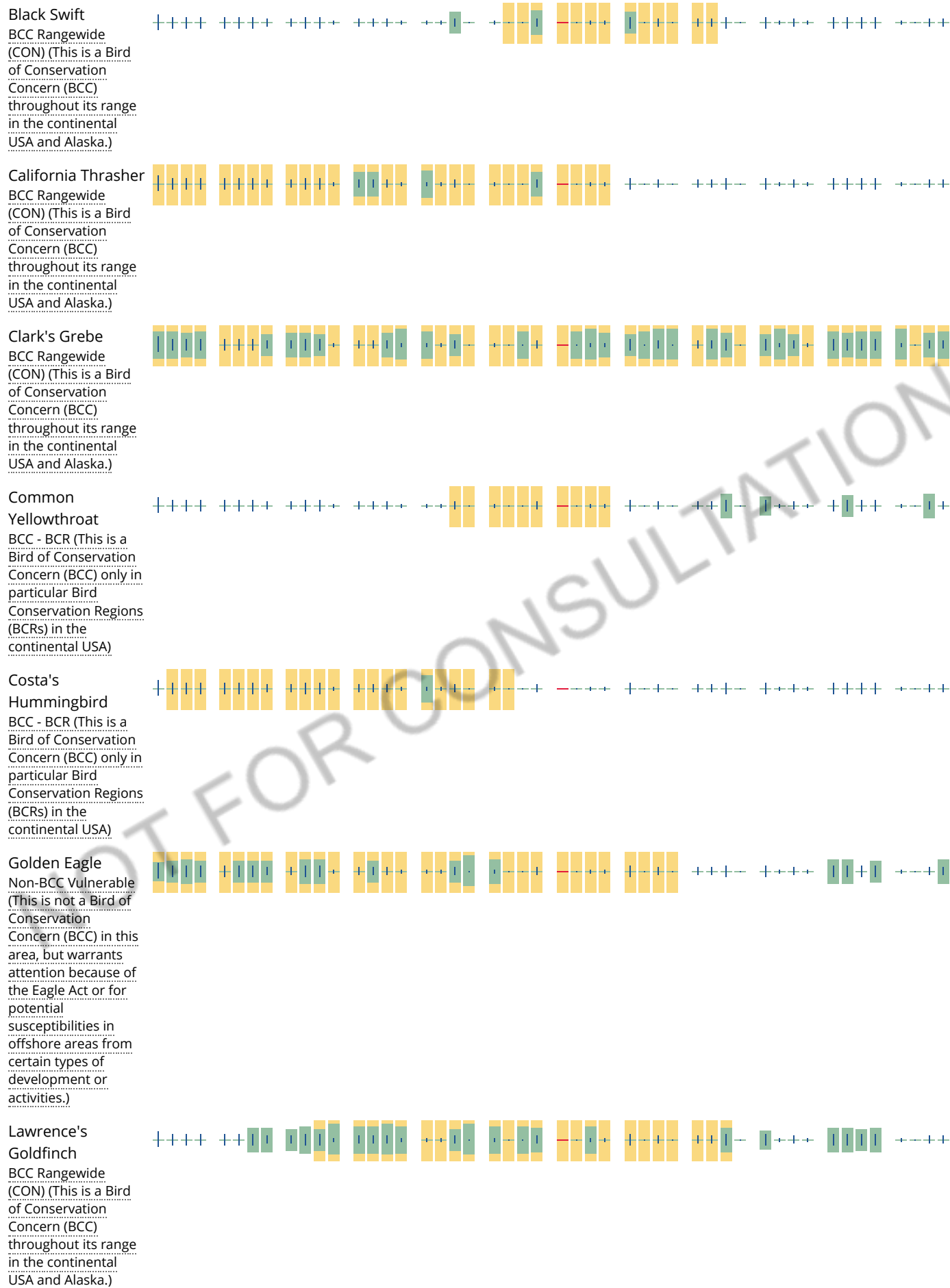
### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

### What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

### What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

## Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

[PFOA](#)

RIVERINE

[R4SBC](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters.

Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

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**ATTACHMENT B**

Representative Site Photos





Photo1. Oak woodland in SE corner of Survey Area, facing SW.



Photo 2. Oak woodland, annual grassland and elderberries, facing SSE.



Photo 3. Representative photo of annual grassland, facing W.



Photo 4. Ruderal area, topped cottonwoods on W side of Survey Area, facing SSW.







Photo 5. Ruderal area, access road on southern property boundary, facing W.



Photo 6. Delineation Sample Point 1 location in NE corner of property, facing N.



Photo 7. NE corner of Survey Area, facing NNE.



Photo 8. Elderberry in SE portion of property, facing West.



## **ATTACHMENT C**

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### Aquatic Resources Delineation Data Sheets



# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Hampton Inn & Suites in Three Rivers City/County: Tulare Sampling Date: 8/13/2020  
 Applicant/Owner: Ineffable Hospitality, Inc. State: CA Sampling Point: 1  
 Investigator(s): Keith Kwan Section, Township, Range: Section 26, T.17 South, R.28 East  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 3  
 Subregion (LRR): C Lat: 36.425129 Long: -118.913574 Datum: NAD83  
 Soil Map Unit Name: 105 - Blasingame sandy loam, 9 to 15 percent slopes NWI classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: shallow swale with no evidence of wetland characteristics or an ordinary high water mark	

## VEGETATION – Use scientific names of plants.

<b>Tree Stratum</b> (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ _____ = Total Cover <b>Sapling/Shrub Stratum</b> (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover <b>Herb Stratum</b> (Plot size: <u>5' radius</u> ) 1. <u>Anthriscus caucalis</u> <u>2</u> <u>no</u> <u>N/L</u> 2. <u>Bromus diandrus</u> <u>15</u> <u>yes</u> <u>N/L</u> 3. <u>Carduus pycnocephalus</u> <u>5</u> <u>no</u> <u>N/L</u> 4. <u>Galium aparine</u> <u>1</u> <u>no</u> <u>FACU</u> 5. _____ 6. _____ 7. _____ 8. _____ _____ = Total Cover <b>Woody Vine Stratum</b> (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover % Bare Ground in Herb Stratum <u>80</u> % Cover of Biotic Crust <u>0</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B) <b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____ <b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. <b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>
Remarks: many Ca. ground squirrel diggings present	

## SOIL

Sampling Point: 1

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
shallow swale with no evidence of an OHWM		

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Hampton Inn & Suites in Three Rivers City/County: Tulare Sampling Date: 8/13/2020  
 Applicant/Owner: Ineffable Hospitality, Inc. State: \_\_\_\_\_ Sampling Point: 2  
 Investigator(s): Keith Kwan Section, Township, Range: Section 26, T.17 South, R.28 East  
 Landform (hillslope, terrace, etc.): toe of slope Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR): C Lat: 36.424787 Long: -118.913852 Datum: NAD83  
 Soil Map Unit Name: 105 - Blasingame sandy loam, 9 to 15 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: shallow swale with no evidence of wetland characteristics or an ordinary high water mark	

## VEGETATION – Use scientific names of plants.

<b>Tree Stratum</b> (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ _____ = Total Cover <b>Sapling/Shrub Stratum</b> (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover <b>Herb Stratum</b> (Plot size: <u>5' radius</u> ) 1. <u>Bromus diandrus</u> 30 yes N/L 2. <u>Centaurea solstitialis</u> 15 yes N/L 3. <u>Carduus pycnocephalus</u> 5 no N/L 4. <u>Amsinckia sp.</u> 1 no N/L 5. _____ 6. _____ 7. _____ 8. _____ _____ = Total Cover <b>Woody Vine Stratum</b> (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover % Bare Ground in Herb Stratum <u>50</u> % Cover of Biotic Crust <u>0</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B) <b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____ <b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. <b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Remarks:

## SOIL

Sampling Point: 2

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		



July 6, 2020

Haren-deep Sanghera,  
Ineffable Hospitality, Inc.  
6473 E. Hatch Road  
Hughson, California 95326

**RE: Hampton Inn and Suites, Three Rivers, Tulare County, California – Special-Status Plant Survey**

Dear Mr. Sanghera:

On behalf of Ineffable Hospitality, Inc., ECORP Consulting, Inc. conducted a special-status plant survey for the Hampton Inn and Suites in Three Rivers, Tulare County, California (Survey Area) (Figure 1. *Survey Area Location and Vicinity*). The ±4.57-acre Survey Area is located adjacent to the community of Three Rivers east of State Highway 198 (Sierra Drive), approximately 1,000 feet north of the Old Three Rivers Road intersection, and immediately south of the Comfort Inn and Suites. The site corresponds to a portion of Section 26, Township 17 South, Range 28 East (Mount Diablo Base and Meridian) of the “Kaweah, California” 7.5-minute quadrangle (North American Datum [NAD] 27) (U.S. Geological Survey [USGS] 1993). The approximate center of the site is located at latitude 36.424827° (NAD83) and longitude - 118.914718° (NAD83) within the Upper Kaweah Watershed (Hydrologic Unit Code#18030007)(Natural Resources Conservation Service [NRCS] et al. 2019). The purpose of the survey was to identify and map the locations of special-status plant species, if found, within the Survey Area.

Prior to conducting the survey, background information was collected on the potential presence of special-status plants within or near the Survey Area from a variety of sources, including the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CDFW 2020), the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation tool (USFWS 2020), and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants of California (CNPS 2020). Each special-status plant species with potential to occur in the vicinity of the Survey Area was evaluated for its potential to occur onsite, and a list of target species was determined. The following 12 species were included as targets for the survey:

- Kaweah brodiaea (*Brodiaea insignis*)
- Springville clarkia (*Clarkia springvillensis*)
- Streambank spring beauty (*Claytonia parviflora* ssp. *grandiflora*)
- Recurved larkspur (*Delphinium recurvatum*)
- Calico monkeyflower (*Diplacus pictus*)
- Mouse buckwheat (*Eriogonum nudum* var. *murinum*)
- Spiny-sepaled button-celery (*Eryngium spinosepalum*)



- Sierra Nevada monkeyflower (*Erythranthe sierrae*)
- American manna grass (*Glyceria grandis*)
- Munz's iris (*Iris munzii*)
- Madera leptosiphon (*Leptosiphon serrulatus*)
- San Joaquin adobe sunburst (*Pseudobahia peirsonii*)

Reference populations, where available, were visited to assess phenology and observe morphology for target species. When reference populations were not available, herbaria specimens, Calflora (Calflora 2020), Calphotos (Calphotos 2020), and *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012) were used as a reference. Observation of the reference populations and review of other reference sources confirmed that the survey coincided with optimal identifiable periods for all target species.

ECORP biologist Hannah Stone conducted the special-status plant survey on April 15, 2020 and June 30, 2020. The survey was conducted in accordance with guidelines promulgated by USFWS (USFWS 2000), CDFW (CDFW 2018), and CNPS (CNPS 2001). The biologist walked meandering transects throughout the Survey Area, including all suitable habitat for target species. A list of all plant species observed within the Survey Area is included in Attachment A. No special-status plant species were observed during the survey.

If you have any questions, please call me at (916) 782-9100.

Sincerely,



Chris Stabenfeldt  
Senior Environmental Planner/Project Manager  
ECORP Consulting, Inc.

## REFERENCES

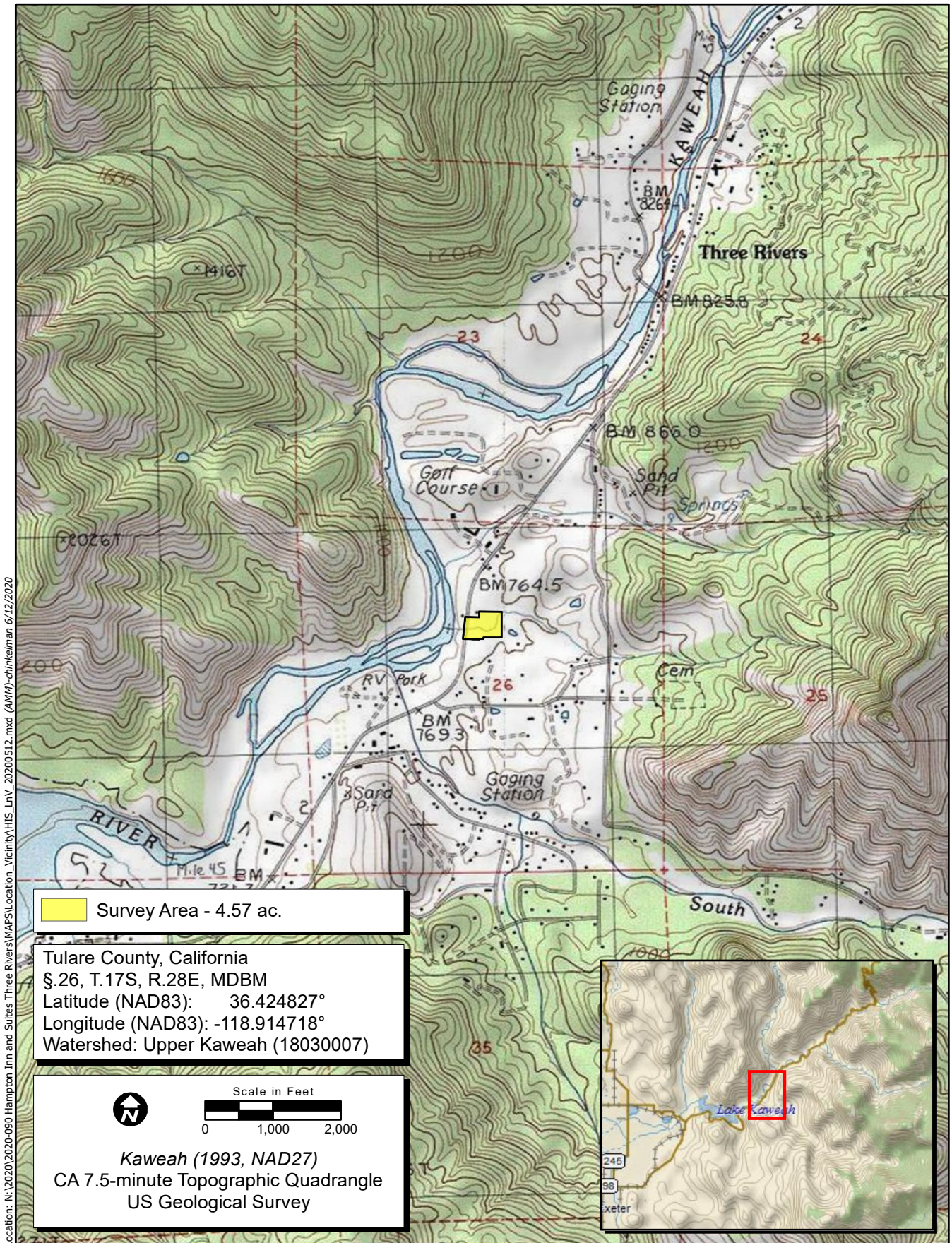
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## LIST OF FIGURES

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Figure 1. Survey Area Location and Vicinity





Map Date: 6/12/2020  
 iService Layer Credits: Copyright© 2013 National Geographic Society, i-cubed  
 Copyright:(c) 2018 Garmin

**Figure 1. Survey Area Location and Vicinity**

2020-090 Hampton Inn and Suites in Three Rivers



Plant Species Observed Onsite (April 15, 2020 and June 30, 2020)

**Hampton Inn and Suites Three Rivers Project**  
Plant Species Observed (April 15, 2020 and June 30, 2020)

SCIENTIFIC NAME	COMMON NAME
<b>ADOXACEAE</b>	<b>MUSKROOT FAMILY</b>
<i>Sambucus nigra</i> subsp. <i>caerulea</i>	Blue elderberry
<b>AMARANTHACEAE</b>	<b>AMARANTH FAMILY</b>
<i>Amaranthus albus</i> *	Pigweed amaranth
<b>APIACEAE</b>	<b>CARROT FAMILY</b>
<i>Anthriscus caucalis</i> *	Bur chervil
<i>Conium maculatum</i> *	Poison hemlock
<i>Torilis arvensis</i> *	Field hedge parsley
<b>ARACEAE</b>	<b>ARUM FAMILY</b>
<i>Lemna</i> sp.	Duckweed
<b>ASTERACEAE</b>	<b>SUNFLOWER FAMILY</b>
<i>Ambrosia psilostachya</i>	Western ragweed
<i>Carduus pycnocephalus</i> *	Italian thistle
<i>Centaurea melitensis</i> *	Tocalote
<i>Centaurea solstitialis</i> *	Yellow star-thistle
<i>Erigeron canadensis</i>	Canada horseweed
<i>Helianthus annuus</i>	Common sunflower
<i>Heterotheca grandiflora</i>	Telegraph weed
<i>Holocarpha virgata</i>	Narrow tarplant
<i>Hypochaeris glabra</i> *	Smooth cat's-ear
<i>Hypochaeris radicata</i> *	Rough cat's-ear
<i>Lactuca serriola</i> *	Prickly lettuce
<i>Pseudognaphalium luteoalbum</i> *	Jersey cudweed
<i>Silybum marianum</i> *	Milk thistle
<b>BORAGINACEAE</b>	<b>BORAGE FAMILY</b>
<i>Amsinckia</i> sp.	Fiddleneck
<b>BRASSICACEAE</b>	<b>MUSTARD FAMILY</b>
<i>Boechera</i> sp.	Rockcress
<i>Capsella bursa-pastoris</i> *	Shepherd purse
<i>Hirschfeldia incana</i> *	Shortpod mustard
<i>Sisymbrium officinale</i> *	Hedge mustard

An asterisk (\*) indicates a non-native species.

**Hampton Inn and Suites Three Rivers Project**  
Plant Species Observed (April 15, 2020 and June 30, 2020)

SCIENTIFIC NAME	COMMON NAME
<b>CARYOPHYLLACEAE</b>	<b>PINK FAMILY</b>
<i>Stellaria media</i> *	Common chickweed
<b>CHENOPODIACEAE</b>	<b>GOOSEFOOT FAMILY</b>
<i>Chenopodium album</i> *	White goosefoot
<b>EUPHORBIACEAE</b>	<b>SPURGE FAMILY</b>
<i>Croton setiger</i>	Turkey mullein
<b>FABACEAE</b>	<b>LEGUME FAMILY</b>
<i>Acmispon americanus</i>	Spanish clover
<i>Lupinus bicolor</i>	Bicolored lupine
<i>Vicia villosa</i> *	Hairy vetch
<i>Wisteria sinensis</i> *	Chinese wisteria
<b>FAGACEAE</b>	<b>OAK FAMILY</b>
<i>Quercus lobata</i>	Valley oak
<i>Quercus wislizeni</i>	Interior live oak
<b>GERANIACEAE</b>	<b>GERANIUM FAMILY</b>
<i>Erodium brachycarpum</i> *	Short fruited filaree
<i>Erodium cicutarium</i> *	Red-stemmed filaree
<b>LAMIACEAE</b>	<b>MINT FAMILY</b>
<i>Marrubium vulgare</i> *	Common horehound
<b>MELIACEAE</b>	<b>MAHOGANY FAMILY</b>
<i>Melia azedarach</i> *	China berry tree
<b>MYRSINACEAE</b>	<b>MYRSINE FAMILY</b>
<i>Lysimachia arvensis</i> *	Scarlet pimpernel
<b>ONAGRACEAE</b>	<b>EVENING PRIMROSE FAMILY</b>
<i>Camissonia strigulosa</i>	Contorted primrose
<i>Epilobium</i> sp.	Willow-herb
<b>PHRYMACEAE</b>	<b>LOPSEED FAMILY</b>
<i>Erythranthe floribunda</i>	Many flowered monkey flower
<b>PLANTAGINACEAE</b>	<b>PLANTAIN FAMILY</b>
<i>Veronica persica</i> *	Bird's eye speedwell

An asterisk (\*) indicates a non-native species.

**Hampton Inn and Suites Three Rivers Project**  
Plant Species Observed (April 15, 2020 and June 30, 2020)

SCIENTIFIC NAME	COMMON NAME
<b>POACEAE</b>	<b>GRASS FAMILY</b>
<i>Avena fatua</i> *	Wild oat
<i>Bromus diandrus</i> *	Ripgut brome
<i>Bromus hordeaceus</i> *	Soft brome
<i>Distichlis spicata</i>	Saltgrass
<i>Elymus caput-medusae</i> *	Medusahead grass
<i>Elymus glaucus</i>	Blue wild-rye
<i>Elymus triticoides</i>	Creeping wild-rye
<i>Festuca perennis</i> *	Italian Ryegrass
<i>Hordeum murinum</i> ssp. <i>glaucum</i> *	Foxtail barley
<b>POLYGONACEAE</b>	<b>BUCKWHEAT FAMILY</b>
<i>Chorizanthe membranacea</i>	Pink spineflower
<i>Rumex crispus</i> *	Curly dock
<b>PORTULACAEAE</b>	<b>PURSLANE FAMILY</b>
<i>Claytonia parviflora</i> ssp. <i>parviflora</i>	Streambank springbeauty
<b>ROSACEAE</b>	<b>ROSE FAMILY</b>
<i>Rubus armeniacus</i> *	Himalayan blackberry
<b>RUBIACEAE</b>	<b>MADDER FAMILY</b>
<i>Galium aparine</i>	Common bedstraw
<b>SALICACEAE</b>	<b>WILLOW FAMILY</b>
<i>Populus deltoides</i> *	Eastern cottonwood
<i>Populus fremontii</i>	Fremont's cottonwood
<i>Salix lasiolepis</i>	Arroyo willow
<b>SCROPHULARIACEAE</b>	<b>FIGWORT FAMILY</b>
<i>Verbascum thapsus</i> *	Common mullein
<b>SIMAROUBACEAE</b>	<b>QUASSIA FAMILY</b>
<i>Ailanthus altissima</i> *	Tree-of-heaven
<b>SOLANACEAE</b>	<b>NIGHTSHADE FAMILY</b>
<i>Datura stramonium</i> *	Jimson weed
<i>Datura wrightii</i>	Sacred thornapple
<i>Solanum americanum</i>	Comon nightshade

An asterisk (\*) indicates a non-native species.



**Hampton Inn and Suites Three Rivers Project**  
 Plant Species Observed (April 15, 2020 and June 30, 2020)

SCIENTIFIC NAME	COMMON NAME
<b>URTICACEAE</b>	<b>NETTLE FAMILY</b>
<i>Urtica dioica</i>	Stinging nettle
<b>VITACEAE</b>	<b>GRAPE FAMILY</b>
<i>Vitis californica</i>	California wild grape
<b>ZYGOPHYLLACEAE</b>	<b>CALTROP FAMILY</b>
<i>Tribulus terrestris</i> *	Puncture vine

# **CULTURAL RESOURCES INVENTORY REPORT**

## **Hampton Inn and Suites Three Rivers**

This report contains confidential information exempt from public disclosure pursuant to:

54 USC § 307103 (National Historic Preservation Act), and/or

16 USC § 470hh (Archaeological Resources Protection Act), and/or

16 USC § 470aaa (Paleontological Resources Preservation Act), and/or

36 CFR § 296.18 (Confidentiality of Archaeological Resource Information), and/or

Gov. Code § 6254(r): California Public Records, Records exempt from disclosure requirements, Native American grave, cemetery and sacred place records, and/or

Gov. Code § 6254.10: California Public Records Act, Disclosure of records relating to archaeological site information and specified reports not required, and/or

14 CCR §15120(d): CEQA Guidelines, Contents of Environmental Impact Reports.

**Consultation Notice – THREE RIVERS-HAMPTON INN & SUITES (CEQ 20-004)**  
**CHRIS & SLF REQUESTS COMPLETED (AB52)**

TRIBE CONTACTED	REQUEST TYPE			ITEMS & DOCUMENTS SUBMITTED					DELIVERY METHOD			CONSULTATION PERIOD		CONSULTATION / ACTIONS
	AB 52	SB 18	Sec 106	Map	Project Description	SLF Search Results	CHRIS Results	Other	E-mail	FedEx	Certified US Mail	Return Receipt	Period Ends	Summary
<b>SACRED LAND FILE (SLF) REQUEST</b>														
Native American Heritage Commission	X			X	X									<p>SLF requested by ECORP on 5/13/20, and the result (negative) was obtained on 5/18/20.</p> <p>The consultant also made a CHRIS request on 5/18/20 and obtained the results already.</p> <p>11/2/2020, NOP sent to OPR/SCH which distributed it to the NAHC.</p> <p>11/3/2020, NAHC provided standard comments regarding AB 52 requirements and the consultation process.</p>
<b>CONSULTATION REQUEST LETTERS</b>														
Kern Valley Indian Community Robert Robinson, Co-Chairperson P.O. Box 1010 Lake Isabella, CA 93240 <a href="mailto:bbutterbredt@gmail.com">bbutterbredt@gmail.com</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115370957	10/8/20	11/7/20	
Kern Valley Indian Community Julie Turner, Secretary P. Box 1010 Lake Isabella, CA 93240 <a href="mailto:meindiagirl@sbcglobal.net">meindiagirl@sbcglobal.net</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115370902	10/8/20	11/7/20	
Kern Valley Indian Community Brandi Kendricks 30741 Foxridge Court Tehachapi, CA 93561 <a href="mailto:krazykendricks@hotmail.com">krazykendricks@hotmail.com</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115372333	10/8/20	11/7/20	
Santa Rosa Rancheria Tachi Yokut Tribe Leo Sisco, Chairperson P. O. Box 8 Lemoore, CA 93245 <a href="mailto:LSisco@tachi-yokut-nsn.gov">LSisco@tachi-yokut-nsn.gov</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115370964	10/5/20	11/4/20	
Santa Rosa Rancheria Tachi Yokut Tribe Robert Jeff, Vice-Chair P. O. Box 8 Lemoore, CA 93245 <a href="mailto:RGJeff@tachi-yokut-nsn.gov">RGJeff@tachi-yokut-nsn.gov</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115370933	10/5/20	11/4/20	

**Consultation Notice – THREE RIVERS-HAMPTON INN & SUITES (CEQ 20-004)**  
**CHRIS & SLF REQUESTS COMPLETED (AB52)**

TRIBE CONTACTED	REQUEST TYPE			ITEMS & DOCUMENTS SUBMITTED					DELIVERY METHOD			CONSULTATION PERIOD		CONSULTATION / ACTIONS
	AB 52	SB 18	Sec 106	Map	Project Description	SLF Search Results	CHRIS Results	Other	E-mail	FedEx	Certified US Mail	Return Receipt	Period Ends	Summary
Santa Rosa Rancheria Tachi Yokut Tribe Bianca Arias, Admin. Assistant. P. O. Box 8 Lemoore, CA 93245 <a href="mailto:BArias@tachi-yokut-nsn.gov">BArias@tachi-yokut-nsn.gov</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115370919	10/5/20	11/4/20	
Santa Rosa Rancheria Cultural Department Shana Powers, Director P. O. Box 8 Lemoore, CA 93245 <a href="mailto:SPowers@tachi-yokut-nsn.gov">SPowers@tachi-yokut-nsn.gov</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115370940	10/5/20	11/4/20	
Santa Rosa Rancheria Tachi Yokut Tribe Cultural Department Greg Cuara, Cultural Specialist P. O. Box 8 Lemoore, CA 93245 <a href="mailto:GCuara@tachi-yokut-nsn.gov">GCuara@tachi-yokut-nsn.gov</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115370926	10/5/20	11/4/20	10/21/20, email response received regarding mitigation
Tubatulabals of Kern Valley Robert L. Gomez, Jr., Chairperson P.O. Box 226 Lake Isabella, CA 93240 <a href="mailto:rgomez@tubatulabal.org">rgomez@tubatulabal.org</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115371169	---	---	10/22/20, delivery attempted 10/3/20, 10/8/20, 10/18/20; envelope returned to RMA as “Unclaimed. Unable to Forward”
Tule River Indian Tribe Neil Peyron, Chairperson P. O. Box 589 Porterville, CA 93258 <a href="mailto:neil.peyron@tulerivertribe-nsn.gov">neil.peyron@tulerivertribe-nsn.gov</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115372319	10/6/20	11/5/20	
Tule River Indian Tribe Environmental Department Kerri Vera, Director P. O. Box 589 Porterville, CA 93258 <a href="mailto:tuleriverenv@yahoo.com">tuleriverenv@yahoo.com</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115372326	10/6/20	11/5/20	
Tule River Indian Tribe Dept. of Environmental Protection Felix Christman, Archaeological Monitor P. O. Box 589 Porterville, CA 93258 <a href="mailto:tuleriverarchmon1@gmail.com">tuleriverarchmon1@gmail.com</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115370988	10/6/20	11/5/20	

Consultation Notice – THREE RIVERS-HAMPTON INN & SUITES (CEQ 20-004) CHRIS & SLF REQUESTS COMPLETED (AB52)														
TRIBE CONTACTED	REQUEST TYPE			ITEMS & DOCUMENTS SUBMITTED					DELIVERY METHOD			CONSULTATION PERIOD		CONSULTATION / ACTIONS
	AB 52	SB 18	Sec 106	Map	Project Description	SLF Search Results	CHRIS Results	Other	E-mail	FedEx	Certified US Mail	Return Receipt	Period Ends	Summary
Wuksache Indian Tribe/ Eshom Valley Band Kenneth Woodrow, Chairperson 1179 Rock Haven Ct. Salinas, CA 93906 <a href="mailto:kwood8934@aol.com">kwood8934@aol.com</a>	X			X	X	X			10/1/20		10/1/20 7014015000 0115372340	10/8/20	11/7/20	



# RESOURCE MANAGEMENT AGENCY

**5961 SOUTH MOONEY BLVD**  
**VISALIA, CA 93277**  
PHONE (559) 624-7000  
FAX (559) 730-2653

Aaron R. Bock  
Reed Schenke  
Sherman Dix

Economic Development and Planning  
Public Works  
Fiscal Services

REED SCHENKE, DIRECTOR

MICHAEL WASHAM, ASSOCIATE DIRECTOR

September 30, 2020

«Tribe»

«Department»

«Contact Name»

«Address 1»

«Address 2»

RE: Project Notification Pursuant to Assembly Bill (AB) 52 for Preparation of a Draft Environmental Impact Report for the Three Rivers-Hampton Inn & Suites Project

Dear «Contact Name»,

In accordance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.), the County of Tulare Resource Management Agency (RMA) will be preparing Draft Environmental Impact Report (DEIR) to evaluate the environmental effects associated with the Project.

Pursuant to the provisions of AB 52, as the lead agency under the California Environmental Quality Act (CEQA), the County of Tulare hereby extends an invitation to consult on the California Environmental Quality Act (CEQA) review of the Three Rivers-Hampton Inn & Suites Project (CEQ 20-004) in order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places including:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine; and
- Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the California Register of Historical Resources including historic or prehistoric ruins and any burial ground, archaeological, or historic site.

## **Sacred Lands File Search**

The Consultant ECORP requested a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC) on May 13, 2020, for the Project. The SLF search returned with negative results on May 18, 2020. As such, the SLF search results will be made available upon the release of the DEIR for public review. However, the results may be made available to your Tribal Representatives if a written request for consultation is submitted to the County within thirty (30) days of receipt of this letter.

## **California Historical Resources Information System**

A Cultural Resources Assessment Report has been prepared for the project. The report was prepared in compliance with Section 106 of the National Historic Preservation Act (NHPA; 16 USC 470hh) and its implementing regulations at 36 CFR 800, as well as the provisions of the California Environmental Quality Act. The report will include research through the Southern San Joaquin Valley Information Center (SSJVIC) and other appropriate data repositories and geomorphological and soil analyses. The Cultural Resources Assessment Report will be made available upon the release of the DEIR for public review. However, the report may be made available to your Tribal Representatives if a written request for consultation is submitted to the County within thirty (30) days of receipt of this letter.

If your Tribe desires to consult with the County on the review of this project, please respond in writing within thirty (30) days of receipt of this letter. Written correspondence can be mailed to the address provided above or e-mailed to the addresses provided below.

**If the County does not receive a response to this notification, it will be presumed that your Tribe has declined the opportunity to consult on this project pursuant to AB 52 and SB 18.**

Thank you for your consideration on this matter and please do not hesitate to contact me by phone or e-mail should you have any questions or need additional information. If you need immediate assistance and I am unavailable, please contact, Jessica Willis, Planner IV, by phone at (559) 624-7122, or by email at [JWillis@co.tulare.ca.us](mailto:JWillis@co.tulare.ca.us).

Sincerely,

Hector Guerra  
Chief of Environmental Planning  
(559) 624-7121  
[hguerra@co.tulare.ca.us](mailto:hguerra@co.tulare.ca.us)

Attachments: Project Notification and Tribal Consultation Request  
Map

# **AB 52 PROJECT NOTIFICATION AND TRIBAL CONSULTATION REQUEST**

**Project Title:** Three Rivers-Hampton Inn & Suites

**Project Location:** The proposed project is located east of State Route 198/Sierra Drive (approximately 1,300' north of Old Three Rivers Road), in Three Rivers, Tulare County, California. The site is located within the Three Rivers Urban Development Boundary with a land use designation of Community Commercial and a zoning classification of C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone). The site is currently vacant and adjacent to the Comfort Inn & Suites to the north, a vacant lot to the east, a rural residential/commercial development to the south, and a vacant lot to the west. The approximately 2.80-acre proposed project site is located on Tulare County APN 068-080-010 in Section 26, Township 17 South, Range 28 East, MDB&M, and the Kaweah USGS 7.5 minute quadrangle.

USGS 7.5 Minute Quadrangle(s): Kaweah

APN(s): 068-080-010

PLSS: Section 26, Township 17 South, Range 28 East, MDB&M.

**Project Description:** The proposed project is consistent with the Tulare County General Plan, the Three Rivers Community Plan, and with the current Zoning classification. A 3-story hotel and associated site improvements are being proposed on the existing parcel with access from SR 198. A driveway road is proposed from State Route (SR) 198 through the vacant lot to the west and to the subject property. This driveway will be situated within an existing 30-foot wide access easement. The 3-story hotel will consist of 107 guest rooms with an elevator, managers office and storage room. Consistent with Tulare County parking requirements, the project includes 108 standard parking stalls, 6 of which will be handicap stalls. Utilities include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration). The project is anticipated to have 12 employees, 70 customers, 1 delivery, and 1 shipment per day, for a total of 168 daily vehicle trips.

**Request for Consultation:** Pursuant to the provisions of AB 52, as the lead agency under the California Environmental Quality Act (CEQA), the County of Tulare hereby extends an invitation to consult on the California Environmental Quality Act (CEQA) review of the Three Rivers-Hampton Inn & Suites in order to assist with identifying and/or preserving and/or mitigating project impacts to Native American cultural places and tribal cultural resources.

If your Tribe desires to consult with the County on the review of this project, please respond in writing within thirty (30) days of receipt of this notification. Written correspondence can be mailed to the following addresses:

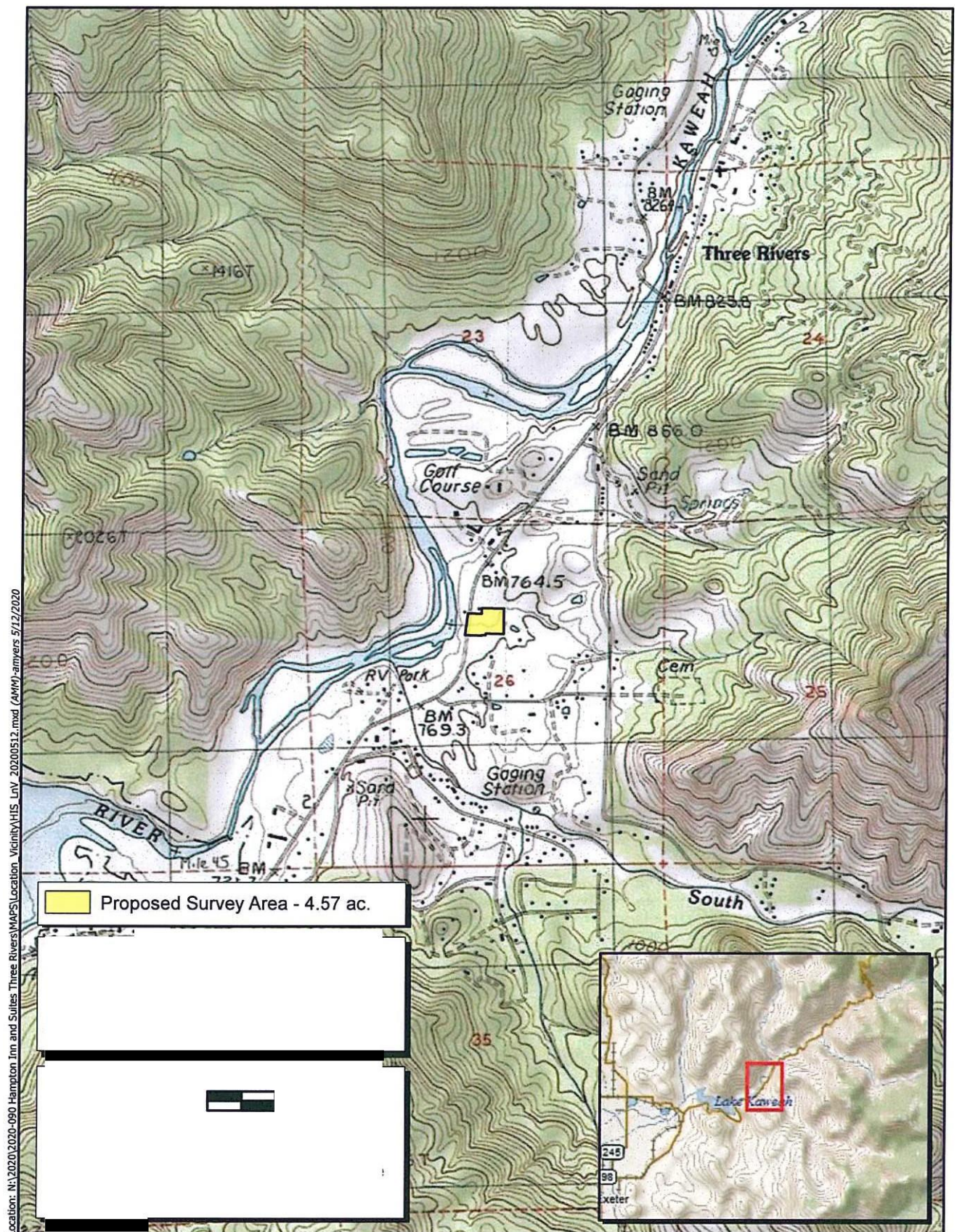


US Post: Tulare County Resource Management Agency  
Environmental Planning Division  
Attn: Jessica Willis / Hector Guerra  
5961 S. Mooney Blvd.  
Visalia, CA 93277-9394

E-mail: [JWillis@co.tulare.ca.us](mailto:JWillis@co.tulare.ca.us) and [HGuerra@co.tulare.ca.us](mailto:HGuerra@co.tulare.ca.us)

If you need further assistance or have any questions, please feel free to contact Jessica Willis by phone at (559) 624-7122, or Hector Guerra at (559) 624-7121.

**If the County does not receive a response to this notification, it will be presumed that your Tribe has declined the opportunity to consult on this project pursuant to AB 52.**





**From:** Cheng Chi  
**To:** bbutterbredt@gmail.com; meindiagirl@sbcglobal.net; crazykendricks@hotmail.com  
**CC:** Jessica Willis; Hector Guerra  
**Date:** 10/1/2020 2:40 PM  
**Subject:** Three Rivers-Hampton Inn & Suites\_Tribal Consultation Notification (AB52)  
**Attachments:** Three Rivers-Hampton Inn\_Consultation Letter-Kern Valley\_Robinson.docx; 3 rivers Hampton Inn.docx; Three Rivers Hampton Inn Project Notification\_AB52.docx

Goos afternoon all.

Please be informed that the tribal consultation notification request letters have been mailed out to you through certified mail earlier today. Allow me to send these materials to you in email attachments too.

Sincerely,

Cheng (Tim) Chi  
Planner II  
County Of Tulare  
Resource Management Agency  
5961 South Mooney Blvd.  
Visalia, CA 93277  
(559) 624-7086  
cchi@co.tulare.ca.us

**From:** Cheng Chi  
**To:** LSisco@tachi-yokut-nsn.gov; RGJeff@tachi-yokut-nsn.gov; BArias@tachi-yokut-nsn.gov; SPowers@tachi-yokut-nsn.gov; GCuara@tachi-yokut-nsn.gov  
**CC:** Jessica Willis; Hector Guerra  
**Date:** 10/1/2020 2:37 PM  
**Subject:** Three Rivers-Hampton Inn & Suites\_Tribal Consultation Notification (AB52)  
**Attachments:** Three Rivers-Hampton Inn\_Consultation Letter-Santa Rosa\_Sisco.docx; Three Rivers Hampton Inn Project Notification\_AB52.docx; 3 rivers Hampton Inn.docx

Goos afternoon all.

Please be informed that the tribal consultation notification request letters have been mailed out to you through certified mail earlier today. Allow me to send these materials to you in email attachments too.

Sincerely,

Cheng (Tim) Chi  
Planner II  
County Of Tulare  
Resource Management Agency  
5961 South Mooney Blvd.  
Visalia, CA 93277  
(559) 624-7086  
cchi@co.tulare.ca.us

**From:** Cheng Chi  
**To:** rgomez@tubatulabal.org  
**CC:** Jessica Willis; Hector Guerra  
**Date:** 10/1/2020 2:51 PM  
**Subject:** Three Rivers-Hampton Inn & Suites\_Tribal Consultation Notification (AB52)  
**Attachments:** Three Rivers-Hampton Inn\_Consultation Letter-Tubatulabals\_Gomez.docx; Three Rivers Hampton Inn Project Notification\_AB52.docx; 3 rivers Hampton Inn.docx

Good afternoon Mr. Gomez.

Please be informed that the tribal consultation notification request letter has been mailed out to you through certified mail earlier today.

Allow me to send these materials to you in email attachments too.

Sincerely,

Cheng (Tim) Chi  
Planner II  
County Of Tulare  
Resource Management Agency  
5961 South Mooney Blvd.  
Visalia, CA 93277  
(559) 624-7086  
cchi@co.tulare.ca.us

**From:** Cheng Chi  
**To:** neil.peyron@tulerivertribe-nsn.gov; tuleriverenv@yahoo.com; tuleriverarchmon1@gmail.com  
**CC:** Jessica Willis; Hector Guerra  
**Date:** 10/1/2020 2:55 PM  
**Subject:** Three Rivers-Hampton Inn & Suites\_Tribal Consultation Notification (AB52)  
**Attachments:** Three Rivers-Hampton Inn\_Consultation Letter-Tule\_Peyron.docx; 3 rivers Hampton Inn.docx; Three Rivers Hampton Inn Project Notification\_AB52.docx

Goos afternoon all.

Please be informed that the tribal consultation notification request letters have been mailed out to you through certified mail earlier today. Allow me to send these materials to you in email attachments too.

Sincerely,

Cheng (Tim) Chi  
Planner II  
County Of Tulare  
Resource Management Agency  
5961 South Mooney Blvd.  
Visalia, CA 93277  
(559) 624-7086  
cchi@co.tulare.ca.us

**From:** [Cheng Chi](#)  
**To:** [kwood8934@aol.com](mailto:kwood8934@aol.com)  
**Cc:** [Hector Guerra](#); [Jessica R Willis](#)  
**Subject:** Three Rivers-Hampton Inn & Suites\_Tribal Consultation Notification (AB52)  
**Date:** Thursday, October 1, 2020 2:50:44 PM  
**Attachments:** [Three Rivers-Hampton Inn Consultation Letter-Wuksache Woodrow.docx](#)  
[Three Rivers Hampton Inn Project Notification AB52.docx](#)  
[3 rivers Hampton Inn.docx](#)

---

Good afternoon Mr. Woodrow.

Please be informed that the tribal consultation notification request letter has been mailed out to you through certified mail earlier today.

Allow me to send these materials to you in email attachments too.

Sincerely,

Cheng (Tim) Chi  
Planner II  
County Of Tulare  
Resource Management Agency  
5961 South Mooney Blvd.  
Visalia, CA 93277  
(559) 624-7086  
[cchi@co.tulare.ca.us](mailto:cchi@co.tulare.ca.us)

# Noise Impact Assessment

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## Three Rivers Hampton Inn and Suites Project

Tulare County, California

### Prepared For:

Ineffable Hospitality, Inc.

**August 2020**



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS



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## **LIST OF ACRONYMS AND ABBREVIATIONS**

ANSI	American National Standards Institute
Caltrans	California Department of Transportation
CNEL	Community Noise Equivalent Level
County	County of Tulare
dB	Decibel
dBA	A-weighted decibels
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
Hz	Hertz
I-8	Interstate 8
L <sub>dn</sub>	Day-night average sound level
L <sub>eq</sub>	Measure of ambient noise
L <sub>max</sub>	The maximum A-weighted noise level during the measurement period.
L <sub>min</sub>	The minimum A-weighted noise level during the measurement period.
OPR	Office of Planning and Research
PPV	Peak particle velocity
Project	Three Rivers Hampton Inn & Suites Project
RMS	Root mean square
RS	Residential Single Unit
sf	Square foot

**LIST OF ACRONYMS AND ABBREVIATIONS**

STC	Sound Transmission Class
WEAL	Western Electro-Acoustic Laboratory, Inc.

## 1.0 INTRODUCTION

This report documents the results of a Noise Impact Assessment completed for the Three Rivers Hampton Inn and Suites Project (Project), which includes the development a 105-room hotel with 108 parking spaces in the community of Three Rivers in the County of Tulare (County). This assessment was prepared to assess the land use compatibility of the Proposed Project within the existing noise environment affecting the Project area. This assessment compares the predicted Project noise levels to noise standards promulgated by the County of Tulare General Plan Health and Safety Element.

### 1.1 Project Location and Description

The Project site is located within the County of Tulare, in the community of Three Rivers. Three Rivers is located in the northern portion of the County of Tulare, bordered by Fresno, Inyo, and Kings Counties. The Project site is located on approximately 2.8 acres, just east of State Highway 198 (see Figure 1. Project Location). The Project is the development of a Hampton Inn on an irregularly shaped and currently undeveloped site. The Project site is surrounded by a Comfort Inn and Suites hotel to the north, a vacant commercial building to the west, and farmland and rural housing to the east, south, and west.

The Project is the development of a 105-room hotel with 108 parking spaces. The hotel is proposed to be three stories. Aside from the 105 guest rooms, the hotel is proposed to contain a meeting room, lobby, breakfast and food preparation areas, laundry, an employee breakroom, and more rooms typical of a moderate to high-end hotel. Other onsite infrastructure would include a swimming pool, two water tanks and wells, and a trash enclosure.

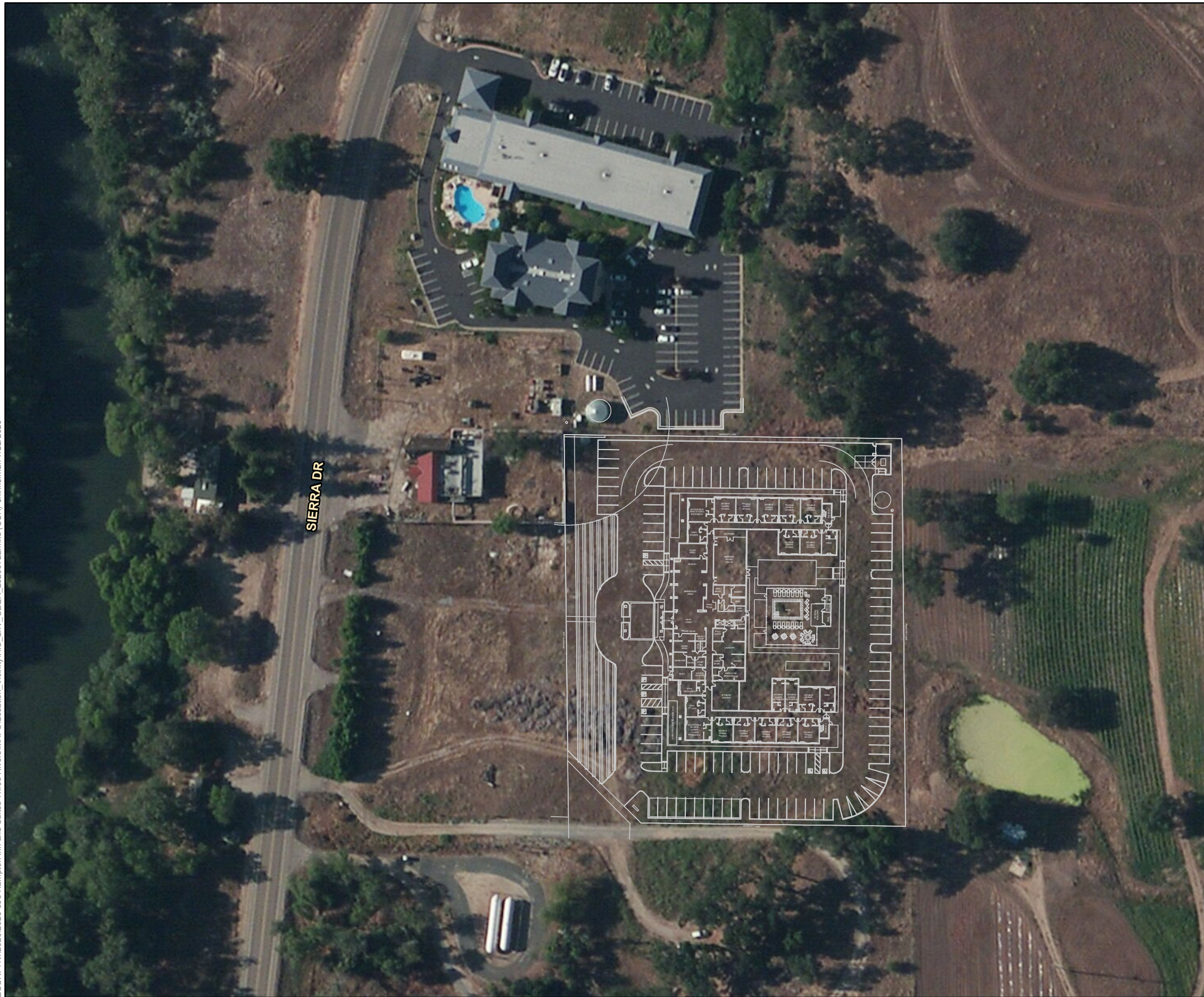
The Project is anticipated to generate 860 additional one-way vehicle trips per day on Saturdays, 625 additional one-way vehicle trips per day on Sundays, and 858 additional one-way vehicle trips per day on weekdays.

A construction period of approximately one year is anticipated, with construction likely to begin in summer of 2021. Project construction is anticipated to include site preparation, grading, building construction, paving, and painting of buildings and parking space and road lines.

The Proposed Project site is designated for *Urban Development* in the Tulare County General Plan.



ECORP: N:\2020\2020-090 Hampton Inn and Suites Three Rivers\MAPS\Location\_Vicinity\HIS\_LnV\_CEOA\_20200722.mxd (CCH)-chinkelman 7/22/2020



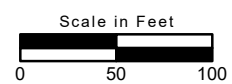
**Map Features**  
— Site Plan

Sources: ESRI, USGS



Map Date: 7/22/2020

**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS



**Figure 1. Project Location and Vicinity**

2020-090 Hampton Inn and Suites Three Rivers



## **2.0 ENVIRONMENTAL NOISE**

### **2.1 Fundamentals of Noise and Environmental Sound**

#### **2.1.1 Addition of Decibels**

The decibel (dB) scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted (dBA), an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound and twice as loud as a 60-dBA sound. When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be three dB higher than one source under the same conditions (Federal Transit Administration [FTA] 2018). For example, a 65-dB source of sound, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by three dB). Under the decibel scale, three sources of equal loudness together would produce an increase of five dB.

Typical noise levels associated with common noise sources are depicted in Figure 2. *Common Noise Levels.*

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet Fly-over at 300m (1000 ft)	110	Rock Band
Gas Lawn Mower at 1 m (3 ft)	100	
Diesel Truck at 15 m (50 ft), at 80 km (50 mph)	90	Food Blender at 1 m (3 ft)
Noisy Urban Area, Daytime	80	Garbage Disposal at 1 m (3 ft)
Gas Lawn Mower, 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area		Normal Speech at 1 m (3 ft)
Heavy Traffic at 90 m (300 ft)	60	Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		Library
Quiet Rural Nighttime	30	Bedroom at Night, Concert Hall (Background)
	20	Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

**Figure 2. Common Noise Levels**

Source: California Department of Transportation Caltrans 2012)

### **2.1.2 Sound Propagation and Attenuation**

Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately six dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately three dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (Federal Highway Administration [FHWA] 2011). No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. For line sources, an overall attenuation rate of three dB per doubling of distance is assumed (FHWA 2011).

Noise levels may also be reduced by intervening structures; generally, a single row of detached buildings between the receptor and the noise source reduces the noise level by about five dBA (FHWA 2006), while a solid wall or berm generally reduces noise levels by 10 to 20 dBA (FHWA 2011). However, noise barriers or enclosures specifically designed to reduce site-specific construction noise can provide a sound reduction 35 dBA or greater (Western Electro-Acoustic Laboratory, Inc. [WEAL] 2000). To achieve the most potent noise-reducing effect, a noise enclosure/barrier must physically fit in the available space, must completely break the "line of sight" between the noise source and the receptors, must be free of degrading holes or gaps, and must not be flanked by nearby reflective surfaces. Noise barriers must be sizable enough to cover the entire noise source and extend lengthwise and vertically as far as feasibly possible to be most effective. The limiting factor for a noise barrier is not the component of noise transmitted through the material, but rather the amount of noise flanking around and over the barrier. In general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver.

The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). The exterior-to-interior reduction of newer residential units is generally 30 dBA or more (Harris Miller, Miller & Hanson Inc. [HMMH] 2006). Generally, in exterior noise environments ranging from 60 dBA Community Noise Equivalent Level (CNEL) to 65 dBA CNEL, interior noise levels can typically be maintained below 45 dBA, a typically residential interior noise standard, with the incorporation of an adequate forced air mechanical ventilation system in each residential building, and standard thermal-pane residential windows/doors with a minimum rating of Sound Transmission Class (STC) 28. (STC is an integer rating of how well a building partition attenuates airborne sound. In the U.S., it is widely used to rate interior partitions, ceilings, floors, doors, windows, and exterior wall configurations.) In exterior noise environments of 65 dBA CNEL or greater, a combination of forced-air mechanical ventilation and sound-rated construction methods is often required to meet the interior noise level limit. Attaining the necessary noise reduction from exterior to interior spaces is readily achievable in noise environments less than 75 dBA CNEL with proper wall construction techniques following California Building Code methods, the selections of proper windows and doors, and the incorporation of forced-air mechanical ventilation systems.



### 2.1.3 Noise Descriptors

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The  $L_{eq}$  is a measure of ambient noise, while the  $L_{dn}$  and CNEL are measures of community noise. Each is applicable to this analysis and defined in Table 2-1.

<b>Table 2-1. Common Acoustical Descriptors</b>	
<b>Descriptor</b>	<b>Definition</b>
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micropascals (or 20 micronewtons per square meter), where one pascal is the pressure resulting from a force of one newton exerted over an area of one square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micropascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hertz (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, $L_{eq}$	The average acoustic energy content of noise for a stated period of time. Thus, the $L_{eq}$ of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
$L_{max}$ , $L_{min}$	The maximum and minimum A-weighted noise level during the measurement period.
$L_{01}$ , $L_{10}$ , $L_{50}$ , $L_{90}$	The A-weighted noise levels that are exceeded one percent, 10 percent, 50 percent, and 90 percent of the time during the measurement period.
Day/Night Noise Level, $L_{dn}$ or DNL	A 24-hour average $L_{eq}$ with a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour $L_{eq}$ would result in a measurement of 66.4 dBA $L_{dn}$ .
Community Noise Equivalent Level, CNEL	A 24-hour average $L_{eq}$ with a five dBA "weighting" during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour $L_{eq}$ would result in a measurement of 66.7 dBA CNEL.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

The dBA sound level scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about  $\pm$ one dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends on the distance between the receptor and the noise source. Close to the noise source, the models are accurate to within about  $\pm$ one to two dBA.

#### **2.1.4 Human Response to Noise**

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60- to 70-dBA range, and high, above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of one dBA cannot be perceived by humans.
- Outside of the laboratory, a three-dBA change is considered a just-perceivable difference.
- A change in level of at least five dBA is required before any noticeable change in community response would be expected. An increase of five dBA is typically considered substantial.
- A 10-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

## **2.1.5 Effects of Noise on People**

### **Hearing Loss**

While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise.

The Occupational Safety and Health Administration has a noise exposure standard that is set at the noise threshold where hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over eight hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

### **Annoyance**

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The  $L_{dn}$  as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. For ground vehicles, a noise level of about 55 dBA  $L_{dn}$  is the threshold at which a substantial percentage of people begin to report annoyance.

## **2.2 Fundamentals of Environmental Groundborne Vibration**

### **2.2.1 Vibration Sources and Characteristics**

Sources of earthborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or manmade causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions).

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

### **2.2.2 Vibration Sources and Characteristics**

Table 2-2 displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care as vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be

annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

For the purposes of this analysis, the PPV descriptor with units of inches per second is used to evaluate construction-generated vibration for building damage and human complaints.

<b>Table 2-2. Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels</b>			
<b>Peak Particle Velocity (inches/second)</b>	<b>Approximate Vibration Velocity Level (VdB)</b>	<b>Human Reaction</b>	<b>Effect on Buildings</b>
0.006–0.019	64–74	Range of threshold of perception	Vibrations unlikely to cause damage of any type
0.08	87	Vibrations readily perceptible	Recommended upper level to which ruins and ancient monuments should be subjected
0.1	92	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities	Virtually no risk of architectural damage to normal buildings, yet threshold at which there is a risk of architectural damage to fragile buildings
0.2	94	Vibrations may begin to annoy people	Threshold at which there is a risk of architectural damage to normal dwellings
0.4–0.6	98–104	Vibrations considered unpleasant by people subjected to continuous vibrations	Architectural damage and possibly minor structural damage

Source: Caltrans 2020

Ground vibration can be a concern in instances where buildings shake and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. For instance, heavy-duty trucks generally generate groundborne vibration velocity levels of 0.006 PPV at 50 feet under typical circumstances, which as identified in Table 2-2 is considered very unlikely to cause damage to buildings of any type. Common sources for groundborne vibration are planes, trains, and construction activities such as earthmoving that requires the use of heavy-duty earthmoving equipment.

### 3.0 EXISTING ENVIRONMENTAL NOISE SETTING

#### 3.1 Noise-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and

prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The Project site is generally surrounded by farmland and rural residential development, with commercial development concentrated along State Route (SR) 198. The nearest noise-sensitive receptors to the Project site are the Comfort Inn and Suites hotel building, located approximately 113 feet north of the Project site, a vacant commercial building located approximately 96 feet west of the Project site at the nearest point, and a residence located across State Highway 198 from the site at approximately 270 feet to the west. The distances to the Comfort Inn and Suites and the vacant commercial building were measured from the property line of the Proposed Project to the physical building. The parking lot and outdoor area associated with hotels and commercial uses are not considered sensitive receptors. Noise-sensitive hotel activities, such as sleeping and resting, would be performed indoors.

### 3.2 Existing Ambient Noise Environment

The primary noise source in the Project vicinity is traffic. Existing roadway noise levels were calculated for the roadway segments in the Project vicinity. This task was accomplished using the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) (see Attachment B) and traffic volumes from the Project's Traffic Impact Study (VRPA Technologies, Inc. 2020). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) used in the FHWA model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data shows that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along these roadway segments are presented in Table 2-3.

Table 2-3. Existing (Baseline) Traffic Noise Levels		
Roadway Segment	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway
<b>SR 198</b>		
South of Old Three Rivers Road	Residential and Commercial	58.4
Between Old Three River Road & Project Driveway	Residential and Commercial	58.4
North of Project Driveway	Residential and Commercial	58.4
<b>Old Three Rivers Road</b>		
East of SR 198	Residential	48.7

Source: Traffic noise levels were calculated by ECORP using the FHWA roadway noise prediction model in conjunction with the trip generation rate identified by VRPA Technologies, Inc. (2020). Refer to Attachment B for traffic noise modeling assumptions and results.

Note: A total of two intersections were analyzed in the Traffic Impact Study; roadway segments that impact sensitive receptors were included.

As shown, the existing traffic-generated noise level on Project-vicinity roadways currently ranges from 48.7 to 58.4 dBA CNEL. As previously described, CNEL is 24-hour average noise level with a 5 dBA “weighting” during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

The community of Three Rivers in the County of Tulare, which encompasses the Project site, is impacted by various noise sources. It is subject to both typical urban and rural noise, such as noise generated by traffic, heavy machinery, and day-to-day outdoor activities as well as noise generated from the various land uses (i.e., residential, commercial, and agricultural) throughout Three Rivers that generate stationary source noise. Mobile sources of noise, especially cars and trucks, are the most common source of noise in the community. The ambient noise environment in the County of Tulare is largely influenced by roadway noise. The Project site is located directly off SR 198, identified by the Tulare General Plan as one of two major regional state highways which traverse the County. The General Plan states that SR 198 connects from U.S. Highway 101 on the west and continues eastward to the County of Tulare, passing through the City of Visalia and into Sequoia National Park (Tulare 2012).

## **4.0 REGULATORY FRAMEWORK**

### **4.1 State**

#### **4.1.1 State of California General Plan Guidelines**

The State of California regulates vehicular and freeway noise affecting noise-sensitive land uses, sets standards for sound transmission and occupational noise control, and identifies noise insulation standards and airport noise/land-use compatibility criteria. The State of California General Plan Guidelines, published by the Office of Planning and Research (OPR 2003), also provides guidance for the acceptability of projects within specific CNEL/L<sub>dn</sub> contours. The guidelines also present adjustment factors that may be used in order to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community’s sensitivity to noise, and the community’s assessment of the relative importance of noise pollution.

#### **State OPR Noise Element Guidelines**

The State OPR Noise Element Guidelines include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The Noise Element Guidelines contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the CNEL.

### **4.2 Local**

#### **4.2.1 County of Tulare General Plan Health and Safety Element**

The Health and Safety Element of the General Plan provides policy direction for minimizing noise impacts in the County and for establishing noise control measures for construction and operation of land use

projects. By identifying noise-sensitive land uses and establishing compatibility guidelines for land use and noise, noise considerations will influence the general distribution, location, and intensity of future land use. The result is that effective land use planning and mitigation can alleviate the majority of noise problems.

The most basic planning strategy to minimize adverse impacts on new land uses due to noise is to avoid designating certain land uses at locations within the County that would negatively affect noise sensitive land uses. Uses such as schools, hospitals, childcare, senior care, congregate care, churches, and all types of residential use should be located outside of any area anticipated to exceed acceptable noise levels as defined by the Land Use Compatibility for Community Noise Environments table and pertinent goals and policies. Additionally, these uses should be protected from excess noise through sound attenuation measures such as site and architectural design and sound walls.

The County of Tulare has adopted these guidelines as a basis for planning decisions based on noise considerations. The land use compatibility guidelines are shown in Table 2-4. In the case that the noise levels identified at a proposed project site fall within levels considered normally acceptable, the project is considered compatible with the existing noise environment. The General Plan also identifies noise goals and policies set to minimize noise impacts within the County.

**Table 2-4. Land Use Compatibility for Community Noise Environments**

Land Use Category	Community Noise Exposure (Ldn or CNEL, dB)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low Density Single Family, Duplex, Mobile Homes	≤ 60	55 - 70	70 - 75	≥ 75
Residential – Multi-Family	≤ 65	60 - 70	70 - 75	≥ 75
Transient Lodging – Motels, Hotels	≤ 65	60 - 70	70 - 80	≥ 80
Schools, Libraries, Churches, Hospitals, Nursing Homes	≤ 70	60 - 70	70 - 80	≥ 80
Auditoriums, Concerts Halls, Amphitheaters	NA	≤ 70	NA	≥ 65
Sports Arenas, Outdoor Spectator Sports	NA	≤ 75	NA	≥ 70
Playgrounds, Neighborhood Parks	≤ 70	NA	68-75	≥ 73
Golf Courses, Riding Stables, Water Recreation, Cemeteries	≤ 75	NA	70 – 80	≥ 80
Office Buildings, Business Commercial and Professional	≤ 70	68 – 78	≥ 75	NA
Industrial, Manufacturing, Utilities, Agriculture	≤ 75	70 - 80	≥ 75	NA

Source: County of Tulare General Plan Health and Safety Element

Notes:

NA: Not Applicable; CNEL: Community Noise Equivalent Level

Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Normally Unacceptable – New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Outdoor areas must be shielded.

Clearly Unacceptable – New construction or development should generally not be undertaken.

The Public Health and Safety Element also contains goals and policies that must be used to guide decisions concerning land uses that are common sources of excessive noise levels. The following relevant and applicable goals and policies from the County's Health and Safety Element have been identified for the Project.

**Goal HS-8:** To protect County residents and visitors from the harmful effects of excessive noise while promoting the County economic base.

- **Policy HS-8.1 Economic Base Protection:** The County shall protect its economic base by preventing the encroachment of incompatible land uses on known noise-producing industries, railroads, airports, and other sources.
- **Policy HS-8.2 Noise Impacted Areas:** The County shall designate areas as noise-impacted if exposed to existing or projected noise levels that exceed 60 dB Ldn (or Community Noise Equivalent Level (CNEL)) at the exterior of buildings.



- **Policy HS-8.3 Noise Sensitive Land Uses:** The County shall not approve new noise sensitive uses unless effective mitigation measures are incorporated into the design of such projects to reduce noise levels to 60 dB Ldn (or CNEL) or less within outdoor activity areas and 45 dB Ldn (or CNEL) or less within interior living spaces.
- **Policy HS-8.4 Airport Noise Contours:** The County shall ensure new noise sensitive land uses are located outside the 60 CNEL contour of all public use airports.
- **Policy HS-8.5 State Noise Standards:** The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code (UBC). Title 24 requires that interior noise levels not exceed 45 dB Ldn (or CNEL) with the windows and doors closed within new developments of multi-family dwellings, condominiums, hotels, or motels. Where it is not possible to reduce exterior noise levels within an acceptable range the County shall require the application of noise reduction technology to reduce interior noise levels to an acceptable level.
- **Policy HS-8.6 Noise Level Criteria:** The County shall ensure noise level criteria applied to land uses other than residential or other noise-sensitive uses are consistent with the recommendations of the California Office of Noise Control (CONC).
- **Policy HS-8.8 Adjacent Uses:** The County shall not permit development of new industrial, commercial, or other noise-generating land uses if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas designated and zoned for residential or other noise-sensitive uses, unless it is determined to be necessary to promote the public health, safety and welfare of the County.
- **Policy HS-8.11 Peak Noise Generators:** The County shall limit noise generating activities, such as construction, to hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generating activities shall be allowed to occur outside of normal business hours without County approval.
- **Policy HS-8.13 Noise Analysis:** The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Health and Safety Element, where there is development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels (such as those referenced in Table 10-1 of the Health and Safety Element).
- **Policy HS-8.14 Sound Attenuation Features:** The County shall require sound attenuation features such as walls, berming, heavy landscaping, between commercial, industrial, and residential uses to reduce noise and vibration impacts.
- **Policy HS-8.15 Noise Buffering:** The County shall require noise buffering or insulation in new development along major streets, highways, and railroad tracks.
- **Policy HS-8.16 State Noise Insulation:** The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code.

- **Policy HS-8.17 Coordinate with Caltrans:** The County shall work with Caltrans to mitigate noise impacts on sensitive receptors near State roadways, by requiring noise buffering or insulation in new construction.
- **Policy HS-8.18 Construction Noise:** The County shall seek to limit the potential noise impacts of construction activities by limiting construction activities to the hours of 7 am to 7pm, Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors.
- **Policy HS-8.19 Construction Noise Control:** The County shall ensure that construction contractors implement best practices guidelines (i.e. berms, screens, etc.) as appropriate and feasible to reduce construction-related noise impacts on surrounding land uses.

## 5.0 IMPACT ASSESSMENT

### 5.1 Thresholds of Significance

The impact analysis provided below is based on the following California Environmental Quality Act Guidelines Appendix G thresholds of significance. The Project would result in a significant noise-related impact if it would meet any of the following criteria:

- 1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- 2) Generation of excessive groundborne vibration or groundborne noise levels.
- 3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would expose people residing or working in the project area to excessive noise levels.

For purposes of this analysis and where applicable, the County noise standards were used for evaluation of Project-related noise impacts.

### 5.2 Methodology

This analysis of the existing and future noise environments is based on noise prediction modeling and empirical observations. In order to estimate the worst-case construction noise levels that may occur at the nearest noise-sensitive receptors in the Project vicinity, predicted construction noise levels were calculated utilizing the FHWA's Roadway Construction Model (2006). Offsite transportation noise was calculated using the FHWA's Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels, coupled with traffic levels calculated by VRPA Technologies, Inc (2020). Onsite operational noise levels are addressed qualitatively with reference measurements previously taken by ECORP Consulting, Inc. Groundborne vibration levels associated with construction-related activities for the Project were evaluated utilizing typical groundborne vibration levels associated with construction equipment, obtained from the Caltrans guidelines set forth above. Potential groundborne vibration

impacts related to structural damage and human annoyance were evaluated, taking into account the distance from construction activities to nearby land uses.

### **5.2.1 Impact Analysis**

#### **Would the Project Result in Short-Term Construction-Generated Noise in Excess of County Noise Standards?**

Construction noise associated with the Proposed Project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., building construction, paving). Noise generated by construction equipment, including earthmovers, material handlers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive receptors in the vicinity of the construction site.

The nearest noise receptors to the Project site are the Comfort Inn and Suites located approximately 113 feet north of the Project site, a vacant commercial building located approximately 96 feet west of the Project parking lot at the nearest point, and a residence located across State Highway 198 from the site at approximately 270 feet to the west. Consistent with the recommendations of the FTA (2018) for assessing construction noise, such noise is measured from the center of the Project site to the nearest receptor. As previously described, per General Plan Safety Element policy HS-8.18, construction activity is exempted provided that noise generating activity does not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday. As mandated by General Plan policy HS-8.11, no peak noise generating activities shall be allowed to occur outside of normal business hours without County approval. In addition, General Plan Policy HS-8.19 requires construction noise control best practices to be implemented to minimize construction noise impacts.

To estimate the worst-case construction noise levels that may occur at the nearest noise-sensitive receptors in the Project vicinity, the construction equipment noise levels were calculated using the Roadway Noise Construction Model for the site preparation, grading and building construction, paving and architectural coating. The anticipated short-term construction noise levels generated for the necessary equipment is presented in Table 2-5.

For comparison purposes, Project construction noise is compared against the construction-related noise level threshold established in the Criteria for a Recommended Standard: Occupational Noise Exposure prepared in 1998 by the National Institute for Occupational Safety and Health (NIOSH). A division of the US Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The construction-related noise level threshold starts at 85 dBA for more than 8 hours per day; for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per

day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative threshold of 85 dBA  $L_{eq}$  is used as an acceptable threshold for construction noise at the nearby sensitive receptors. Since this construction-related noise level threshold represents the energy average of the noise source over a given time period, the noise level is expressed in  $L_{eq}$ . As stated previously, the nearest noise-sensitive receptor is located approximately 190 feet from the center of the Project site. As shown in Table 2-5, the predicted maximum eight-hour noise levels at the vacant commercial building to the west could potentially reach approximately 74.4 dBA  $L_{eq}$ , which is below the NIOSH threshold of 85 dBA. Thus, construction noise would reach even lower levels at the Comfort Inn and Suites and the nearest residence.

<b>Table 2-5. Construction Average (dBA) Noise Levels at Nearest Receptor</b>			
<b>Equipment</b>	<b>Estimated Exterior Construction Noise Level @ Nearest Residence (dBA <math>L_{eq}</math>)</b>	<b>NIOSH Construction Noise Standards (dBA <math>L_{eq}</math>)</b>	<b>Exceeds Standard at Nearest Sensitive Receptor?</b>
<b>Site Preparation</b>			
Grader	69.4	85	No
Scraper	68.0	85	No
Tractor/ Loader/ Backhoe	62.0	85	
<b>Combined Site Preparation Equipment</b>	<b>72.2</b>	85	<b>No</b>
<b>Grading</b>			
Rubber Tired Dozers	66.1	85	No
Graders	69.4	85	No
Tractors/Loaders/Backhoes (2)	62.0 (each)	85	No
<b>Combined Grading Equipment</b>	<b>72.0</b>	85	<b>No</b>
<b>Building Construction/ Paving/ Architectural Coating</b>			
Crane	61.0	85	No
Forklifts (2)	63.5 (each)	85	No
Generator Set	66.0	85	No
Tractors/Loaders/Backhoes (2)	62.0 (each)	85	No
Welders (3)	58.4	85	No
Cement and Mortar Mixer	63.2	85	
Paver	62.6	85	No
Rollers (2)	61.4 (each)	85	No
Paving Equipment	62.6	85	No
Air Compressors	66.3	85	No
<b>Combined Building Equipment</b>	<b>74.4</b>	85	<b>No</b>

Source: Construction noise levels were calculated by ECRP Consulting, Inc. using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Attachment A for Model Data Outputs.

Notes: Construction equipment used during construction derived from CalEEMod 2016.3.2. CalEEMod is designed to calculate air pollutant emissions from construction activity and contains default construction equipment and usage parameters for typical construction projects based on several construction surveys conducted in order to identify such parameters. The distance to the nearest sensitive receptor was calculated from the center of the Project site consistent with FTA (2018) recommendations (approximately 190 feet). Building construction, paving and architectural coating are assumed to occur simultaneously.

As shown, no individual piece of construction equipment or cumulative construction equipment would exceed the NOISH threshold of 85 dBA at the closest residence.

Therefore, Project construction activities would not expose persons to and generate noise levels in excess of NOISH standards and all construction activities would occur during the times permitted by the County.

**Would the Project Result in a Substantial Permanent Increase in Ambient Noise Levels in Excess of County Standards During Operations?**

As previously described, noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise sensitive and may warrant unique measures for protection from intruding noise. The nearest noise receptors to the Project site are the Comfort Inn and Suites located approximately 113 feet north of the Project site, a vacant commercial building located approximately 96 feet west of the Project site, and a residence located across State Highway 198 at approximately 270 feet to the west. Distance to the adjacent hotel and vacant commercial building was measured to the nearest point of each physical building from the Project property line.

*Project Operational Offsite Traffic Noise*

Future traffic noise levels throughout the Project vicinity (i.e., vicinity roadway segments that traverse noise sensitive residential land uses) were modeled using the FHWA's Highway Noise Prediction Model (FHWA-RD-77-108) and based on the traffic volumes identified by VRPA Technologies, Inc. (2020) to determine the noise levels along Project vicinity roadways. Table 2-6 shows the calculated offsite roadway noise levels under existing traffic levels compared to existing traffic levels plus the Project. The calculated noise levels as a result of the Project at affected sensitive land uses are compared to the operational noise standards in the County General Plan (Policy HS-8.3). In the case that the existing ambient noise levels already exceed the applicable numeric noise threshold, an increase of more than 5 dBA over the existing ambient noise level is considered significant. As previously described, a change in level of at least 5 dBA is required before any noticeable change in community response would be expected.

**Table 2-6. Existing Plus Project Conditions - Predicted Traffic Noise Levels**

Roadway Segment	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway		Noise Standard (dBA CNEL)	Exceed Standard/ Significant Impact?
		Existing Conditions	Existing + Project Conditions		
SR 198					
South of Old 3 Rivers Road	Residential and Commercial	58.4	58.6	60	No
Between Old 3 Rivers Road and Project Driveway	Residential and Commercial	58.4	58.5	60	No
North of Project Driveway	Residential and Commercial	58.4	58.4	60	No
Old Three River Road					
East of SR 198	Residential	48.7	48.7	60	No

Source: Traffic noise levels were calculated by ECORP Consulting using the FHWA's Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels in conjunction with the trip generation rate identified by VRPA Technologies, Inc. 2020. Refer to Attachment B for traffic noise modeling assumptions and results.

Notes: A total of 2 intersections were analyzed in the Traffic Impact Study; however, all roadway segments that impact sensitive receptors were included for the purposes of this analysis.

As shown in Table 2-6, predicted increase in traffic noise levels associated with the Project would be less than the County noise standards.

### *Operational Stationary Noise*

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Hotel uses, such as those proposed by the Project, are not typically associated with excessive, ongoing operations-related noise that would lead to substantial permanent increases in ambient noise levels. Instead, much of the operational stationary noise generated by the Project would be voices and maneuvering vehicles as hotel guests move in and out of the parking lot. Parking lot noise will be the focus of the operational noise analysis due to their proximity to the existing residences and hotel.

The loudest source of noise associated with the proposed hotel would be parking lot noise. Previous measurements were taken by ECORP staff during a weekday in the middle of a parking lot serving a large grocery store identified noise levels reaching 61.1 dBA at approximately 5 feet distant. These measurements were taken with a Larson Davis SoundExpert LxT precision sound level meter, which satisfies the American National Standards Institute for general environmental noise measurement instrumentation. Prior to the measurements, the SoundExpert LxT sound level meter was calibrated according to manufacturer specifications with a Larson Davis CAL200 Class I Calibrator. The proposed hotel would not be expected to generate noise levels at the same intensity as a large grocery store and therefore this reference noise applied to the Project is conservative.

The Project is proposing the development of a 105-room hotel. As stated previously, the parking lot would be the main source of stationary noise. Based on prior parking lot noise measurements taken by ECORP staff, the Project parking lot is conservatively estimated to reach a maximum noise level of 61.1 dBA, as explained above.

As previously stated, the two nearest noise receptors to the Project site are the Comfort Inn and Suites hotel building, located approximately 113 feet north of the Project site and the vacant commercial building, located approximately 96 feet west of the Project parking lot at the nearest point. The vacant commercial building is located in close proximity to the Proposed Project boundary. However, as previously stated, noise attenuates a rate of approximately six dB for each doubling of distance from a stationary or point source (FHWA 2011). Considering the conservative parking lot noise measurement of 61.1 dBA at approximately five feet distant, the nearest noise-sensitive receptor, the vacant commercial building located 96 feet away from the Proposed Project Parking lot, would experience operational stationary noise levels of below 35.5 dBA. This falls below the County of Tulare operational noise threshold of 60 dBA (Policy HS-8.8).

As previously stated, the manner in which older homes and buildings for lodging in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). Thus, exterior noise levels of 37.1 could be expected to at least 20 dBA less in interior.

Thus, the Proposed Project would not result in noise levels in excess of County noise standards. The Project would have a less than significant impact in this area.

#### *Land Use Compatibility*

The County of Tulare provides a Land Use Compatibility Table to gauge the compatibility of new land uses (the Proposed Project) relative to existing noise levels. As shown in Table 2-4 above, the General Plan identifies normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for various land uses; including hotels and motels such as that proposed by the Project. In the case that the noise levels identified at the Project site fall within levels considered normally acceptable, the Project is considered compatible with the existing noise environment. As shown in Table 2-4, a clearly compatible noise level for locating hotel uses is anything 65 dBA and under. Additionally, General Plan Health and Safety Element Policy HS-8.5 limits exterior noise levels at hotels to 60 dBA CNEL and interior noise level within hotels to 45 dBA CNEL.

The predominate noise source in the Project vicinity is generated by traffic on SR 198. As shown in Table 2-6 above, traffic noise would not exceed 60 dBA under existing plus Project conditions.

Furthermore, the primary stationary noise source emitted from the adjacent hotel and vacant commercial building (if use was to resume) would be parking lot noise. As mentioned previously, previous measurements were taken by ECORP staff during a weekday in the middle of a parking lot serving a large grocery store identified noise levels reaching 61.1 dBA at approximately 5 feet distant. Considering the attenuation of sound with distance and the reduction of exterior-to-interior noise levels provided by

building walls, the noise experienced inside the proposed new hotel would be significantly less than 61.1 dBA. Thus, noise emitted from the adjacent hotel and commercial building would not exceed 65 dBA.

Therefore, the Project is considered a compatible land use with the adjacent hotel and vacant commercial building, both in terms of commercial land use class and in terms of noise falling in the normally compatible range for hotels and motels. Thus, the proposed and existing land uses are considered compatible.

### **Would the Project Expose Structures to Substantial Groundborne Vibration During Construction?**

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Once operational, the Project would not be a source of groundborne vibration. Increases in groundborne vibration levels attributable to the Proposed Project would be primarily associated with short-term, construction-related activities. Construction on the Project site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. Pile drivers are not anticipated to be necessary for Project construction in the case of the Proposed Project. Vibration decreases rapidly with distance and it is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with typical construction equipment are summarized in Table 2-7.

The County of Tulare does not regulate construction vibration. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020) recommended standard of 0.2 inch per second PPV with respect to the prevention of structural damage for normal buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings.

<b>Table 2-7. Representative Vibration Source Levels for Construction Equipment</b>	
<b>Equipment Type</b>	<b>Peak Particle Velocity at 20 Feet (inches per second)</b>
Large Bulldozer	0.124
Caisson Drilling	0.124
Loaded Trucks	0.106
Rock Breaker	0.115
Jackhammer	0.049
Small Bulldozer/Tractor	0.004

Source: FTA 2018; Caltrans 2020



It is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to the nearest structure. The nearest structure of concern to the construction site is a vacant commercial building with the closest physical building being approximately 20 feet away from the Project site boundary. Based on the vibration levels presented in Table 2-7, ground vibration generated by heavy-duty equipment would not be anticipated to exceed approximately 0.124 inch per second PPV at 20 feet. Thus, the nearby structures would not be negatively affected.

### **Would the Project Expose Structures to Substantial Groundborne Vibration During Operations?**

Project operations would not include the use of any stationary equipment that would result in excessive groundborne vibration levels.

### **Would the Project Expose People Residing or Working in the Project area to Excessive Airport Noise?**

The Project site is located approximately 10.22 miles east of the City of Woodlake Airport, located in the City of Woodlake. Although aircraft flight patterns may cover Three Rivers, noise from aircrafts is not a significant issue in the community. As shown in the Tulare General Plan, the community of Three Rivers is well outside of the airport zone. Aircraft noise does not significantly impact the community of Three Rivers and the Proposed Project would not expose people visiting or working on the Project site to excess airport noise levels.

## **5.2.2 Cumulative Noise Impacts?**

### **Cumulative Construction Noise**

Construction activities associated with the Proposed Project and other construction projects in the area may overlap, resulting in construction noise in the area. However, construction noise impacts primarily affect the areas immediately adjacent to the construction site. Construction noise for the Proposed Project was determined to be less than significant following compliance with the County General Plan's construction timing and construction noise control guidelines. Per the General Plan, construction is to be limited to the hours of 7 am to 7 pm, Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors. Further, the County requires noise construction control per policy HS 8.19. In addition, the individual Project would not exceed the NOISH construction noise standard prior to implementation of construction noise control.

Cumulative development in the vicinity of the Project site could result in elevated construction noise levels at sensitive receptors in the Project area. However, each project would be required to comply with the applicable County General Plan limitations on allowable hours of construction and the NOISH construction noise limits. Therefore, the Project would not contribute to cumulative impacts and impacts in this regard are not cumulatively considerable.

### **Cumulative Operational Noise**

Cumulative long-term noise sources associated with development at the Project, combined with other cumulative projects, could cause local noise level increases. Noise levels associated with the Proposed Project and related cumulative projects together could result in higher noise levels than considered separately. The Project is the construction of a hotel. Operations of the Proposed Project would not result in any substantial changes in the noise environment due to onsite sources. Noise increase as a result of the Project would not exceed County standards. In addition, with implementation of the measures required by Policies HS- 8.14, HS 8.15, HS 8.16, HS 8.17, HS 8.18, and HS 8.19 of the General Plan, Project noise would be further controlled. Therefore, the Project would not contribute to cumulative impacts during operations.

## 6.0 REFERENCES

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## **LIST OF ATTACHMENTS**

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Attachment A – Roadway Construction Noise Model Outputs – Project Construction Noise

Attachment B – Federal Highway Administration Roadway Traffic Noise Model Outputs – Project Traffic Noise

Federal Highway Administration Roadway Construction Noise Model Outputs – Project  
Construction Noise

## Roadway Construction Noise Model (RCNM), Version 1.1

**Report date:** 7/10/2020

**Case Description:** Site Prep

**Description**      **Land Use**  
 Residence / small b Residential

Description			Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85		160	0
Scraper	No	40		83.6	160	0
Backhoe	No	40		77.6	160	0

### Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	74.9	<b>70.9</b>
Scraper	73.5	<b>69.5</b>
Backhoe	67.5	<b>63.5</b>
Total	74.9	<b>73.7</b>

\*Calculated Lmax is the Loudest value.

## Roadway Construction Noise Model (RCNM), Version 1.1

**Report date:** 7/10/2020  
**Case Description:** Grading

**Description**                      **Land Use**  
 Reidence / Small Business    Residential

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Dozer	No	40		81.7	160	0
Grader	No	40	85		160	0
Backhoe	No	40		77.6	160	0
Backhoe	No	40		77.6	160	0

### Results

Calculated (dBA)

Equipment	*Lmax	Leq
Dozer	71.6	<b>67.6</b>
Grader	74.9	<b>70.9</b>
Backhoe	67.5	<b>63.5</b>
Backhoe	67.5	<b>63.5</b>
Total	74.9	<b>73.5</b>

\*Calculated Lmax is the Loudest value.

## Roadway Construction Noise Model (RCNM), Version 1.1

**Report date:** 7/10/2020  
**Case Description:** Const. / Paving / Arch. Coating

**Description**                      **Land Use**  
 Residence / Small Business      Residential

Description			Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16		80.6	160	0
Front End Loader	No	40		79.1	160	0
Generator	No	50		80.6	160	0
Front End Loader	No	40		79.1	160	0
Backhoe	No	40		77.6	160	0
Backhoe	No	40		77.6	160	0
Welder / Torch	No	40		74	160	0
Welder / Torch	No	40		74	160	0
Welder / Torch	No	40		74	160	0
Concrete Mixer Truck	No	40		78.8	160	0
Paver	No	50		77.2	160	0
Roller	No	20		80	160	0
Roller	No	20		80	160	0
Paver	No	50		77.2	160	0
Pumps	No	50		80.9	160	0

### Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	70.4	62.5



Front End Loader	69	<b>65</b>
Generator	70.5	<b>67.5</b>
Front End Loader	69	<b>65</b>
Backhoe	67.5	<b>63.5</b>
Backhoe	67.5	<b>63.5</b>
Welder / Torch	63.9	<b>59.9</b>
Welder / Torch	63.9	<b>59.9</b>
Welder / Torch	63.9	<b>59.9</b>
Concrete Mixer Truck	68.7	<b>64.7</b>
Paver	67.1	<b>64.1</b>
Roller	69.9	<b>62.9</b>
Roller	69.9	<b>62.9</b>
Paver	67.1	<b>64.1</b>
Pumps	70.8	<b>67.8</b>
Total	70.8	<b>75.9</b>

\*Calculated Lmax is the Loudest value.

Federal Highway Administration Roadway Traffic Noise Model Outputs – Project Traffic Noise

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 2020-090  
Project Name: Hampton Inn & Suites Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
Source of Traffic Volumes: VRPA 2020  
Community Noise Descriptor: L<sub>dn</sub>: CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

														Traffic Volumes				
Analysis Condition	Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway					Calc Dist	Day	Eve	Night	
							Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour								
									70 CNEL	65 CNEL	60 CNEL	55 CNEL						
Existing																		
SR 198																		
South of Old Three Rivers Rd.		2	0	5,153	45	0.5	1.8%	0.7%	58.4	-	36	78	167	100	4,003	654	495	
Between Old Three River Rd. & Project Driveway		2	0	5,202	45	0.5	1.8%	0.7%	58.4	-	36	78	168	100	4,042	661	499	
North of Project Driveway		2	0	5,211	45	0.5	1.8%	0.7%	58.4	-	36	78	169	100	4,049	662	500	
Old Three Rivers Rd.																		
East of SR 198		2	0	558	45	0.5	1.8%	0.7%	48.7	-	-	-	38	100	434	71	54	

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 2020-090  
Project Name: Hampton Inn & Suites Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
Source of Traffic Volumes: VRPA 2020  
Community Noise Descriptor: L<sub>dn</sub>: CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

														Traffic Volumes				
Analysis Condition	Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway					Calc Dist	Day	Eve	Night	
							Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour								
									70 CNEL	65 CNEL	60 CNEL	55 CNEL						
Existing + Project																		
SR 198																		
South of Old Three Rivers Rd.		2	0	5,481	45	0.5	1.8%	0.7%	58.6	-	38	81	174	100	4,259	696	526	
Between Old Three River Rd. & Project Driveway		2	0	5,337	45	0.5	1.8%	0.7%	58.5	-	37	79	171	100	4,147	678	512	
North of Project Driveway		2	0	5,270	45	0.5	1.8%	0.7%	58.4	-	37	79	170	100	4,094	669	506	
Old Three Rivers Rd.																		
East of SR 198		2	0	558	45	0.5	1.8%	0.7%	48.7	-	-	-	38	100	434	71	54	

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 2020-090  
Project Name: Hampton Inn & Suites Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
Source of Traffic Volumes: VRPA 2020  
Community Noise Descriptor: L<sub>dn</sub>: CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

														Traffic Volumes			
Analysis Condition	Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway					Calc Dist	Day	Eve	Night
							Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour							
									70 CNEL	65 CNEL	60 CNEL	55 CNEL					
Buildout NO Project																	
SR 198																	
	South of Old Three Rivers Rd.	2	0	7,295	45	0.5	1.8%	0.7%	59.9	-	45	98	211	100	5,668	926	700
	Between Old Three River Rd. & Project Driveway	2	0	6,894	45	0.5	1.8%	0.7%	59.6	-	44	94	203	100	5,357	876	662
	North of Project Driveway	2	0	7,448	45	0.5	1.8%	0.7%	60.0	-	46	99	214	100	5,787	946	715
Old Three Rivers Rd.																	
	East of SR 198	2	0	1,899	45	0.5	1.8%	0.7%	54.0	-	-	40	86	100	1,476	241	182

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 2020-090  
Project Name: Hampton Inn & Suites Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
Source of Traffic Volumes: VRPA 2020  
Community Noise Descriptor: L<sub>dn</sub>: CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

														Traffic Volumes			
Analysis Condition	Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway					Calc Dist	Day	Eve	Night
							Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour							
65 CNEL							60 CNEL	55 CNEL									
Buildout with Project																	
SR 198																	
	South of Old Three Rivers Rd.	2	0	7,614	45	0.5	1.8%	0.7%	60.0	-	47	101	217	100	5,916	967	731
	Between Old Three River Rd. & Project Driveway	2	0	7,124	45	0.5	1.8%	0.7%	59.8	-	45	96	208	100	5,535	905	684
	North of Project Driveway	2	0	7,511	45	0.5	1.8%	0.7%	60.0	-	46	100	215	100	5,836	954	721
Old Three Rivers Rd.																	
	East of SR 198	2	0	1,899	45	0.5	1.8%	0.7%	54.0	-	-	40	86	100	1,476	241	182

# Three Rivers Hampton Inn & Suites

## Traffic Impact Study Report June 2020

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## Three Rivers Hampton Inn & Suites Traffic Impact Study

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## Executive Summary

This Traffic Impact Study (TIS) has been prepared for the purpose of analyzing traffic conditions related to the Three Rivers Hampton Inn & Suites Development (Project). The Project seeks to develop a 105-room hotel to be located off of State Route (SR) 198 (Sierra Drive), approximately 1,100 feet north of Old 3 Rivers Road in the Three Rivers Community.

Three Rivers is located in the Kaweah River canyon, just above Lake Kaweah, approximately 28 miles east of the City of Visalia. Three Rivers' name comes from its location near the junction of the North, Middle, and South Forks of the Kaweah River. The surrounding terrain is marked by oak woodland forest and foothills. Three Rivers is located in the northern portion of Tulare County at an elevation of 825 feet above sea level with a total area of 45.4 square miles. Three Rivers is the gateway town for the Ash Mountain Main Entrance to Sequoia-Kings Canyon National Park, home of the Giant Sequoia trees.

### IMPACTS

#### Intersections

Table E-1 shows the anticipated level of service conditions at study intersections for the Existing through the Cumulative Year 2042 Plus Project scenarios. Results of the analysis show that levels of service at the SR 198 (Sierra Drive) and Project Driveway and SR 198 (Sierra Drive) and Old 3 Rivers Road intersections will not exceed target LOS 'D' for all the study scenarios. Therefore, no mitigation measures are required to achieve acceptable levels of service. It should be noted that the Project Driveway along SR 198 (Sierra Drive) must meet Tulare County and Caltrans standards.

**Table E-1**  
**Intersection Operations**

INTERSECTION	CONTROL	TARGET LOS	PEAK HOUR		EXISTING		EXISTING PLUS PROJECT		NEAR-TERM PLUS PROJECT		CUMULATIVE YEAR 2042 WITHOUT PROJECT		CUMULATIVE YEAR 2042 PLUS PROJECT	
					DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
1. SR 198 (Sierra Drive) / Project Driveway	One-Way Stop Sign	D	Saturday	Midday	11.2	B	13.1	B	13.8	B	13.0	B	16.5	C
				PM	9.8	A	16.0	C	17.8	C	10.5	B	22.4	C
			Sunday	Midday	12.9	B	12.9	B	13.7	B	15.6	C	15.4	C
				PM	11.1	B	13.5	B	14.5	B	11.8	B	14.6	B
2. SR 198 (Sierra Drive) / Old 3 Rivers Road	One-Way Stop Sign	D	Saturday	Midday	14.3	B	15.0	C	20.5	C	22.8	C	24.8	C
				PM	13.5	B	14.0	B	27.6	D	31.1	D	33.9	D
			Sunday	Midday	14.8	B	15.4	C	18.1	C	21.2	C	22.4	C
				PM	12.3	B	12.7	B	18.1	C	18.9	C	19.9	C

DELAY is measured in seconds

LOS = Level of Service

For one-way controlled intersections, delay results show the delay for the worst movement.

### CEQA Environmental Checklist

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. Implementation of the Project result in a significant impact if it would:

- ✓ Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

**Less Than Significant** - An important goal is to maintain acceptable levels of service along the highway, street, and road network. To accomplish this, Tulare County RMA and Caltrans adopt minimum levels of service in an attempt to control congestion that may result as new development occurs. Tulare County's 2030 General Plan, policy number TC-1.16, identifies a minimum LOS standard of "D" on the County roadway system (both segments and intersections). Caltrans' SR-198 Transportation Concept Report (TCR) identifies the 2040 concept as LOS "D".

Results of the analysis show that the proposed Project will not exceed the minimum LOS standard of "D" as shown in Tables 2-1 and 3-2.

The Project does not conflict with any applicable adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Tulare County Area Transit (TCaT) Route 30 (Northeast County Route) operates between the Three Rivers Memorial Building and the Visalia Transit Center in downtown Visalia. Route 30 provides 4 roundtrips to the Visalia Transit Center on weekdays and 1 roundtrip on the weekend, all at 4-hour intervals. Implementation of the Project will not hinder the operation of Route 30 in the Three Rivers Community.

Caltrans' SR 198 TCR indicated that bicycles are permitted along the SR 198 corridor in the Three Rivers Community. The proposed Project will not prohibit the use of bicycles along SR 198. The SR 198 TCR also indicates that pedestrian facilities are nonexistent in the Three Rivers community. The Project will comply with Tulare County General Plan goals, which include Bicycle/Pedestrian Trail System (TC-5.1) and Consideration of Non-Motorized Modes in Planning and Development (TC-5.2).

Therefore, the Project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. Therefore, no mitigation is needed.

- ✓ Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

**Less Than Significant Impact** - In the fall of 2013, Senate Bill 743 (SB 743) was passed by the

legislature and signed into law by the governor. For California, this legislation will eventually change the way that transportation studies are conducted for environmental documents. Delay-based metrics such as roadway capacity and level of service will no longer be the performance measures used for the determination of the transportation impacts of projects in studies conducted under CEQA. Instead, new performance measures such as vehicle miles travelled (VMT) or other similar measures will be used.

July 1, 2020 is the statewide implementation date and agencies may opt-in use of new metrics prior to that date. Therefore, the traffic analysis currently follows current practice regarding state and local guidance as of the date of preparation.

Tourism is the largest and most important industry in the Three Rivers area, as the town is situated near Sequoia National Forest, which receives over 1.2 million annual visitors, and Kings Canyon National Park, which receives nearly 700,000 annual visitors. The industries and businesses surrounding Three Rivers are almost all related to visitors passing through, en route to the Sequoia National Forest and Kings Canyon National Park. The Three Rivers Community and surrounding area features a multitude of boutique lodging facilities, restaurants, and small retail shops to support the area's small population and transient travelers.

The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable accommodations or stay in properties located outside the market area. Seeking accommodations outside of the desired market area increases VMT since travelers would be forced to travel longer distances to secure accommodations. The development of the Project would reduce the unaccommodated demand, thus reducing VMT in the market area. Therefore, no mitigation is needed.

- ✓ Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (eg., farm equipment)?

**Less Than Significant Impact** - The Project would not result in hazards due to design features, since all proposed improvements (Project Driveway) would be built to County design standards. Access to the proposed Project will be provided at one (1) driveway along SR 198 (Sierra Drive), which is an existing driveway within Tulare County jurisdiction. Internal traffic and parking operations will be designed in accordance with Tulare County design standards. The proposed Project seeks to utilize a plot of relatively undeveloped land for a hotel with approximately 105 rooms in a rural area surrounded by rural/agricultural residences. The Project would not increase the use of farm equipment on streets and roads in the Three Rivers Community. As a result, the Project will not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Therefore, no mitigation is needed.

- ✓ Result in inadequate emergency access?

***Less Than Significant Impact*** - The Project would not result in any degradation of emergency access within the community. Congestion at an intersection or along a roadway can adversely impact emergency access. Results of the traffic analysis shows that all of the study intersections and roadway segments will meet Tulare County's and Caltrans' LOS "D" criteria through the year 2042. As a result, the Project will not result in inadequate emergency access. Therefore, no mitigation is needed.

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# 1.0 Introduction

## 1.1 Description of the Region/Project

This Traffic Impact Study (TIS) has been prepared for the purpose of analyzing traffic conditions related to the Three Rivers Hampton Inn & Suites Development (Project). The Project seeks to develop a 105-room hotel to be located off of State Route (SR) 198 (Sierra Drive), approximately 1,100 feet north of Old 3 Rivers Road in the Three Rivers Community.

Three Rivers is located in the Kaweah River canyon, just above Lake Kaweah, approximately 28 miles east of the City of Visalia as shown in Figure 1-1. Three Rivers' name comes from its location near the junction of the North, Middle, and South Forks of the Kaweah River. The surrounding terrain is marked by oak woodland forest and foothills. Three Rivers is located in the northern portion of Tulare County at an elevation of 825 feet above sea level with a total area of 45.4 square miles. Three Rivers is the gateway town for the Ash Mountain Main Entrance to Sequoia-Kings Canyon National Park, home of the Giant Sequoia trees.

### 1.1.1 Project Access

The Project will have one (1) driveway along SR 198, approximately 1,100 feet to the north of Old 3 Rivers Road.

### 1.1.2 Study Area

The Project location is shown in Figure 1-2 and the Project site plan is provided in Appendix A. The following intersections analyzed in this TIS are shown in Figure 1-2 and include:

#### Intersections

- ✓ SR 198 (Sierra Drive) and Project Driveway
- ✓ SR 198 (Sierra Drive) and Old 3 Rivers Road

### 1.1.3 Study Scenarios

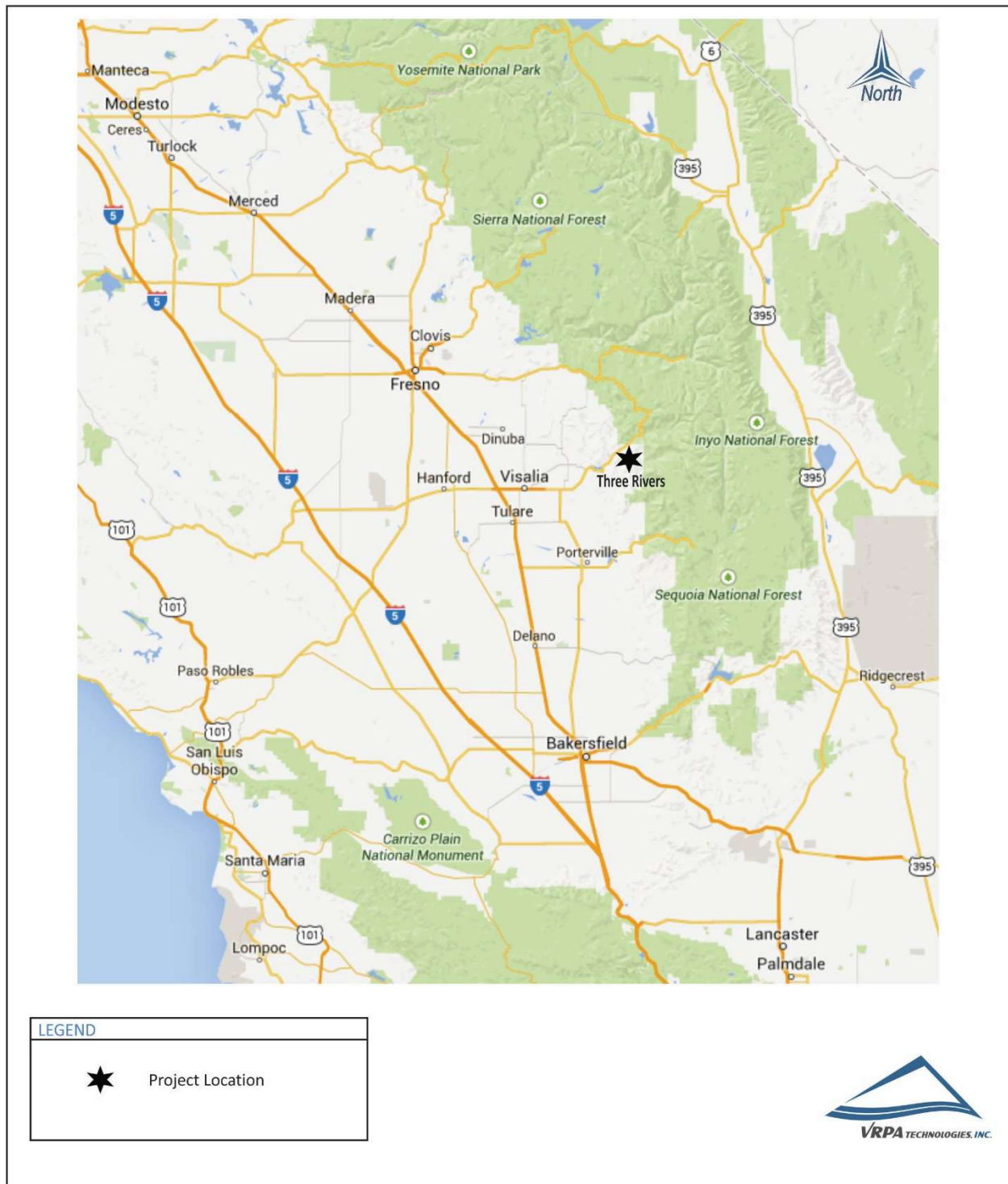
The TIS completed for the proposed Project includes level of service (LOS) analysis for the following traffic scenarios:

- ✓ Existing
- ✓ Existing Plus Project
- ✓ Near-Term Plus Project
- ✓ Cumulative Year 2042 Without Project
- ✓ Cumulative Year 2042 Plus Project



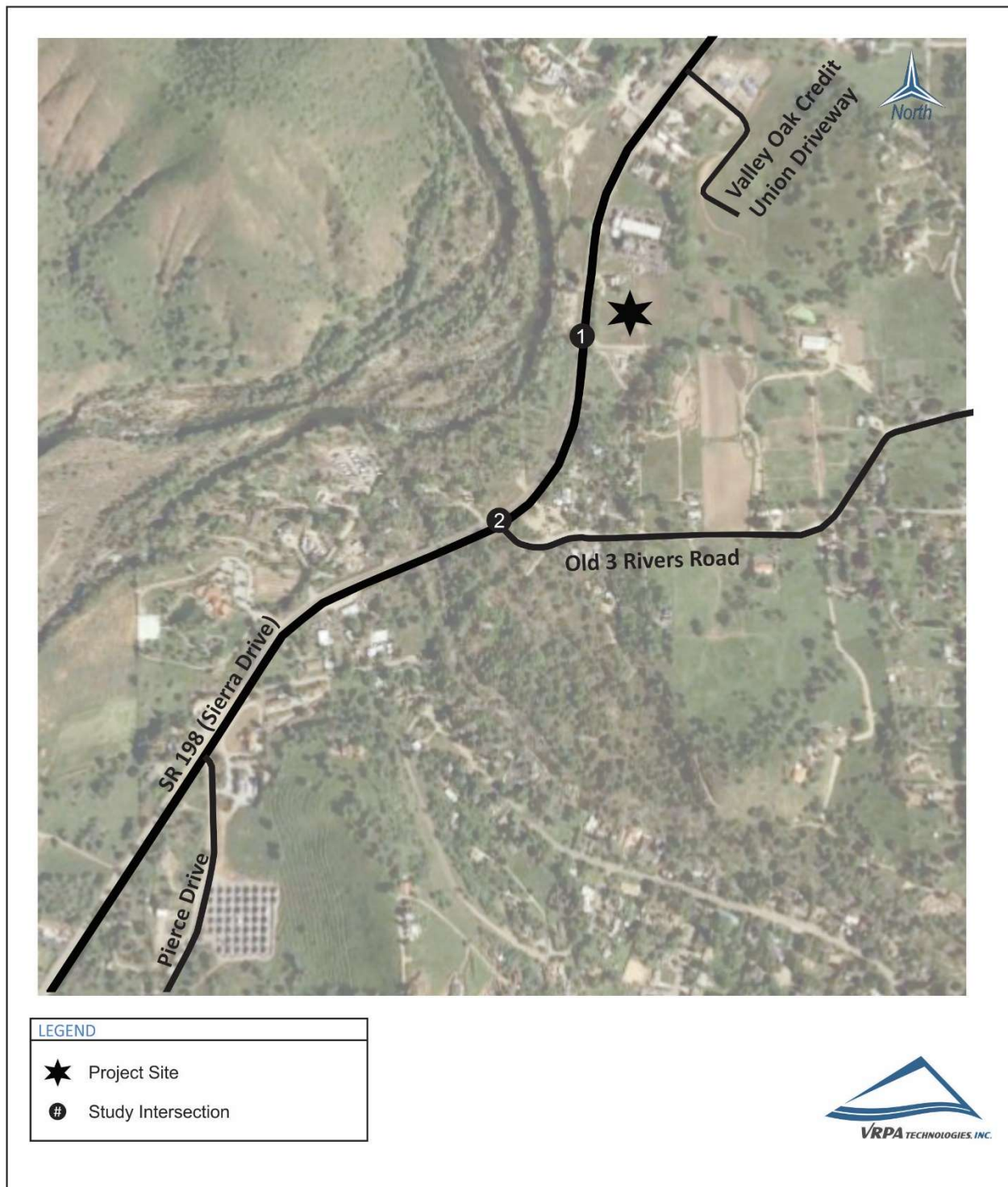
## Three Rivers Hampton Inn & Suites Regional Location

Figure  
1-1



**Three Rivers Hampton Inn & Suites**  
**Project Location**

**Figure**  
**1-2**



## 1.2 Methodology

When preparing a TIS, guidelines set by affected agencies are followed. In analyzing street and intersection capacities the Level of Service (LOS) methodologies are applied. LOS standards are applied by transportation agencies to quantitatively assess a street and highway system's performance. In addition, safety concerns are analyzed to determine the need for appropriate mitigation resulting from increased traffic near sensitive uses and other evaluations such as the need for signalized intersections or other improvements.

### 1.2.1 Intersection Analysis

Intersection LOS analysis was conducted using the Synchro 10 software program. Synchro 10 supports the Highway Capacity Manual (HCM) 6<sup>th</sup> Edition methodologies and is an acceptable program by Tulare County and Caltrans staff for assessment of traffic impacts. Levels of Service can be determined for both signalized and unsignalized intersections. The existing study intersections are currently unsignalized.

Tables 1-1 indicates the ranges in the amounts of average delay for a vehicle at unsignalized intersections for the various levels of service ranging from LOS "A" to "F".

Intersection turning movement counts and roadway geometrics used to develop LOS calculations were obtained from field review findings and count data provided from the traffic count sources identified in Section 2.1.

When an unsignalized intersection does not meet acceptable LOS standards, the investigation of the need for a traffic signal shall be evaluated. The California Manual on Uniform Traffic Control Devices (California MUTCD) introduces standards for determining the need for traffic signals. The California MUTCD indicates that the satisfaction of one or more traffic signal warrants does not in itself require the installation of a traffic signal. In addition to the warrant analysis, an engineering study of the current or expected traffic conditions should be conducted to determine whether the installation of a traffic signal is justified. The California MUTCD Peak Hour Warrant (Warrant 3) will be used, as necessary, to determine if a traffic signal is warranted at the unsignalized intersection that falls below current LOS standards.

## 1.3 Policies to Maintain Level of Service

An important goal is to maintain acceptable levels of service along the highway, street, and road network. To accomplish this, Tulare County and Caltrans adopt minimum levels of service in an attempt to control congestion that may result as new development occurs.

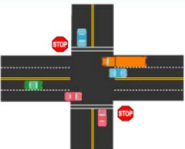
Tulare County's 2030 General Plan, policy number TC-1.16, identifies a minimum LOS standard of D on the County roadway system (both segments and intersections).

Based on guidance from Caltrans, the LOS for operating State highway facilities is based on Measures of Effectiveness (MOE) identified in the Highway Capacity Manual (HCM). Caltrans endeavors to maintain a target LOS at the transition between LOS “C” and LOS “D” on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than this target LOS, the existing MOE should be maintained. In general, the region-wide goal for an acceptable LOS on all freeways, roadways segments, and intersections is “D”. For undeveloped or not densely developed locations, the goal may be to achieve LOS “C”.

Given the LOS standards of the various agencies in the Project area, the goal of the Project is to provide LOS results that meet the minimum LOS “C” for Caltrans facilities and LOS “D” for County facilities for all intersections and segments. However, due to the location of the Kaweah River and topographical challenges, Caltrans’ SR-198 Transportation Concept Report (TCR) identifies the 2040 concept as LOS “D”. This target level of service is consistent with the Tulare County General Plan minimum LOS standard of “D”. Caltrans District 6 staff confirmed by email on September 6, 2016 that “reference to the 2040 concept with a LOS D means that Caltrans will accept LOS “D” on this segment of SR 198 in 2040”. This TIS, therefore, will utilize a minimum LOS standard of “D” for the County and Caltrans on SR 198 in the Three Rivers Urban Development Boundary (UDB).



**Table 1-1**  
**Unsignalized Intersections**  
**Level of Service Definitions**  
**(Highway Capacity Manual)**

LEVEL OF SERVICE	DEFINITION		AVERAGE TOTAL DELAY (sec/veh)
A	No delay for stop-controlled approaches.		0 - 10.0
B	Describes operations with minor delay.		> 10.0 - 15.0
C	Describes operations with moderate delays.		> 15.0 - 25.0
D	Describes operations with some delays.		> 25.0 - 35.0
E	Describes operations with high delays and long queues.		> 35.0 - 50.0
F	Describes operations with extreme congestion, with very high delays and long queues unacceptable to most drivers.		> 50.0

## 2.0 Existing Conditions

### 2.1 Existing Traffic Counts and Roadway Geometrics

The first step toward assessing Project traffic impacts is to assess existing traffic conditions. Typically, existing peak hour counts are collected in the study area for purposes of evaluating existing conditions. However, the present COVID-19 pandemic has altered travel patterns in the State of California, especially with the closure of the Sequoia-Kings Canyon National Park. As a result, existing traffic counts would be skewed and wouldn't reflect typical travel patterns in the study area. 2018 Traffic counts in the study area were used to evaluate existing traffic conditions in this traffic analysis. Intersection turning movement counts conducted for the Saturday and Sunday peak hour periods on February 3, 2018 and February 4, 2018, were used and are provided in Appendix B.

Due to the Project's proximity to Sequoia National Park, a seasonal adjustment factor was applied to the traffic counts as described above. The region sees significantly larger volumes of traffic during the summer months due to tourists/visitors of Sequoia National Park. In consultation with Caltrans staff, a seasonal growth factor of 1.76 was applied to the existing traffic counts to account for the increase in traffic in Three Rivers during the summer months. In addition, a growth rate of 1.3% per year was applied to the counts to estimate Year 2020 traffic volumes in the study area. Historical growth in Tulare County is approximately 1.3% based on population trends as forecasted in the Tulare County General Plan 2030 Update.

### 2.2 Existing Functional Roadway Classification System

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the type of service they are intended to provide. Fundamental to this process is the recognition that individual streets and highways do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads.

The following are general descriptions of the roadway types shown in the Three Rivers Community:

- ✓ **State Freeways and Highways** – There is one state facility serving the Three Rivers Community Area, State Highway 198. The segment of State Highway 198 (Sierra Drive), which passes through the Planning Area, is classified as a principal arterial.
- ✓ **Collectors** – Five (5) roads within the Three Rivers Community area are currently designated as county collector roads. Those roads include, North Fork Drive, Dinely Drive, Kaweah Drive, South Fork Drive, Mineral King Road. The primary function of collector roads is to collect and distribute traffic between local streets and the arterial roadway system. They generally provide access and movement between residential, commercial, and industrial areas.

- ✓ **Local Streets** – Roadways which provide access to individual homes and businesses. Local streets have one lane in each direction. Local streets connect single family homes and other uses to the arterial-collector network. All of the roadways in the Three Rivers Community that are not listed above would be classified as local streets.

## 2.3 Affected Streets and Highways

Major street and highway intersections and segments in the Three Rivers Community were analyzed to determine levels of service utilizing HCM-based methodologies described previously. The study intersections and street and highway segments included in this TIS are listed below.

### Intersections

- ✓ SR 198 (Sierra Drive) and Project Driveway
- ✓ SR 198 (Sierra Drive) and Old 3 Rivers Road

The existing lane geometry at study area intersections are shown in Figure 2-1. Existing study intersections are currently unsignalized. Figure 2-2 shows existing traffic volumes for the Saturday and Sunday Midday and PM peak hours in the study area.

## 2.4 Level of Service

### 2.4.1 Intersection Capacity Analysis

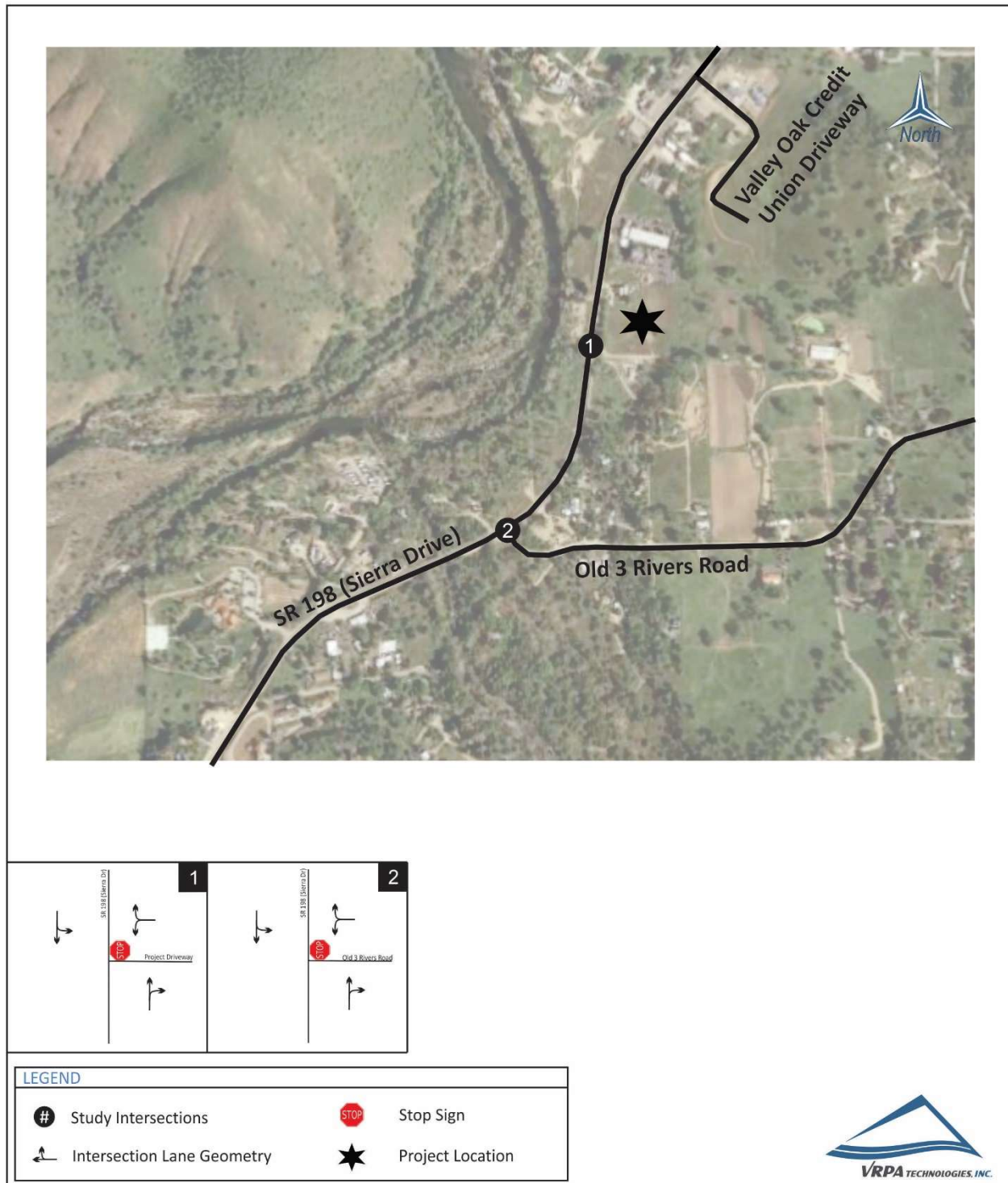
All intersection LOS analyses were estimated using the Synchro 10 software program. Various roadway geometrics, traffic volumes, and properties (peak hour factors, storage pocket length, etc.) were input into the Synchro 10 software program in order to accurately determine the travel delay and LOS for each Study scenario. The intersection LOS and delays reported represent the HCM 6<sup>th</sup> Edition outputs. Synchro assumptions, listed below, show the various Synchro inputs and methodologies used in the analysis.

- ✓ **Traffic Conditions**
  - The peak hour factor (PHF) used for Existing, Existing Plus Project, and Near-Term Plus Project conditions was determined from the existing counts. The HCM peak hour default value of 0.92 was used for the Cumulative Year 2042 scenarios unless the existing PHF is above 0.92.
  - Heavy vehicle percentages were applied as follows and are based on the HCM default, traffic counts, or Caltrans' parameters:
    - State Highway 198 – 9% (Caltrans' TCR shows 9% truck trips in the study area except between Mineral King Road and Sequoia Park, which is 6%)
    - All other roadways – 3%

Results of the analysis show that all of the study intersections are currently operating at acceptable levels of service during the Saturday and Sunday peak hours. Table 2-1 shows the intersection LOS for the existing conditions. Synchro 10 (HCM 6<sup>th</sup> Edition) Worksheets are provided in Appendix C.

### Three Rivers Hampton Inn & Suites Existing Lane Geometry

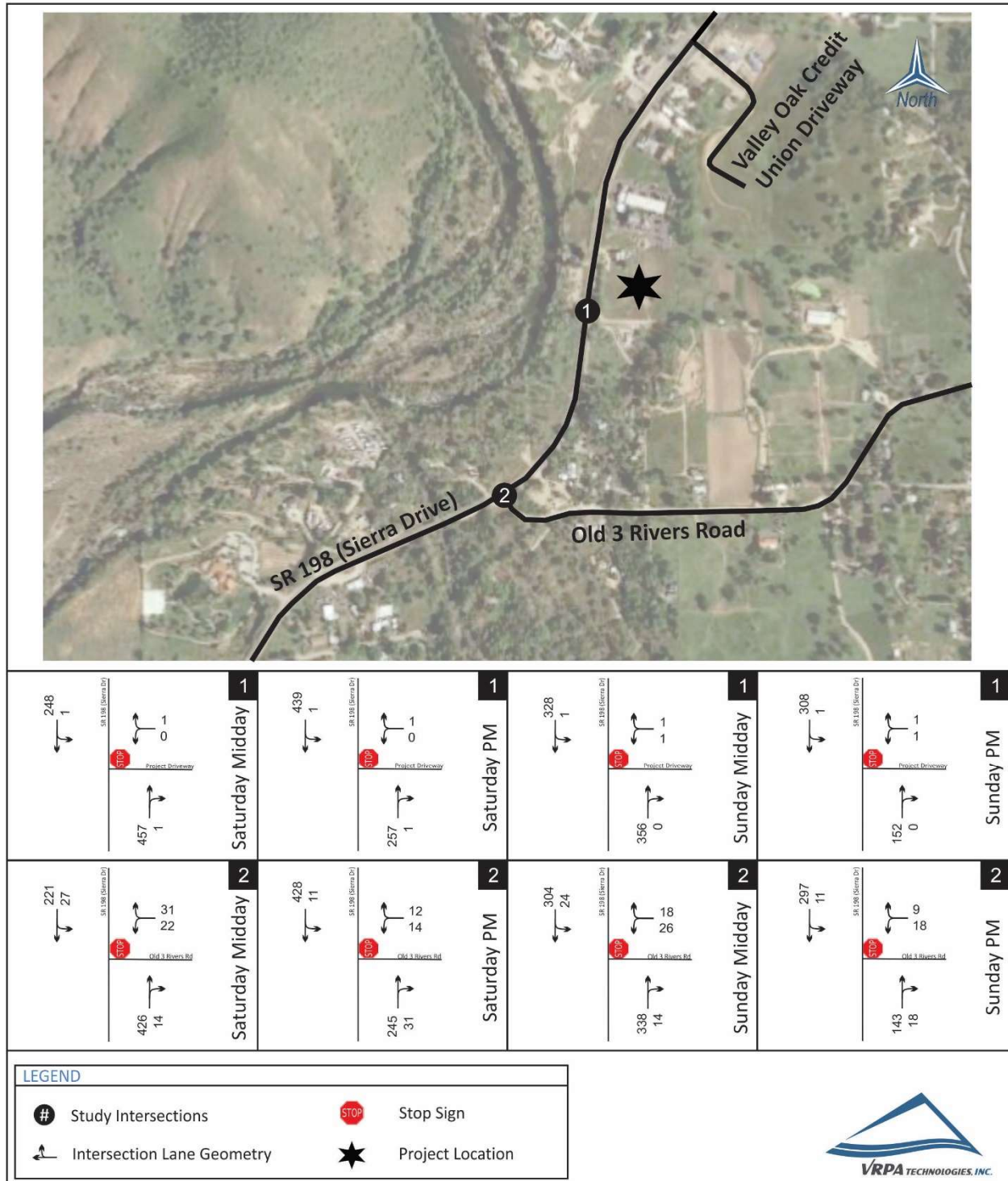
Figure  
2-1





### Three Rivers Hampton Inn & Suites Existing Peak Hour Traffic

Figure  
2-2



## 2.4.2 Queuing Analysis

Table 2-2 provides a queue length summary for study intersections for the Existing scenario. Traffic queue lengths at an intersection or along a roadway segment assist in the determination of a roadways overall performance. Excessive queuing at an intersection increases vehicle delay and reduces capacity. The queuing analyses is based upon methodology presented in Chapter 400 of Caltrans' Highway Design Manual (HDM), which is included in Appendix D. The queue results shown in Table 2-2 represent the approximate queue lengths for the respective lane movements.

**Table 2-1**  
**Existing Intersection Operations**

INTERSECTION	CONTROL	TARGET LOS	PEAK HOUR		EXISTING	
					DELAY	LOS
1. SR 198 (Sierra Drive) / Project Driveway	One-Way Stop Sign	D	Saturday	Midday	11.2	B
				PM	9.8	A
			Sunday	Midday	12.9	B
				PM	11.1	B
2. SR 198 (Sierra Drive) / Old 3 Rivers Road	One-Way Stop Sign	D	Saturday	Midday	14.3	B
				PM	13.5	B
			Sunday	Midday	14.8	B
				PM	12.3	B

DELAY is measured in seconds

LOS = Level of Service

For one-way controlled intersections, delay results show the delay for the worst movement.

**Table 2-2**  
**Existing Queuing Operations**

INTERSECTION	EXISTING QUEUE STORAGE LENGTH (ft)		EXISTING CONDITIONS			
			SATURDAY		SUNDAY	
			MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue
1. SR 198 (Sierra Drive) / Project Driveway	WB Approach	--	1	1	2	2
2. SR 198 (Sierra Drive) / Old 3 Rivers Road	WB Approach	325	44	22	37	23

Queue is measured in feet

## 2.5 Public Transit and Active Transport Systems

While the private automobile is the dominant mode of travel within Three Rivers, as it is throughout Tulare County, other modes of transportation are important. Data available from the American Community Survey (ACS) indicates that the average commute time for Three Rivers Community residents is about 23 minutes. About two-third of commuters drive alone to work, while one-third use other means: 21 percent carpool or vanpool, 1 percent walked, and 13 percent worked at home.<sup>1</sup> The Census bureau does not collect data on non-work trips, which represent a greater share of travel than work trips but tend to be less concentrated in peak traffic periods. The Census bureau does not collect data on non-work trips, which represent a greater share of travel than work trips but tend to be less concentrated in peak traffic periods. Off-peak trips also tend to have a greater proportion of shared ride and active (walk and bike) trips.

While congestion is not a major issue in the Three Rivers Community, overreliance on automobiles creates other costs for both society and households and means that many in the community who cannot drive (the young, the old, the disabled, the poor) must rely on those who can drive for their mobility. For this reason, it is important to encourage public transit systems and increased use of active modes of transportation, including bicycles and walking. The public transit system alternative for Three Rivers is a fixed route public transit system.

Investment in bikeways provides an inexpensive environment-friendly transportation opportunity. Bicycling is considered an effective alternative mode of transportation that can help to improve air quality and reduce the number of vehicles traveling along existing highways, especially within the cities and unincorporated communities. While the numbers of cyclists are

<sup>1</sup> Source: US Census American Community Survey, via [datausa.io/profile/geo/three-rivers-ca/](https://datausa.io/profile/geo/three-rivers-ca/)

small in comparison to the amount of auto traffic, the size of the Three Rivers Community means that most trips within the community can be comparable to using an automobile. Caltrans' SR-198 Transportation Concept Report, dated June 2016, indicates that bike use is permitted along SR-198 throughout the Three Rivers Community. However, it should be noted that roadway shoulders along SR-198 are generally between 4 - 8 feet.

Tulare County Area Transit (TCaT) Route 30 (Northeast County Route) operates between the Three Rivers Memorial Building and the Visalia Transit Center in downtown Visalia. Route 30 provides 4 roundtrips to the Visalia Transit Center on weekdays and 1 roundtrip on the weekend, all at 4-hour intervals. At the Visalia Transit Center, transfers can be made to connect to remainder of Visalia, as well as the City of Tulare, and the smaller cities and communities in the County served by the TCaT fixed route transit system. Visalia transit vehicles are wheelchair accessible and all full-size buses include bike racks.

The Sequoia Shuttle, which operates from May to September, offers approximately five (5) daily trips to the Sequoia National Park. The shuttle departs from various convenient locations throughout Visalia, Exeter, and Three Rivers, Ca.

## 3.0 Traffic Impacts

This chapter provides an assessment of the traffic the Project is expected to generate and the impact of that traffic on the surrounding street system.

### 3.1 Trip Generation

To assess the impacts that the Project may have on the surrounding street and highway segments and intersections, the first step is to determine Project trip generation. Project trip generation was determined using trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition). Trips associated with the Project were derived from the Hotel (310) Land Use in the ITE Trip Generation Manual.

The considerations described above led to the recommended trip generation for both Saturday and Sunday Midday and PM peak hours shown in Table 3-1. The peak hour trips for Saturday and Sunday identified in Table 3-1 below were applied to the Midday and PM peak hour time periods.

**Table 3-1**  
**Project Trip Generation**

LAND USE	Quantity	SATURDAY DAILY TRIP ENDS	(ADT)	SATURDAY PEAK HOUR OF GENERATOR					SUNDAY DAILY TRIP ENDS	(ADT)	SUNDAY PEAK HOUR OF GENERATOR				
		RATE	VOLUME	RATE	IN:OUT SPLIT	VOLUME			RATE	VOLUME	RATE	IN:OUT SPLIT	VOLUME		
						IN	OUT	TOTAL					IN	OUT	TOTAL
Hotel (310)	105 Rooms	8.19	860	0.72	56:44	43	33	76	5.95	625	0.56	46:54	27	32	59
<b>TOTAL TRIP GENERATION</b>			<b>860</b>			<b>43</b>	<b>33</b>	<b>76</b>		<b>625</b>			<b>27</b>	<b>32</b>	<b>59</b>

Source: Generation factors from ITE Trip Generation Manual, 10th Edition.  
Trip ends are one-way traffic movements, entering or leaving.  
The numbers in parenthesis are ITE land use codes.

### 3.2 Trip Distribution

Project trip distribution is shown in Figure 3-1 and is based upon engineering judgement, prevailing traffic patterns in the study area, complementary land uses, major routes, population centers, and a review of data available in the Tulare County General Plan. The Project will have one (1) driveway along SR 198 (Sierra Drive), approximately 1,100 feet to the north of Old 3 Rivers Road.

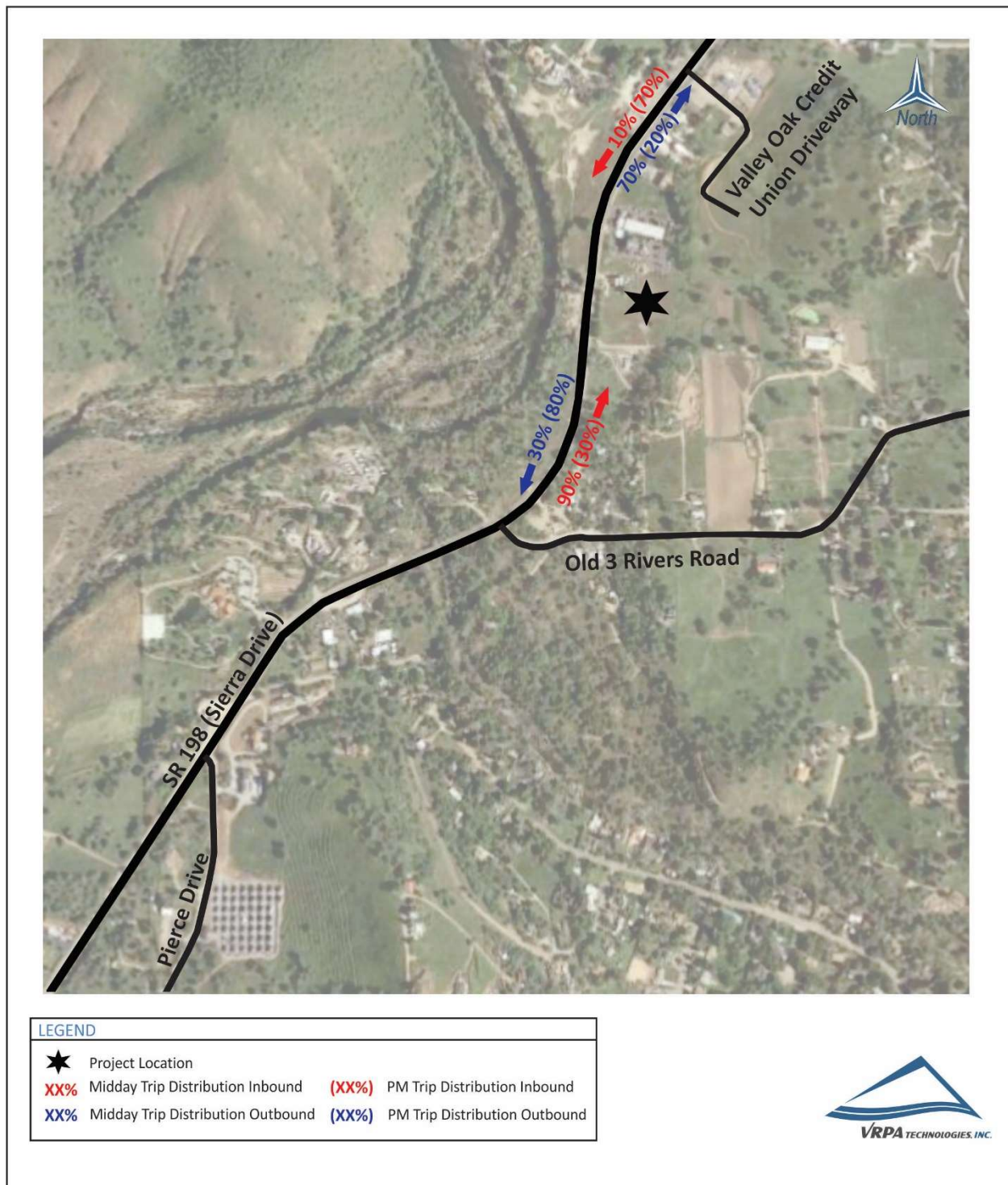
### 3.3 Project Traffic

Project traffic as shown in Table 3-1 was distributed to the roadway system using the trip distribution percentages shown in Figure 3-1. A graphical representation of the resulting noon and PM peak hour Project trips used is shown in Figure 3-2.



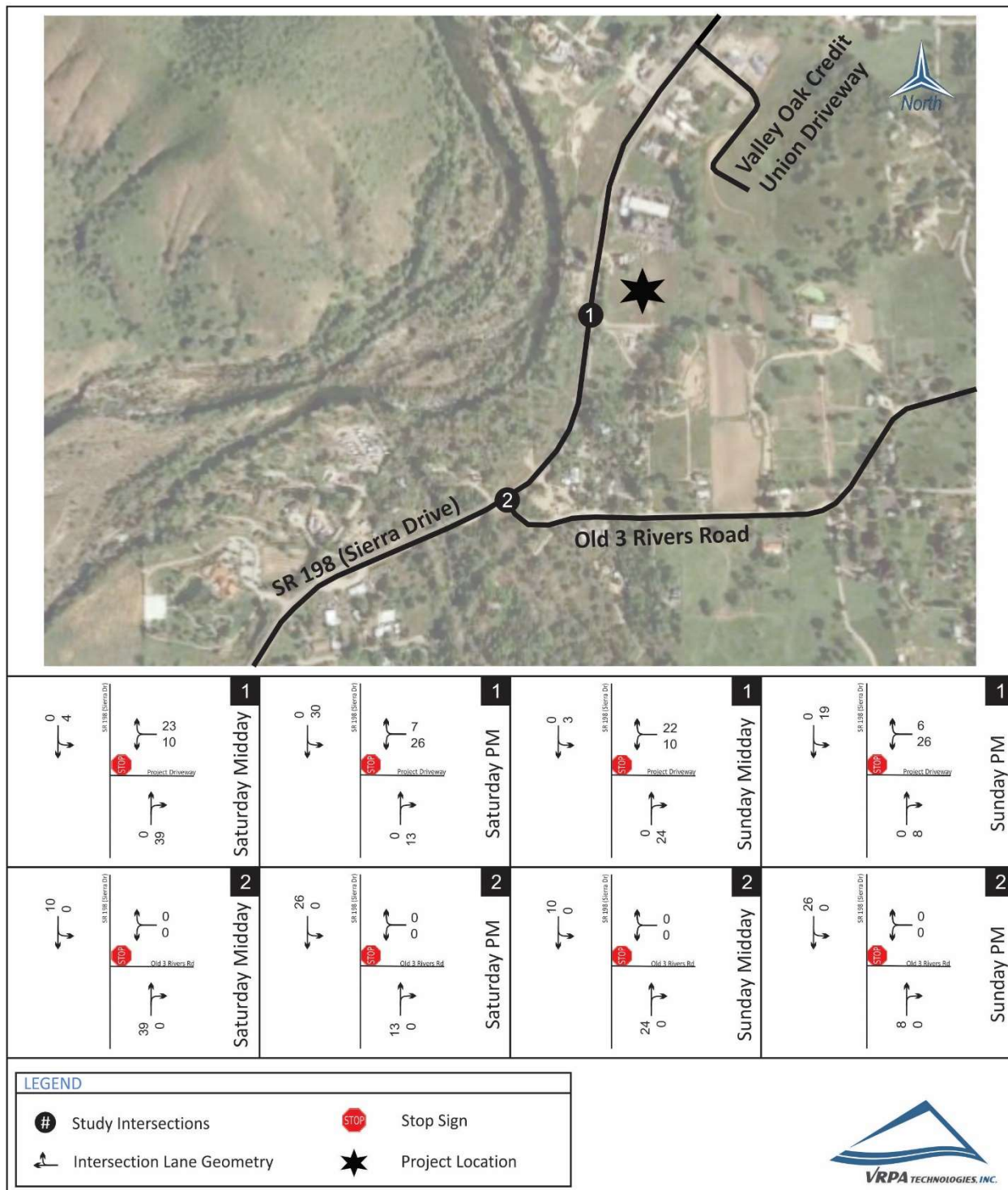
**Three Rivers Hampton Inn & Suites**  
**Project Trip Distribution**

**Figure**  
**3-1**



**Three Rivers Hampton Inn & Suites**  
**Peak Hour Project Traffic**

**Figure**  
**3-2**



### 3.4 Existing Plus Project Traffic Conditions

An Existing Plus Project Scenario was analyzed to include existing traffic plus traffic generated by development of the Project. The resulting traffic is shown in Figure 3-3.

### 3.5 Approved/Pending Project Traffic

Traffic impact analyses typically require the analysis of approved or pending developments that have not yet been built in the vicinity of the Project in addition to the proposed Project. The approved or pending developments identified for use in this traffic analysis included a proposed 200-room hotel located along Old 3 Rivers Road, approximately 700 feet to the east of SR 198 (Sierra Drive). Trip generation and distribution information for the development was based on information found in its corresponding TIS report. Trip generation and distribution information is provided in Appendix D. The peak hour trips for the approved or pending project traffic was applied to the Near-Term and Cumulative Year 2042 traffic conditions discussed later in the report.

### 3.6 Near-Term Plus Project Traffic Conditions

Traffic conditions with the Project in the Year 2022 were estimated by applying a growth rate of 1.3% per year to the existing traffic volumes. Historical growth in Tulare County is approximately 1.3% based on population trends as forecasted in the Tulare County General Plan 2030 Update. In consultation with Tulare County RMA and Caltrans staff it was determined that a growth rate of 1.3% was consistent with the overall growth in the study area and should be used to evaluate Near-Term conditions. The resulting traffic is shown in Figure 3-4.

### 3.7 Cumulative Year 2042 Without Project Traffic Conditions

The impacts of the Project were analyzed considering future traffic conditions in the year 2042. The levels of traffic expected in 2042 relate to the cumulative effect of traffic increases resulting from the implementation of the General Plans of local agencies, including Tulare County. Traffic conditions without the Project in the Year 2042 were estimated by applying a 1.3% per year growth factor to existing roadway segment volumes in the study area (ambient growth). The resulting traffic volumes were compared and evaluated against cumulative development in the area and adjusted as necessary. The resulting traffic is shown in Figure 3-5.

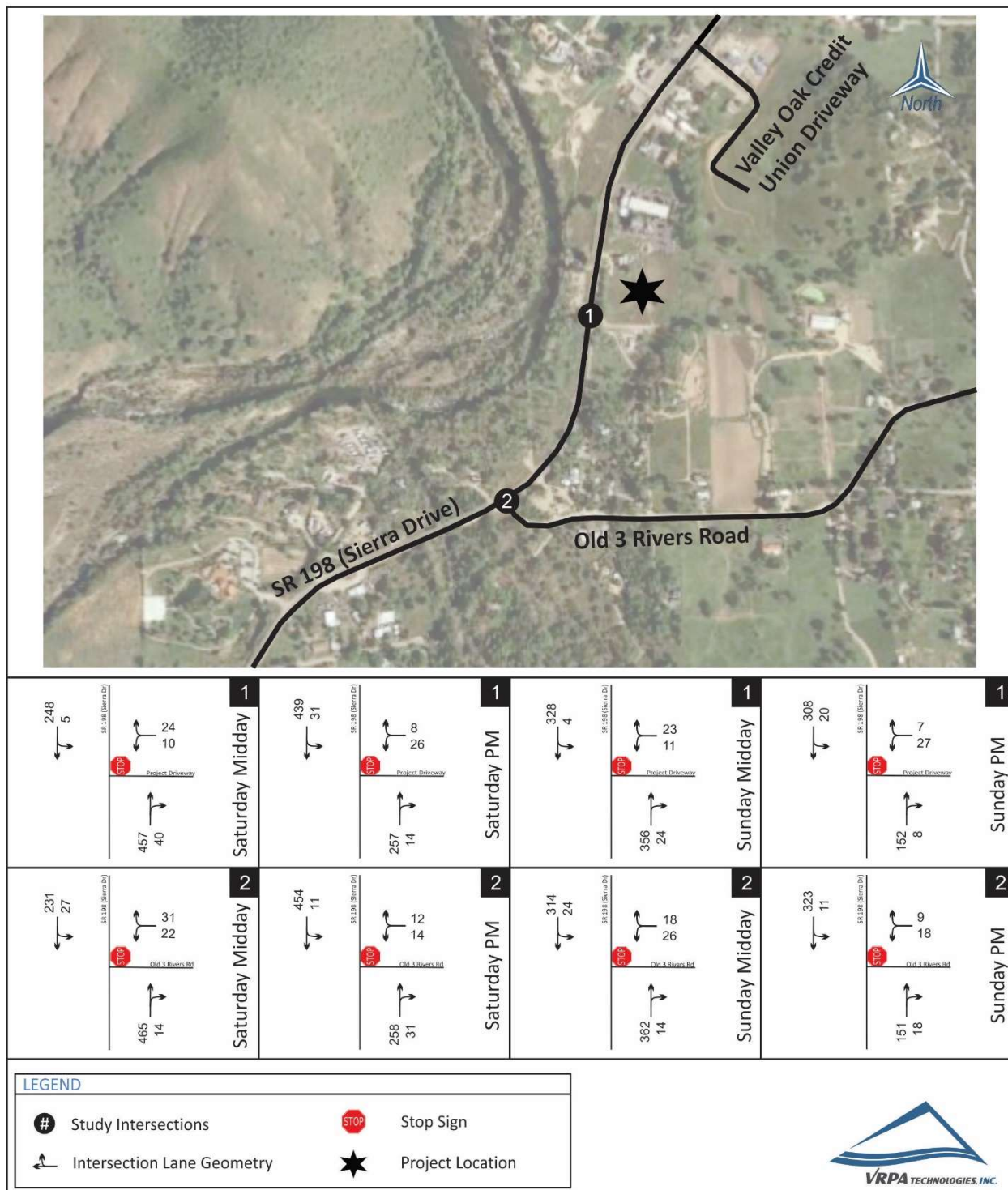
### 3.8 Cumulative Year 2042 Plus Project Traffic Conditions

The addition of Project trips, as shown in Figure 3-2 (Section 3.3), were added to Cumulative Year 2042 Without Project traffic volumes. This leads to the Cumulative Year 2042 Plus Project Peak Hour Traffic Volumes shown in Figure 3-6.



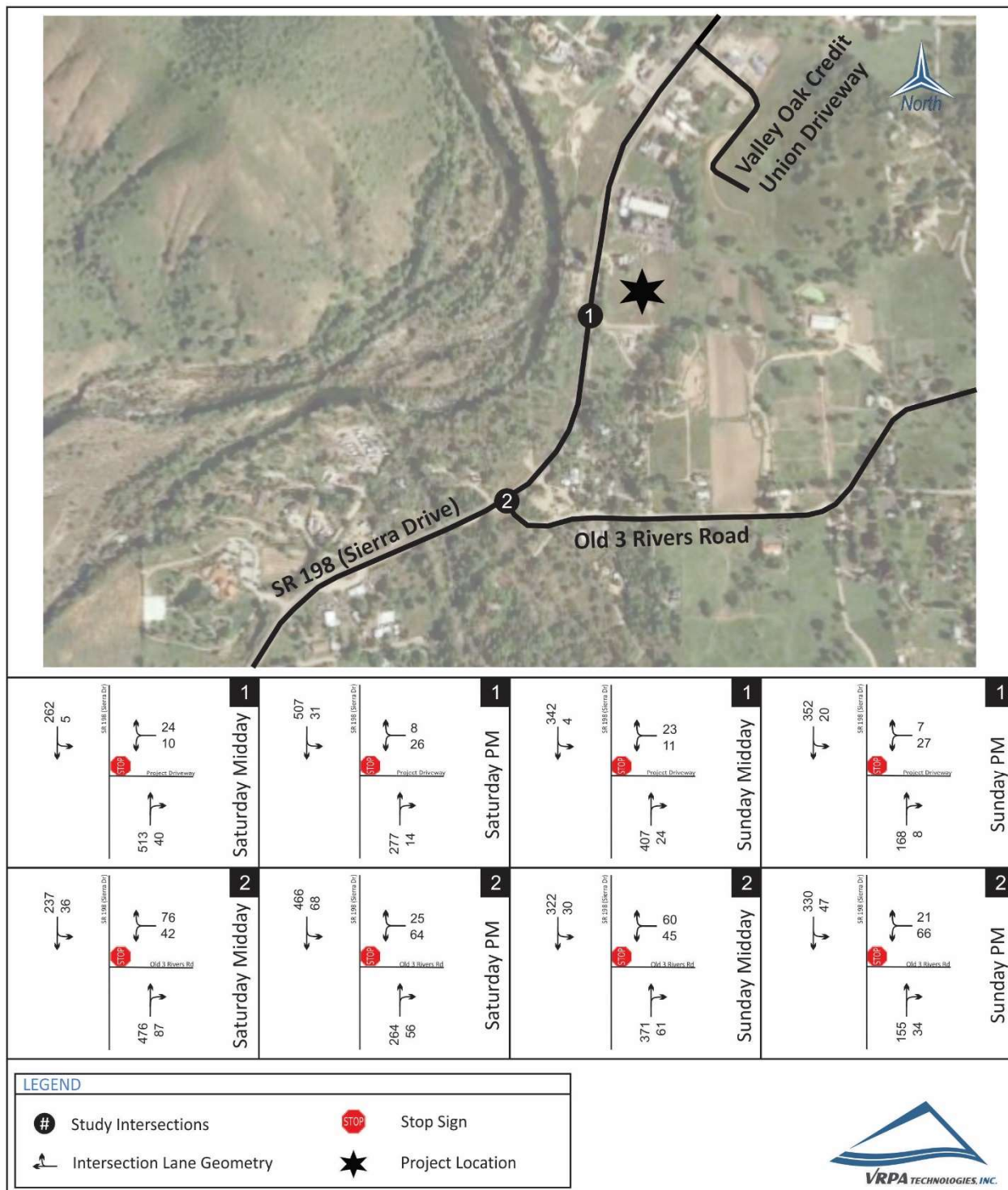
**Three Rivers Hampton Inn & Suites**  
**Existing Plus Project Peak Hour Traffic**

**Figure**  
**3-3**



**Three Rivers Hampton Inn & Suites**  
**Near-Term Peak Hour Traffic**

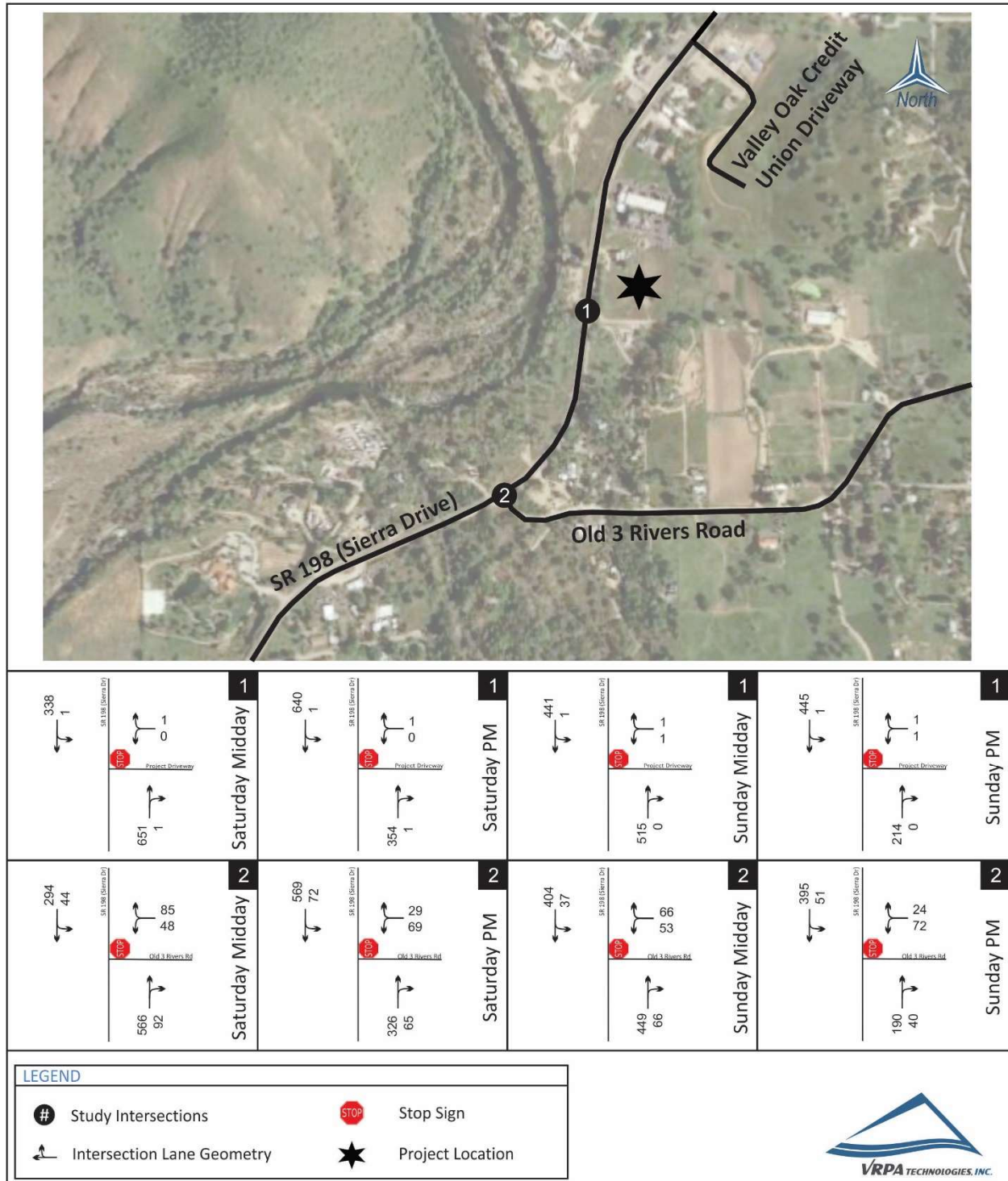
**Figure**  
**3-4**





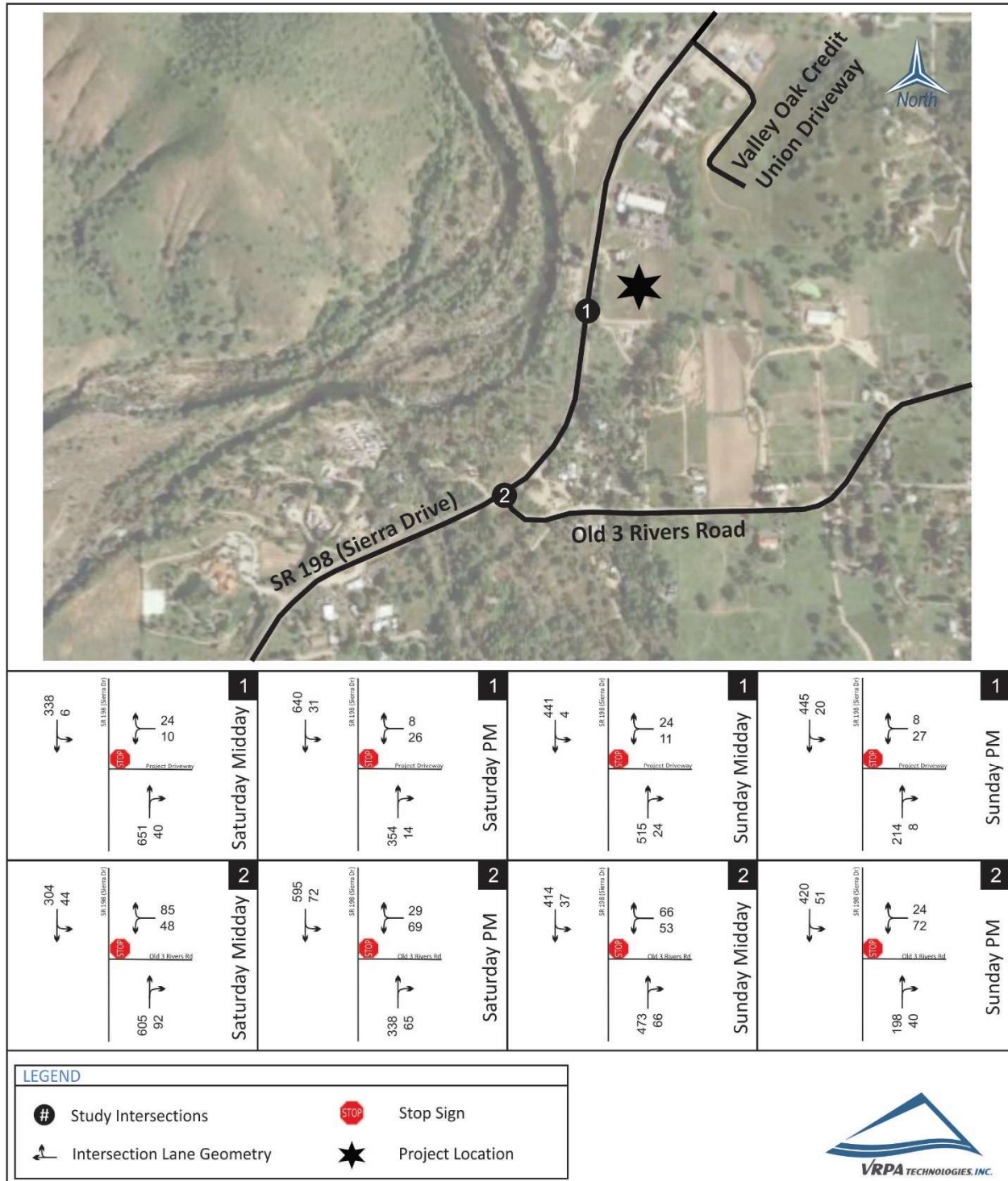
**Three Rivers Hampton Inn & Suites**  
**Cumulative Year 2042 Without Project Peak Hour Traffic**

**Figure**  
**3-5**



**Three Rivers Hampton Inn & Suites**  
**Cumulative Year 2042 Plus Project Peak Hour Traffic**

**Figure**  
**3-6**



## 3.9 Impacts

### 3.9.1 Intersection Capacity Analysis

Table 3-2 shows the projected delay for all scenarios at study area intersections. Results of the analysis show that levels of service at the SR 198 (Sierra Drive) and Project Driveway and SR 198 (Sierra Drive) and Old 3 Rivers Road intersections will not exceed target LOS 'D' for all the study scenarios. Therefore, no mitigation measures are required to achieve acceptable levels of service. It should be noted that the Project Driveway along SR 198 (Sierra Drive) must meet Tulare County and Caltrans standards.

### 3.9.2 Queuing Analysis

Table 3-3 provides a queue length summary for turning movements at the Project Driveway and Old 3 Rivers Road. Queuing analysis for unsignalized intersections was completed using Section 400 of Caltrans' Highway Design Manual. Results of the analysis show that the queue lengths along Old 3 Rivers Road are not projected to encroach upon the most easterly driveway to SR 198 (Sierra Drive).

**Table 3-2**  
**Intersection Operations**

INTERSECTION	CONTROL	TARGET LOS	PEAK HOUR		EXISTING PLUS PROJECT		NEAR-TERM PLUS PROJECT		CUMULATIVE YEAR 2042 WITHOUT PROJECT		CUMULATIVE YEAR 2042 PLUS PROJECT	
					DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
1. SR 198 (Sierra Drive) / Project Driveway	One-Way Stop Sign	D	Saturday	Midday	13.1	B	13.8	B	13.0	B	16.5	C
				PM	16.0	C	17.8	C	10.5	B	22.4	C
			Sunday	Midday	12.9	B	13.7	B	15.6	C	15.4	C
				PM	13.5	B	14.5	B	11.8	B	14.6	B
2. SR 198 (Sierra Drive) / Old 3 Rivers Road	One-Way Stop Sign	D	Saturday	Midday	15.0	C	20.5	C	22.8	C	24.8	C
				PM	14.0	B	27.6	D	31.1	D	33.9	D
			Sunday	Midday	15.4	C	18.1	C	21.2	C	22.4	C
				PM	12.7	B	18.1	C	18.9	C	19.9	C

DELAY is measured in seconds

LOS = Level of Service

For one-way controlled intersections, delay results show the delay for the worst movement.

**Table 3-3**  
**Queuing Operations**

INTERSECTION	EXISTING QUEUE STORAGE LENGTH (ft)		EXISTING PLUS PROJECT				NEAR-TERM YEAR PLUS PROJECT				CUMULATIVE YEAR 2042 WITHOUT PROJECT				CUMULATIVE YEAR 2042 PLUS PROJECT			
			SATURDAY		SUNDAY		SATURDAY		SUNDAY		SATURDAY		SUNDAY		SATURDAY		SUNDAY	
			MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue
1. SR 198 (Sierra Drive) / Project Driveway	WB Approach	--	28	28	28	28	28	28	28	28	1	1	3	3	28	28	29	29
2. SR 198 (Sierra Drive) / Old 3 Rivers Road	WB Approach	325	44	22	37	23	98	75	88	73	111	82	98	80	111	82	98	80

Queue is measured in feet

## 4.0 Standards of Significance

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in significant adverse impacts on the environment. The criteria used to determine the significance of an impact to traffic are based on the following thresholds of significance which come from Appendix G of the CEQA Guidelines. Accordingly, traffic impacts resulting from the proposed Project are considered significant if the Project would:

- ✓ Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
- ✓ Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
- ✓ Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (eg., farm equipment)?
- ✓ Result in inadequate emergency access?

### 4.1 Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

**Less Than Significant** - An important goal is to maintain acceptable levels of service along the highway, street, and road network. To accomplish this, Tulare County RMA and Caltrans adopt minimum levels of service in an attempt to control congestion that may result as new development occurs. Tulare County's 2030 General Plan, policy number TC-1.16, identifies a minimum LOS standard of "D" on the County roadway system (both segments and intersections). Caltrans' SR-198 Transportation Concept Report (TCR) identifies the 2040 concept as LOS "D".

Results of the analysis show that the proposed Project will not exceed the minimum LOS standard of "D" as shown in Tables 2-1 and 3-2.

The Project does not conflict with any applicable adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Tulare County Area Transit (TCaT) Route 30 (Northeast County Route) operates between the Three Rivers Memorial Building and the Visalia Transit Center in downtown Visalia. Route 30 provides 4 roundtrips to the Visalia Transit Center on weekdays and 1 roundtrip on the weekend, all at 4-hour intervals. Implementation of the Project will not hinder the operation of Route 30 in the Three Rivers Community.



Caltrans' SR 198 TCR indicated that bicycles are permitted along the SR 198 corridor in the Three Rivers Community. The proposed Project will not prohibit the use of bicycles along SR 198. The SR 198 TCR also indicates that pedestrian facilities are nonexistent in the Three Rivers community. The Project will comply with Tulare County General Plan goals, which include Bicycle/Pedestrian Trail System (TC-5.1) and Consideration of Non-Motorized Modes in Planning and Development (TC-5.2).

Therefore, the Project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. Therefore, no mitigation is needed.

#### 4.2 Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

***Less Than Significant Impact*** - In the fall of 2013, Senate Bill 743 (SB 743) was passed by the legislature and signed into law by the governor. For California, this legislation will eventually change the way that transportation studies are conducted for environmental documents. Delay-based metrics such as roadway capacity and level of service will no longer be the performance measures used for the determination of the transportation impacts of projects in studies conducted under CEQA. Instead, new performance measures such as vehicle miles travelled (VMT) or other similar measures will be used.

July 1, 2020 is the statewide implementation date and agencies may opt-in use of new metrics prior to that date. Therefore, the traffic analysis currently follows current practice regarding state and local guidance as of the date of preparation.

Tourism is the largest and most important industry in the Three Rivers area, as the town is situated near Sequoia National Forest, which receives over 1.2 million annual visitors, and Kings Canyon National Park, which receives nearly 700,000 annual visitors. The industries and businesses surrounding Three Rivers are almost all related to visitors passing through, en route to the Sequoia National Forest and Kings Canyon National Park. The Three Rivers Community and surrounding area features a multitude of boutique lodging facilities, restaurants, and small retail shops to support the area's small population and transient travelers.

The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable accommodations or stay in properties located outside the market area. Seeking accommodations outside of the desired market area increases VMT



since travelers would be forced to travel longer distances to secure accommodations. The development of the Project would reduce the unaccommodated demand, thus reducing VMT in the market area. Therefore, no mitigation is needed.

#### 4.3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

**Less Than Significant Impact** - The Project would not result in hazards due to design features, since all proposed improvements (Project Driveway) would be built to County design standards. Access to the proposed Project will be provided at one (1) driveway along SR 198 (Sierra Drive), which is an existing driveway within Tulare County jurisdiction. Internal traffic and parking operations will be designed in accordance with Tulare County design standards. The proposed Project seeks to utilize a plot of relatively undeveloped land for a hotel with approximately 105 rooms in a rural area surrounded by rural/agricultural residences. The Project would not increase the use of farm equipment on streets and roads in the Three Rivers Community. As a result, the Project will not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Therefore, no mitigation is needed.

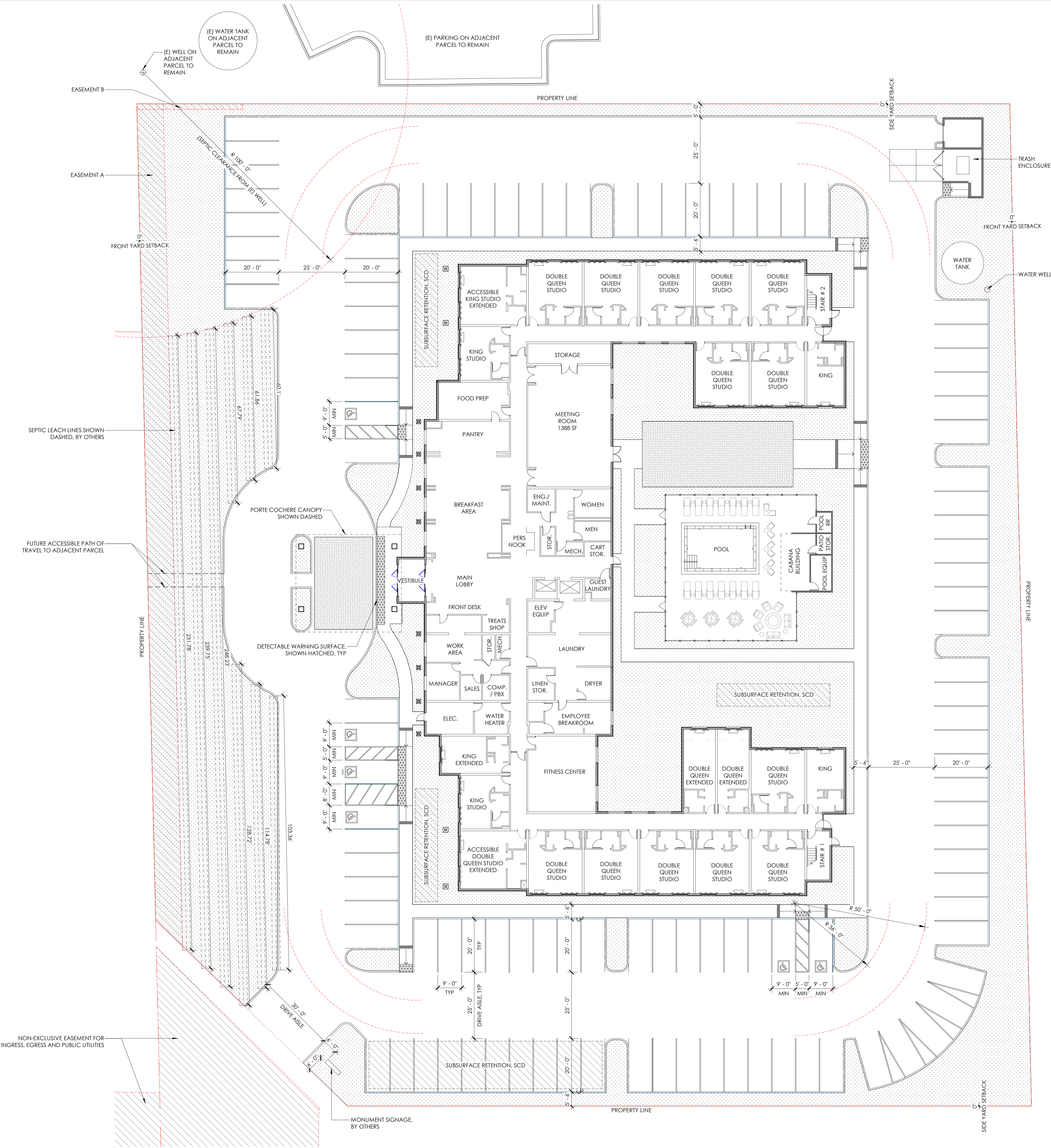
#### 4.4 Result in inadequate emergency access?

**Less Than Significant Impact** - The Project would not result in any degradation of emergency access within the community. Congestion at an intersection or along a roadway can adversely impact emergency access. Results of the traffic analysis shows that all of the study intersections and roadway segments will meet Tulare County's and Caltrans' LOS "D" criteria through the year 2042. As a result, the Project will not result in inadequate emergency access. Therefore, no mitigation is needed.

# **APPENDIX A**

## Project Site Plan





SITE PLAN

ROOM MATRIX

	FIRST FLOOR (25,043 SF)	SECOND FLOOR (22,848 SF)	THIRD FLOOR (24,473 SF)	TOTAL (72,364 SF)
STANDARD DOUBLE QUEEN EXTENDED	2	15	18	35
STANDARD DOUBLE QUEEN ACCESSIBLE EXT.	0	1	1	2
DOUBLE QUEEN STUDIO	13	13	13	39
DOUBLE QUEEN STUDIO EXT.	0	1	1	2
ACCESSIBLE DOUBLE QUEEN STUDIO EXT.	1	1	0	2
STANDARD KING	2	2	2	6
STANDARD KING EXTENDED	1	3	3	7
STANDARD KING ACCESSIBLE EXT.	0	1	1	2
KING STUDIO	2	2	2	6
KING STUDIO ACCESSIBLE EXT.	1	1	2	4
TOTAL NUMBER OF GUEST ROOMS	22	40	43	105

PARKING COUNT

GUEST ROOMS	105
REQUIRED PARKING SECTION 15 (A.2.b.(3)) (1 PARKING SPACE FOR EVERY 3 GUEST ROOMS)	108
REGULAR STALLS	108
TOTAL PARKING	108
ACCESSIBLE PARKING (INCLUDED ABOVE)	6 = OK

ZONING CODE

APN:	068-080-010
ZONING	C-2-MU-SC (GENERAL COMMERCIAL WITH MIXED-USE OVERLAY AND SCENIC CORRIDOR OVERLAY)
GENERAL PLAN	URBAN DEVELOPMENT BOUNDARIES

THREE RIVERS COMMUNITY PLAN

MIXED-USE OVERLAY DISTRICT:	
HEIGHT	35 FT
SETBACKS:	
FRONT YARD	0 FT
SIDE YARD	0 FT
REAR YARD	0 FT
FLOOR AREA RATIO (FAR) - MAX ALLOWED	2
LOT AREA (SF)	122,403.6 SF
TOTAL BUILDING SF	72,364 SF
FAR	0.6 < 2 = OK
FENCES, WALLS, AND SCREENING	NOT REQUIRED (LOT DOES NOT ABUT A 'R' ZONE)

SITE PLAN LEGEND

	ACCESSIBLE PATH OF TRAVEL, NO SLOPES IN DIRECTION OF TRAVEL EXCEEDING 5% AND NO CROSS SLOPES EXCEEDING 2%
	DETECTABLE WARNING SURFACE



5221 DEER VALLEY ROAD, # 150  
RESCUE, CALIFORNIA, 95672  
(916) 316-6759  
josh@dvbarchitecture.com

OWNER  
CONTRACTOR  
This drawing is not final or to be used for construction until it is signed by the architect and the owner.

PRELIMINARY DESIGN

THREE RIVERS HIS

SIERRA DRIVE, THREE RIVERS, CA 93271

NOT FOR CONSTRUCTION

05/06/20 PRELIMINARY DESIGN

SITE PLAN

Project Number  
19042  
Drawn By  
JJJ  
Checked By  
JJJ

A1



# **APPENDIX B**

Traffic Count Data Sheets

# National Data & Surveying ServicesIntersection Turning Movement Count

**Location:** SR 198 / Sierra Dr & Old 3 Rivers Rd

**City:** Three Rivers

**Control:** 1-Way Stop(WB)

**Project ID:** 18-02019-001

**Date:** 2018-02-03

## Total

NS/EW Streets:		SR 198 / Sierra Dr				SR 198 / Sierra Dr				Old 3 Rivers Rd				Old 3 Rivers Rd			
NOON		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
11:00 AM		0	1	0	0	3	25	0	0	0	0	0	0	0	1	0	0
11:15 AM		0	46	5	0	4	18	0	0	0	0	0	0	3	0	4	0
11:30 AM		0	51	5	1	4	22	0	0	0	0	0	0	4	0	2	0
11:45 AM		0	57	2	1	4	22	0	0	0	0	0	0	5	0	7	0
12:00 PM		0	63	1	0	5	34	0	0	0	0	0	0	1	0	6	0
12:15 PM		0	60	3	0	2	35	0	0	0	0	0	0	3	0	3	1
12:30 PM		0	56	2	0	4	31	0	0	0	0	0	0	3	0	1	0
12:45 PM		0	57	3	0	7	24	0	0	0	0	0	0	4	0	3	0
		0	58	4	0	2	28	0	0	0	0	0	0	2	0	1	0
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s :		0	448	25	2	31	217	0	0	0	0	0	0	25	0	27	1
PEAK HR VOL :		0	236	8	1	15	122	0	0	0	0	0	0	12	0	17	1
PEAK HR FACTOR :		0.000	0.937	0.667	0.250	0.750	0.871	0.000	0.000	0.000	0.000	0.000	0.000	0.600	0.000	0.607	0.250
		11:30 AM - 12:30 PM				0.878				0.625				0.936			
		0.957															
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
4:00 PM		0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0
4:15 PM		0	41	1	0	0	69	0	0	0	0	0	0	3	0	3	0
4:30 PM		0	32	4	0	2	51	0	0	0	0	0	0	2	0	1	0
4:45 PM		0	28	5	0	2	56	0	0	0	0	0	0	1	0	2	0
5:00 PM		0	35	7	0	2	61	0	0	0	0	0	0	2	0	1	0
5:15 PM		0	26	5	0	5	58	0	0	0	0	0	0	2	0	0	0
5:30 PM		0	27	3	0	1	56	0	0	0	0	0	0	2	0	3	0
5:45 PM		0	21	1	0	4	33	0	0	0	0	0	0	4	0	0	0
		0	24	3	0	2	70	0	0	0	0	0	0	5	0	3	0
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s :		0	234	29	0	18	454	0	0	0	0	0	0	21	0	13	0
PEAK HR VOL :		0	136	17	0	6	237	0	0	0	0	0	0	8	0	7	0
PEAK HR FACTOR :		0.000	0.829	0.607	0.000	0.750	0.859	0.000	0.000	0.000	0.000	0.000	0.000	0.667	0.000	0.583	0.000
		0.911				0.880				0.625				0.878			
		0.911															
		0.911															

# National Data & Surveying ServicesIntersection Turning Movement Count

**Location:** SR 198 / Sierra Dr & Old 3 Rivers Rd  
**City:** Three Rivers  
**Control:** 1-Way Stop(WB)

**Project ID:** 18-02019-001  
**Date:** 2018-02-04

## Total




NS/EW Streets:		SR 198 / Sierra Dr				SR 198 / Sierra Dr				Old 3 Rivers Rd				Old 3 Rivers Rd			
NOON		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
11:00 AM		0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0
11:15 AM		0	36	4	0	1	36	0	0	0	0	0	0	2	0	2	0
11:30 AM		0	40	3	0	1	36	0	0	0	0	0	0	3	0	2	0
11:45 AM		0	27	2	0	0	30	0	0	0	0	0	0	2	0	2	0
12:00 PM		0	44	3	0	4	37	0	0	0	0	0	0	1	0	2	0
12:15 PM		0	58	1	0	3	45	0	0	0	0	0	0	2	0	6	0
12:30 PM		0	40	1	0	4	45	0	0	0	0	0	0	4	0	2	0
12:45 PM		0	45	3	0	2	41	0	0	0	0	0	0	7	0	0	0
		0	42	5	0	2	36	0	0	0	0	0	0	3	0	0	0
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s :		0	332	22	0	17	306	0	0	0	0	0	0	24	0	16	0
PEAK HR VOL :		0	187	8	0	13	168	0	0	0	0	0	0	14	0	10	0
PEAK HR FACTOR :		0.000	0.806	0.667	0.000	0.813	0.933	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.417	0.000
		0.826				0.923				0.750				0.00%			
		11:45 AM - 12:45 PM															
TOTAL		400				400				870				870			




PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
4:00 PM		0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0
4:15 PM		0	19	5	0	2	46	0	0	0	0	0	0	3	0	1	0
4:30 PM		0	25	2	0	1	57	0	0	0	0	0	0	4	0	1	0
4:45 PM		0	16	1	0	2	33	0	0	0	0	0	0	2	0	1	0
5:00 PM		0	19	2	0	1	28	0	0	0	0	0	0	1	0	2	0
5:15 PM		0	12	3	0	2	29	0	0	0	0	0	0	2	0	0	0
5:30 PM		0	6	2	0	2	26	0	0	0	0	0	0	2	0	1	0
5:45 PM		0	9	6	0	1	32	0	0	0	0	0	0	3	0	0	0
		0	16	2	0	2	31	0	0	0	0	0	0	2	0	1	0
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s :		0	122	23	0	13	282	0	0	0	0	0	0	19	0	7	0
PEAK HR VOL :		0	79	10	0	6	164	0	0	0	0	0	0	10	0	5	0
PEAK HR FACTOR :		0.000	0.790	0.500	0.000	0.750	0.719	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.625	0.000
		0.824				0.733				0.750				0.00%			
TOTAL		274				274				761				761			




# **APPENDIX C**




## SYNCHRO 10 Worksheets




Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	457	1	1	248
Future Vol, veh/h	0	1	457	1	1	248
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	0	1	476	1	1	282
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	761	477	0	0	477	0
Stage 1	477	-	-	-	-	-
Stage 2	284	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	372	586	-	-	1050	-
Stage 1	622	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	372	586	-	-	1050	-
Mov Cap-2 Maneuver	372	-	-	-	-	-
Stage 1	621	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.2	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	586	1050	-	
HCM Lane V/C Ratio	-	-	0.002	0.001	-	
HCM Control Delay (s)	-	-	11.2	8.4	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	



Intersection						
Int Delay, s/veh	1.8					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	22	31	426	14	27	221
Future Vol, veh/h	22	31	426	14	27	221
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	96	96	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	35	49	444	15	31	251
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	765	452	0	0	459	0
Stage 1	452	-	-	-	-	-
Stage 2	313	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	370	605	-	-	1066	-
Stage 1	639	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	357	605	-	-	1066	-
Mov Cap-2 Maneuver	357	-	-	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	14.3	0	0.9			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NER	NWL	SWL	SWT	
Capacity (veh/h)	-	-	470	1066	-	
HCM Lane V/C Ratio	-	-	0.179	0.029	-	
HCM Control Delay (s)	-	-	14.3	8.5	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-	




Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	257	1	1	439
Future Vol, veh/h	0	1	257	1	1	439
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	91	91	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	0	1	282	1	1	499
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	784	283	0	0	283	0
Stage 1	283	-	-	-	-	-
Stage 2	501	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	361	754	-	-	1240	-
Stage 1	763	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	361	754	-	-	1240	-
Mov Cap-2 Maneuver	361	-	-	-	-	-
Stage 1	762	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.8	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	754	1240	-	
HCM Lane V/C Ratio	-	-	0.001	0.001	-	
HCM Control Delay (s)	-	-	9.8	7.9	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Intersection						
Int Delay, s/veh	0.8					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	14	12	245	31	11	428
Future Vol, veh/h	14	12	245	31	11	428
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	91	91	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	22	19	269	34	13	486
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	798	286	0	0	303	0
Stage 1	286	-	-	-	-	-
Stage 2	512	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	354	751	-	-	1219	-
Stage 1	760	-	-	-	-	-
Stage 2	600	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	349	751	-	-	1219	-
Mov Cap-2 Maneuver	349	-	-	-	-	-
Stage 1	749	-	-	-	-	-
Stage 2	600	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	13.5	0	0.2			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	464	1219	-	
HCM Lane V/C Ratio	-	-	0.089	0.01	-	
HCM Control Delay (s)	-	-	13.5	8	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	1	356	0	1	328
Future Vol, veh/h	1	1	356	0	1	328
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	1	1	429	0	1	353
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	784	429	0	-	429	0
Stage 1	429	-	-	-	-	-
Stage 2	355	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	361	624	-	0	1094	-
Stage 1	655	-	-	0	-	-
Stage 2	707	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	361	624	-	-	1094	-
Mov Cap-2 Maneuver	361	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	12.9	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBTWBLn1	SBL	SBT			
Capacity (veh/h)	- 457	1094	-			
HCM Lane V/C Ratio	- 0.005	0.001	-			
HCM Control Delay (s)	- 12.9	8.3	-			
HCM Lane LOS	- B	A	-			
HCM 95th %tile Q(veh)	- 0	0	-			

**Intersection**




Int Delay, s/veh 1.3

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	26	18	338	14	24	304
Future Vol, veh/h	26	18	338	14	24	304
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	83	83	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	35	24	407	17	26	327

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	795	416	0
Stage 1	416	-	-
Stage 2	379	-	-
Critical Hdwy	6.43	6.23	-
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	-
Pot Cap-1 Maneuver	355	634	-
Stage 1	664	-	-
Stage 2	690	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	345	634	-
Mov Cap-2 Maneuver	345	-	-
Stage 1	645	-	-
Stage 2	690	-	-

Approach	NW	NE	SW
HCM Control Delay, s	14.8	0	0.6
HCM LOS	B		




Minor Lane/Major Mvmt	NET	NER	NWL	SWL	SWT
Capacity (veh/h)	-	-	424	1099	-
HCM Lane V/C Ratio	-	-	0.138	0.023	-
HCM Control Delay (s)	-	-	14.8	8.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-




Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	1	152	0	1	308
Future Vol, veh/h	1	1	152	0	1	308
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	82	82	73	73
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	1	1	185	0	1	422

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	609	185	0	-	185
Stage 1	185	-	-	-	-
Stage 2	424	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281
Pot Cap-1 Maneuver	457	855	-	0	1349
Stage 1	844	-	-	0	-
Stage 2	658	-	-	0	-
Platoon blocked, %			-		-
Mov Cap-1 Maneuver	457	855	-	-	1349
Mov Cap-2 Maneuver	457	-	-	-	-
Stage 1	843	-	-	-	-
Stage 2	658	-	-	-	-




Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	0
HCM LOS	B		




Minor Lane/Major Mvmt	NBTWBLn1	SBL	SBT
Capacity (veh/h)	- 596	1349	-
HCM Lane V/C Ratio	- 0.004	0.001	-
HCM Control Delay (s)	- 11.1	7.7	-
HCM Lane LOS	- B	A	-
HCM 95th %tile Q(veh)	- 0	0	-




Intersection						
Int Delay, s/veh	0.9					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	18	9	143	18	11	297
Future Vol, veh/h	18	9	143	18	11	297
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	82	82	73	73
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	24	12	174	22	15	407
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	622	185	0	0	196	0
Stage 1	185	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	449	855	-	-	1336	-
Stage 1	844	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	442	855	-	-	1336	-
Mov Cap-2 Maneuver	442	-	-	-	-	-
Stage 1	831	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	12.3	0	0.3			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	527	1336	-	
HCM Lane V/C Ratio	-	-	0.068	0.011	-	
HCM Control Delay (s)	-	-	12.3	7.7	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	




Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	24	457	40	5	248
Future Vol, veh/h	10	24	457	40	5	248
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	11	26	476	42	6	282
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	791	497	0	0	518	0
Stage 1	497	-	-	-	-	-
Stage 2	294	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	357	571	-	-	1013	-
Stage 1	609	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	355	571	-	-	1013	-
Mov Cap-2 Maneuver	355	-	-	-	-	-
Stage 1	605	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	13.1	0	0.2			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	484	1013	-	
HCM Lane V/C Ratio	-	-	0.076	0.006	-	
HCM Control Delay (s)	-	-	13.1	8.6	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	









Intersection						
Int Delay, s/veh	1.7					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	22	31	465	14	27	231
Future Vol, veh/h	22	31	465	14	27	231
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	96	96	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	35	49	484	15	31	263
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	817	492	0	0	499	0
Stage 1	492	-	-	-	-	-
Stage 2	325	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	345	575	-	-	1030	-
Stage 1	612	-	-	-	-	-
Stage 2	730	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	333	575	-	-	1030	-
Mov Cap-2 Maneuver	333	-	-	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	730	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	15	0	0.9			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	442	1030	-	
HCM Lane V/C Ratio	-	-	0.19	0.03	-	
HCM Control Delay (s)	-	-	15	8.6	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-	




Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	8	257	14	31	439
Future Vol, veh/h	26	8	257	14	31	439
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	91	91	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	28	9	282	15	35	499
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	859	290	0	0	297	0
Stage 1	290	-	-	-	-	-
Stage 2	569	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	326	747	-	-	1225	-
Stage 1	757	-	-	-	-	-
Stage 2	564	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	313	747	-	-	1225	-
Mov Cap-2 Maneuver	313	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	564	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	16	0		0.5		
HCM LOS	C					
Minor Lane/Major Mvmt		NBT	NBRWBLn1	SBL	SBT	
Capacity (veh/h)		-	-	363	1225	-
HCM Lane V/C Ratio		-	-	0.102	0.029	-
HCM Control Delay (s)		-	-	16	8	-
HCM Lane LOS		-	-	C	A	-
HCM 95th %tile Q(veh)		-	-	0.3	0.1	-




Intersection						
Int Delay, s/veh	0.8					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	14	12	258	31	11	454
Future Vol, veh/h	14	12	258	31	11	454
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	91	91	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	22	19	284	34	13	516
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	843	301	0	0	318	0
Stage 1	301	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	333	736	-	-	1204	-
Stage 1	748	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	328	736	-	-	1204	-
Mov Cap-2 Maneuver	328	-	-	-	-	-
Stage 1	737	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	14	0	0.2			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	441	1204	-	
HCM Lane V/C Ratio	-	-	0.094	0.01	-	
HCM Control Delay (s)	-	-	14	8	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	23	356	24	4	328
Future Vol, veh/h	11	23	356	24	4	328
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	12	25	429	29	4	353
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	805	444	0	0	458	0
Stage 1	444	-	-	-	-	-
Stage 2	361	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	350	612	-	-	1067	-
Stage 1	644	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	348	612	-	-	1067	-
Mov Cap-2 Maneuver	348	-	-	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	12.9	0	0.1			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	491	1067	-	
HCM Lane V/C Ratio	-	-	0.075	0.004	-	
HCM Control Delay (s)	-	-	12.9	8.4	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	




Intersection						
Int Delay, s/veh	1.3					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	26	18	362	14	24	314
Future Vol, veh/h	26	18	362	14	24	314
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	83	83	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	35	24	436	17	26	338
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	835	445	0	0	453	0
Stage 1	445	-	-	-	-	-
Stage 2	390	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	336	611	-	-	1072	-
Stage 1	644	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	326	611	-	-	1072	-
Mov Cap-2 Maneuver	326	-	-	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	15.4	0	0.6			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	403	1072	-	
HCM Lane V/C Ratio	-	-	0.146	0.024	-	
HCM Control Delay (s)	-	-	15.4	8.4	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-	




Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	7	152	8	20	308
Future Vol, veh/h	27	7	152	8	20	308
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	82	82	73	73
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	29	8	185	10	27	422
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	666	190	0	0	195	0
Stage 1	190	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	423	849	-	-	1337	-
Stage 1	840	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	412	849	-	-	1337	-
Mov Cap-2 Maneuver	412	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	13.5	0		0.5		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-		461	1337	
HCM Lane V/C Ratio	-	-		0.08	0.02	
HCM Control Delay (s)	-	-		13.5	7.7	
HCM Lane LOS	-	-		B	A	
HCM 95th %tile Q(veh)	-	-		0.3	0.1	

Intersection						
Int Delay, s/veh	0.8					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	18	9	151	18	11	323
Future Vol, veh/h	18	9	151	18	11	323
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	82	82	73	73
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	24	12	184	22	15	442
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	667	195	0	0	206	0
Stage 1	195	-	-	-	-	-
Stage 2	472	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	422	844	-	-	1325	-
Stage 1	836	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	416	844	-	-	1325	-
Mov Cap-2 Maneuver	416	-	-	-	-	-
Stage 1	823	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	12.7	0	0.3			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	501	1325	-	
HCM Lane V/C Ratio	-	-	0.072	0.011	-	
HCM Control Delay (s)	-	-	12.7	7.7	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	24	513	40	5	262
Future Vol, veh/h	10	24	513	40	5	262
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	11	26	534	42	6	298
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	865	555	0	0	576	0
Stage 1	555	-	-	-	-	-
Stage 2	310	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	323	529	-	-	964	-
Stage 1	573	-	-	-	-	-
Stage 2	741	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	321	529	-	-	964	-
Mov Cap-2 Maneuver	321	-	-	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	741	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	13.8	0		0.2		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	444	964	-	
HCM Lane V/C Ratio	-	-	0.083	0.006	-	
HCM Control Delay (s)	-	-	13.8	8.8	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	






Intersection						
Int Delay, s/veh	3.9					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	42	76	476	87	36	237
Future Vol, veh/h	42	76	476	87	36	237
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	96	96	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	67	121	496	91	41	269
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	893	542	0	0	587	0
Stage 1	542	-	-	-	-	-
Stage 2	351	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	311	538	-	-	954	-
Stage 1	581	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	295	538	-	-	954	-
Mov Cap-2 Maneuver	295	-	-	-	-	-
Stage 1	551	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	20.5	0	1.2			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	416	954	-	
HCM Lane V/C Ratio	-	-	0.45	0.043	-	
HCM Control Delay (s)	-	-	20.5	8.9	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	2.3	0.1	-	

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	8	277	14	31	507
Future Vol, veh/h	26	8	277	14	31	507
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	91	91	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	28	9	304	15	35	576
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	958	312	0	0	319	0
Stage 1	312	-	-	-	-	-
Stage 2	646	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	284	726	-	-	1202	-
Stage 1	740	-	-	-	-	-
Stage 2	520	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	272	726	-	-	1202	-
Mov Cap-2 Maneuver	272	-	-	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	520	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	17.8	0		0.5		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	319	1202	-	
HCM Lane V/C Ratio	-	-	0.116	0.029	-	
HCM Control Delay (s)	-	-	17.8	8.1	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-	

**Intersection**




Int Delay, s/veh 4.2

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	64	25	264	56	68	466
Future Vol, veh/h	64	25	264	56	68	466
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	91	91	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	102	40	290	62	77	530

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1005	321	0
Stage 1	321	-	-
Stage 2	684	-	-
Critical Hdwy	6.43	6.23	-
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	-
Pot Cap-1 Maneuver	267	718	-
Stage 1	733	-	-
Stage 2	499	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	242	718	-
Mov Cap-2 Maneuver	242	-	-
Stage 1	665	-	-
Stage 2	499	-	-

Approach	NW	NE	SW
HCM Control Delay, s	27.6	0	1.1
HCM LOS	D		

Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT
Capacity (veh/h)	-	-	297	1169
HCM Lane V/C Ratio	-	-	0.476	0.066
HCM Control Delay (s)	-	-	27.6	8.3
HCM Lane LOS	-	-	D	A
HCM 95th %tile Q(veh)	-	-	2.4	0.2

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	23	407	24	4	342
Future Vol, veh/h	11	23	407	24	4	342
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	12	25	490	29	4	368




Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	881	505	0	0	519
Stage 1	505	-	-	-	-
Stage 2	376	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281
Pot Cap-1 Maneuver	316	565	-	-	1012
Stage 1	604	-	-	-	-
Stage 2	692	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	314	565	-	-	1012
Mov Cap-2 Maneuver	314	-	-	-	-
Stage 1	601	-	-	-	-
Stage 2	692	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	449	1012
HCM Lane V/C Ratio	-	-	0.082	0.004
HCM Control Delay (s)	-	-	13.7	8.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0

**Intersection**

Int Delay, s/veh 2.7

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	45	60	371	61	30	322
Future Vol, veh/h	45	60	371	61	30	322
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	83	83	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	60	80	447	73	32	346

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	894	484	0
Stage 1	484	-	-
Stage 2	410	-	-
Critical Hdwy	6.43	6.23	-
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	-
Pot Cap-1 Maneuver	310	581	-
Stage 1	618	-	-
Stage 2	668	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	298	581	-
Mov Cap-2 Maneuver	298	-	-
Stage 1	594	-	-
Stage 2	668	-	-




Approach	NW	NE	SW
HCM Control Delay, s	18.1	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWL	SWL	SWT
Capacity (veh/h)	-	-	413	1011	-
HCM Lane V/C Ratio	-	-	0.339	0.032	-
HCM Control Delay (s)	-	-	18.1	8.7	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.5	0.1	-

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑			↑
Traffic Vol, veh/h	27	7	168	8	20	352
Future Vol, veh/h	27	7	168	8	20	352
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	82	82	73	73
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	29	8	205	10	27	482
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	746	210	0	0	215	0
Stage 1	210	-	-	-	-	-
Stage 2	536	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	380	828	-	-	1314	-
Stage 1	823	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	369	828	-	-	1314	-
Mov Cap-2 Maneuver	369	-	-	-	-	-
Stage 1	800	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	14.5	0		0.4		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	417	1314	-	
HCM Lane V/C Ratio	-	-	0.089	0.021	-	
HCM Control Delay (s)	-	-	14.5	7.8	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-	

Intersection




Int Delay, s/veh 3

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	66	21	155	34	47	330
Future Vol, veh/h	66	21	155	34	47	330
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	82	82	73	73
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	88	28	189	41	64	452




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	790	210	0
Stage 1	210	-	-
Stage 2	580	-	-
Critical Hdwy	6.43	6.23	-
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	-
Pot Cap-1 Maneuver	358	828	-
Stage 1	823	-	-
Stage 2	558	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	334	828	-
Mov Cap-2 Maneuver	334	-	-
Stage 1	769	-	-
Stage 2	558	-	-




Approach	NW	NE	SW
HCM Control Delay, s	18.1	0	1
HCM LOS	C		




Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT
Capacity (veh/h)	-	-	390	1298
HCM Lane V/C Ratio	-	-	0.297	0.05
HCM Control Delay (s)	-	-	18.1	7.9
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.2	0.2




Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	651	1	1	338
Future Vol, veh/h	0	1	651	1	1	338
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	0	1	678	1	1	367
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1048	679	0	0	679	0
Stage 1	679	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	251	450	-	-	881	-
Stage 1	502	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	251	450	-	-	881	-
Mov Cap-2 Maneuver	251	-	-	-	-	-
Stage 1	501	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	13	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 450		881	-	
HCM Lane V/C Ratio	-	- 0.002		0.001	-	
HCM Control Delay (s)	-	- 13		9.1	-	
HCM Lane LOS	-	- B		A	-	
HCM 95th %tile Q(veh)	-	- 0		0	-	









Intersection						
Int Delay, s/veh	3.1					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	48	85	566	92	44	294
Future Vol, veh/h	48	85	566	92	44	294
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	52	92	590	96	48	320
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1054	638	0	0	686	0
Stage 1	638	-	-	-	-	-
Stage 2	416	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	249	475	-	-	876	-
Stage 1	524	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	232	475	-	-	876	-
Mov Cap-2 Maneuver	232	-	-	-	-	-
Stage 1	489	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	22.8	0	1.2			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	345	876	-	
HCM Lane V/C Ratio	-	-	0.419	0.055	-	
HCM Control Delay (s)	-	-	22.8	9.3	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	2	0.2	-	

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	354	1	1	640
Future Vol, veh/h	0	1	354	1	1	640
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	0	1	385	1	1	696
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1084	386	0	0	386	0
Stage 1	386	-	-	-	-	-
Stage 2	698	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	239	660	-	-	1135	-
Stage 1	685	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	239	660	-	-	1135	-
Mov Cap-2 Maneuver	239	-	-	-	-	-
Stage 1	684	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.5	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	660	1135	-	
HCM Lane V/C Ratio	-	-	0.002	0.001	-	
HCM Control Delay (s)	-	-	10.5	8.2	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Intersection						
Int Delay, s/veh	3.3					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	69	29	326	65	72	569
Future Vol, veh/h	69	29	326	65	72	569
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	75	32	354	71	78	618
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1164	390	0	0	425	0
Stage 1	390	-	-	-	-	-
Stage 2	774	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	214	656	-	-	1098	-
Stage 1	682	-	-	-	-	-
Stage 2	453	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	191	656	-	-	1098	-
Mov Cap-2 Maneuver	191	-	-	-	-	-
Stage 1	608	-	-	-	-	-
Stage 2	453	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	31.1	0	1			
HCM LOS	D					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	242	1098	-	
HCM Lane V/C Ratio	-	-	0.44	0.071	-	
HCM Control Delay (s)	-	-	31.1	8.5	0	
HCM Lane LOS	-	-	D	A	A	
HCM 95th %tile Q(veh)	-	-	2.1	0.2	-	

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	1	515	0	1	441
Future Vol, veh/h	1	1	515	0	1	441
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	1	1	560	0	1	479
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1041	560	0	-	560	0
Stage 1	560	-	-	-	-	-
Stage 2	481	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	254	526	-	0	977	-
Stage 1	570	-	-	0	-	-
Stage 2	620	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	254	526	-	-	977	-
Mov Cap-2 Maneuver	254	-	-	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	15.6	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBTWBLn1		SBL	SBT		
Capacity (veh/h)	-		343	977	-	
HCM Lane V/C Ratio	-		0.006	0.001	-	
HCM Control Delay (s)	-		15.6	8.7	-	
HCM Lane LOS	-		C	A	-	
HCM 95th %tile Q(veh)	-		0	0	-	

Intersection						
Int Delay, s/veh	2.6					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	53	66	449	66	37	404
Future Vol, veh/h	53	66	449	66	37	404
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	58	72	488	72	40	434
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1038	524	0	0	560	0
Stage 1	524	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	255	551	-	-	977	-
Stage 1	592	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	241	551	-	-	977	-
Mov Cap-2 Maneuver	241	-	-	-	-	-
Stage 1	560	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	21.2	0	0.7			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	350	977	-	
HCM Lane V/C Ratio	-	-	0.37	0.041	-	
HCM Control Delay (s)	-	-	21.2	8.8	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	1.7	0.1	-	

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	1	214	0	1	445
Future Vol, veh/h	1	1	214	0	1	445
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	1	1	233	0	1	484




Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	719	233	0	-	233
Stage 1	233	-	-	-	-
Stage 2	486	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281
Pot Cap-1 Maneuver	394	804	-	0	1294
Stage 1	803	-	-	0	-
Stage 2	616	-	-	0	-
Platoon blocked, %			-		-
Mov Cap-1 Maneuver	394	804	-	-	1294
Mov Cap-2 Maneuver	394	-	-	-	-
Stage 1	802	-	-	-	-
Stage 2	616	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBTWBLn1	SBL	SBT
Capacity (veh/h)	- 529	1294	-
HCM Lane V/C Ratio	- 0.004	0.001	-
HCM Control Delay (s)	- 11.8	7.8	-
HCM Lane LOS	- B	A	-
HCM 95th %tile Q(veh)	- 0	0	-

**Intersection**




Int Delay, s/veh 2.9

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	72	24	190	40	51	395
Future Vol, veh/h	72	24	190	40	51	395
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	85	28	224	47	60	465

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	833	248	0
Stage 1	248	-	-
Stage 2	585	-	-
Critical Hdwy	6.43	6.23	-
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	-
Pot Cap-1 Maneuver	337	788	-
Stage 1	791	-	-
Stage 2	555	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	315	788	-
Mov Cap-2 Maneuver	315	-	-
Stage 1	740	-	-
Stage 2	555	-	-

Approach	NW	NE	SW
HCM Control Delay, s	18.9	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT
Capacity (veh/h)	-	-	371	1253
HCM Lane V/C Ratio	-	-	0.304	0.048
HCM Control Delay (s)	-	-	18.9	8
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.3	0.2




Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	24	651	40	6	338
Future Vol, veh/h	10	24	651	40	6	338
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	11	26	678	42	7	367

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1080	699	0	0	720
Stage 1	699	-	-	-	-
Stage 2	381	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281
Pot Cap-1 Maneuver	240	438	-	-	850
Stage 1	491	-	-	-	-
Stage 2	688	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	238	438	-	-	850
Mov Cap-2 Maneuver	238	-	-	-	-
Stage 1	486	-	-	-	-
Stage 2	688	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.5	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	351	850
HCM Lane V/C Ratio	-	-	0.105	0.008
HCM Control Delay (s)	-	-	16.5	9.3
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.3	0



Intersection						
Int Delay, s/veh	3.2					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	48	85	605	92	44	304
Future Vol, veh/h	48	85	605	92	44	304
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	52	92	630	96	48	330
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1104	678	0	0	726	0
Stage 1	678	-	-	-	-	-
Stage 2	426	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	233	450	-	-	846	-
Stage 1	502	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	217	450	-	-	846	-
Mov Cap-2 Maneuver	217	-	-	-	-	-
Stage 1	467	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	24.8	0	1.2			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	324	846	-	
HCM Lane V/C Ratio	-	-	0.446	0.057	-	
HCM Control Delay (s)	-	-	24.8	9.5	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	2.2	0.2	-	

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑			↑
Traffic Vol, veh/h	26	8	354	14	31	640
Future Vol, veh/h	26	8	354	14	31	640
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	28	9	385	15	34	696
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1157	393	0	0	400	0
Stage 1	393	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	216	654	-	-	1122	-
Stage 1	680	-	-	-	-	-
Stage 2	458	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	205	654	-	-	1122	-
Mov Cap-2 Maneuver	205	-	-	-	-	-
Stage 1	647	-	-	-	-	-
Stage 2	458	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	22.4	0	0.4			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	244	1122	-	
HCM Lane V/C Ratio	-	-	0.151	0.03	-	
HCM Control Delay (s)	-	-	22.4	8.3	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-	

**Intersection**

Int Delay, s/veh 3.4

**Movement** NWL NWR NET NER SWL SWTLane Configurations 

Traffic Vol, veh/h 69 29 338 65 72 595

Future Vol, veh/h 69 29 338 65 72 595

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - 0 - - 0

Grade, % 0 - 0 - - 0

Peak Hour Factor 92 92 92 92 92 92

Heavy Vehicles, % 3 3 9 9 9 9

Mvmt Flow 75 32 367 71 78 647

**Major/Minor** Minor1 Major1 Major2

Conflicting Flow All 1206 403 0 0 438 0

Stage 1 403 - - - - -

Stage 2 803 - - - - -

Critical Hdwy 6.43 6.23 - - 4.19 -

Critical Hdwy Stg 1 5.43 - - - - -

Critical Hdwy Stg 2 5.43 - - - - -

Follow-up Hdwy 3.527 3.327 - - 2.281 -

Pot Cap-1 Maneuver 202 645 - - 1086 -

Stage 1 673 - - - - -

Stage 2 439 - - - - -

Platoon blocked, % - - - - -

Mov Cap-1 Maneuver 179 645 - - 1086 -

Mov Cap-2 Maneuver 179 - - - - -

Stage 1 598 - - - - -

Stage 2 439 - - - - -

**Approach** NW NE SW

HCM Control Delay, s 33.9 0 0.9

HCM LOS D

**Minor Lane/Major Mvmt** NET NERNWLn1 SWL SWT




Capacity (veh/h) - - 228 1086 -

HCM Lane V/C Ratio - - 0.467 0.072 -

HCM Control Delay (s) - - 33.9 8.6 0

HCM Lane LOS - - D A A




HCM 95th %tile Q(veh) - - 2.3 0.2 -




Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	24	515	24	4	441
Future Vol, veh/h	11	24	515	24	4	441
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	12	26	560	26	4	479

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1060	573	0	0	586
Stage 1	573	-	-	-	-
Stage 2	487	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281
Pot Cap-1 Maneuver	247	517	-	-	955
Stage 1	562	-	-	-	-
Stage 2	616	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	246	517	-	-	955
Mov Cap-2 Maneuver	246	-	-	-	-
Stage 1	559	-	-	-	-
Stage 2	616	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.4	0	0.1
HCM LOS	C		




Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	384	955
HCM Lane V/C Ratio	-	-	0.099	0.005
HCM Control Delay (s)	-	-	15.4	8.8
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Intersection						
Int Delay, s/veh	2.7					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	53	66	473	66	37	414
Future Vol, veh/h	53	66	473	66	37	414
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	58	72	514	72	40	445
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1075	550	0	0	586	0
Stage 1	550	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	242	533	-	-	955	-
Stage 1	576	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	228	533	-	-	955	-
Mov Cap-2 Maneuver	228	-	-	-	-	-
Stage 1	544	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	22.4	0	0.7			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	334	955	-	
HCM Lane V/C Ratio	-	-	0.387	0.042	-	
HCM Control Delay (s)	-	-	22.4	8.9	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	1.8	0.1	-	

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	8	214	8	20	445
Future Vol, veh/h	27	8	214	8	20	445
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	29	9	233	9	22	484
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	766	238	0	0	242	0
Stage 1	238	-	-	-	-	-
Stage 2	528	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	369	798	-	-	1284	-
Stage 1	799	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	361	798	-	-	1284	-
Mov Cap-2 Maneuver	361	-	-	-	-	-
Stage 1	781	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	14.6	0	0.3			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	413	1284	-	
HCM Lane V/C Ratio	-	-	0.092	0.017	-	
HCM Control Delay (s)	-	-	14.6	7.9	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-	

**Intersection**

Int Delay, s/veh 2.9

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	72	24	198	40	51	420
Future Vol, veh/h	72	24	198	40	51	420
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	85	28	233	47	60	494

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	871	257	0
Stage 1	257	-	-
Stage 2	614	-	-
Critical Hdwy	6.43	6.23	-
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	-
Pot Cap-1 Maneuver	320	779	-
Stage 1	784	-	-
Stage 2	538	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	299	779	-
Mov Cap-2 Maneuver	299	-	-
Stage 1	731	-	-
Stage 2	538	-	-

Approach	NW	NE	SW
HCM Control Delay, s	19.9	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWL	SWL	SWT
Capacity (veh/h)	-	-	353	1243	-
HCM Lane V/C Ratio	-	-	0.32	0.048	-
HCM Control Delay (s)	-	-	19.9	8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.4	0.2	-

# **APPENDIX D**

Chapter 400 of Caltrans' Highway Design Manual (HDM)



## CHAPTER 400 INTERSECTIONS AT GRADE

Intersections are planned points of conflict where two or more roadways join or cross. At-grade intersections are among the most complicated elements on the highway system, and control the efficiency, capacity, and safety for motorized and non-motorized users of the facility. The type and operation of an intersection is important to the adjacent property owners, motorists, bicyclists, pedestrians, transit operators, the trucking industry, and the local community.

There are two basic types of at grade intersections: crossing and circular. It is not recommended that intersections have more than four legs. Occasionally, local development and land uses create the need for a more complex intersection design. Such intersections may require a specialized intersection design to handle the specify traffic demands at that location. In addition to the guidance in this manual, see Traffic Operations Policy Directive (TOPD) Number 13-02: Intersection Control Evaluation (ICE) for direction and procedures on the evaluation, comparison and selection of the intersection types and control strategies identified in Index 401.5. Also refer to the Complete Streets Intersection Guide for further information.

### Topic 401 - Factors Affecting Design

#### Index 401.1 - General

At-grade intersections must handle a variety of conflicts among users, which includes truck, transit, pedestrians, and bicycles. These recurring conflicts play a major role in the preparation of design standards and guidelines. Arriving, departing, merging, turning, and crossing paths of moving pedestrians, bicycles, truck, and vehicular traffic have to be accommodated within a relatively small area. The objective of designing an intersection is to effectively balance the convenience, ease, and comfort of the users, as well as the human factors, with moving traffic (automobiles, trucks, motorcycles, transit vehicles, bicycles, pedestrians, etc.). The safety and mobility needs of motorist, bicyclist and pedestrians as well as their movement

patterns in intersections must be analyzed early in the planning phase and then followed through appropriately during the design phase of all intersections on the State highway. It is Departmental policy to develop integrated multimodal projects in balance with community goals, plans, and values.

The Complete Intersections: A Guide to Reconstructing Intersections and Interchanges for Bicyclists and Pedestrians contains a primer on the factors to consider when designing intersections. It is published by the California Division of Traffic Operations.

#### 401.2 Human Factors

- (1) *The Driver.* An appreciation of driver performance is essential to proper highway design and operation. The suitability of a design rests as much on how safely and efficiently drivers are able to use the highway as on any other criterion.

Motorist's perception and reaction time set the standards for sight distance and length of transitions. The driver's ability to understand and interpret the movements and crossing times of the other vehicle drivers, bicyclists, and pedestrians using the intersection is equally important when making decisions and their associated reactions. The designer needs to keep in mind the user's limitations and therefore design intersections so that they meet user expectation.

- (2) *The Bicyclist.* Bicyclist experience, skills and physical capabilities are factors in intersection design. Intersections are to be designed to help bicyclists understand how to traverse the intersection. Chapter 1000 provides intersection guidance for Class I and Class III bikeways that intersect the State highway system. The guidance in this chapter specifically relates to bicyclists that operate within intersections on the State highway system.
- (3) *The Pedestrian.* Understanding how pedestrians will use an intersection is critical because pedestrian volumes, their age ranges, physical ability, etc. all factor in to their startup time and the time it takes them to cross an intersection and thus, dictates how to design

the intersection to avoid potential conflicts with bicyclists and motor vehicles. The guidance in this chapter specifically relates to pedestrian travel within intersections on the State highway system. See Topic 105, Pedestrian Facilities, Design Information Bulletin 82 - "Pedestrian Accessibility Guidelines for Highway Projects," the AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, and the California Manual on Uniform Traffic Control Devices (California MUTCD) for additional guidance.

### 401.3 Traffic Considerations

Good intersection design clearly indicates to bicyclists and motorists how to traverse the intersection (see Figure 403.6A). Designs that encourage merging traffic to yield to through bicycle and motor vehicle traffic are desirable.

The size, maneuverability, and other characteristics of bicycles and motorized vehicles (automobiles, trucks, transit vehicles, farm equipment, etc.) are all factors that influence the design of an intersection. The differences in operating characteristics between bicycles and motor vehicles should be considered early in design.

Table 401.3 compares vehicle characteristics to intersection design elements.

A design vehicle is a convenient means of representing a particular segment of the vehicle population. See Topic 404 for a further discussion of the uses of design vehicles.

Transit vehicles and how their stops interrelate with an intersection, pedestrian desired walking patterns and potential transfers to other transit facilities are another critical factor to understand when designing an intersection. Transit stops and their placement needs to take into account the required maintenance operations that will be needed and usually supplied by the Transit Operator.

### 401.4 The Physical Environment

In highly developed urban areas, where right of way is usually limited, the volume of vehicular traffic, pedestrians, and bicyclists may be large, street parking exists, and transit stops (for both buses and light rail) are available. All interact in a variety of movements that contribute to and add to the

complexity of a State highway and can result in busy intersections.

Industrial development may require special attention to the movement of large trucks.

Rural areas where farming occurs may require special attention for specialized farm equipment. In addition, rural cities or town centers (rural main streets) also require special attention.

Rural intersections in farm areas with low traffic volumes may have special visibility problems or require shadowing of left-turn vehicles from high speed approach traffic.

**Table 401.3**

Vehicle Characteristics	Intersection Design Element Affected
Length	Length of storage lane
Width	Lane width
Height	Clearance to overhead signs and signals
Wheel base	Corner radius and width of turning lanes
Acceleration	Tapers and length of acceleration lane
Deceleration	Tapers and length of deceleration lane

There are many factors to be considered in the design of intersections, with the goal to achieve a functional, safe and efficient intersection for all users of the facility. The location and level of use by various modes will have an impact on intersection design, and therefore should be considered early in the design process. In addition to current levels of use, it is important to consider future travel patterns for vehicles, including trucks; pedestrian and bicycle demand and the future expansion of transit.

### 401.5 Intersection Type

Intersection types are characterized by their basic geometric configuration, and the form of intersection traffic control that is employed:

*(1) Geometric Configurations*

- (a) Crossing-Type Intersections - “Tee” and 4-legged intersections
- (b) Circular Intersections –roundabouts, traffic circles, rotaries; however, only roundabouts are acceptable for State highways.
- (c) Alternative Intersection Designs – various effective geometric alternatives to traditional designs that can reduce crashes and their severity, improve operations, reduce congestion and delay typically by reducing or altering the number of conflict points; these alternatives include geometric design features such as intersections with displaced left-turns or variations on U-turns.

*(2) Intersection Control strategies, See California MUTCD and Traffic Operations Policy Directive (TOPD) Number 13-02, Intersection Control Evaluation for procedures and guidance on how to evaluate, compare and select from among the following intersection control strategies:*

- (a) Two-Way Stop Controlled - for minor road traffic
- (b) All-Way Stop Control
- (c) Signal Control
- (d) Yield Control (Roundabout)

Historically, crossing-type intersections with signal or “STOP”-control have been used on the State highway system. However, other intersection types, given the appropriate circumstances may enhance intersection performance through fewer or less severe crashes and improve operations by reducing overall delay. Alternative intersection geometric designs should be considered and evaluated early in the project scoping, planning and decision-making stages, as they may be more efficient, economical and safer solutions than traditional designs. Alternative intersection designs can effectively balance the safety and mobility needs of the motor vehicle drivers, transit riders, bicyclists and pedestrians using the intersection.

**401.6 Transit**

Transit use may range from periodic buses, handled as part of the normal mix of vehicular traffic, to Bus

Rapid Transit (BRT) or light rail facilities which can have a large impact on other users of the intersection. Consideration of these modes should be part of the early planning and design of intersections.

**Topic 402 - Operational Features Affecting Design****402.1 Capacity**

Adequate capacity to handle peak period traffic demands is a basic goal of intersection design.

- (1) *Unsignalized Intersections.* The “Highway Capacity Manual”, provides methodology for capacity analysis of unsignalized intersections controlled by “STOP” or “YIELD” signs. The assumption is made that major street traffic is not affected by the minor street movement. Unsignalized intersections generally become candidates for signalization when traffic backups begin to develop on the cross street or when gaps in traffic are insufficient for drivers to yield to crossing pedestrians. See the California MUTCD, for signal warrants. Changes to intersection controls must be coordinated with District Traffic Branch.
- (2) *Signalized Intersections.* See Topic 406 for analysis of simple signalized intersections, including ramps. The analysis of complex and alternative intersections should be referred to the District Traffic Branch; also see Traffic Operations Policy Directive (TOPD) Number 13-02.
- (3) *Roundabout Intersections.* See TOPD Number 13-02 for screening process and the Intersection Control Evaluation(ICE) Process Informational Guide for operational analysis methods and tools.

**402.2 Collisions**

- (1) *General.* Intersections have a higher potential for conflict compared to other sections of the highway because travel is interrupted, traffic streams cross, and many types of turning movements occur.

The type of traffic control affects the type of collisions. Signalized intersections tend to have more rear end and same-direction

sideswipes than intersections with “STOP”-control on minor legs. Roundabouts experience few angle or crossing collisions. Roundabouts reduce the frequency and severity of collisions, especially when compared to the performance of signalized intersections in high speed environments. Other alternative intersection types are configurations to consider for minimizing the number of conflict points.

(2) *Undesirable Geometric Features.*

- Inadequate approach sight distance.
- Inadequate corner sight distance.
- Steep grades.
- Five or more approaches.
- Presence of curves within intersections(unless at roundabouts).
- Inappropriately large curb radii.
- Long pedestrian crossing distances.
- Intersection Angle <75 degrees (see Topic 403).

### 402.3 On-Street Parking

On-street parking generally decreases through-traffic capacity, impedes traffic flow, and increases crash potential. Where the primary service of the arterial is the movement of vehicles, it may be desirable to prohibit on-street parking on State highways in urban and suburban expressways and rural arterial sections. However, within urban and suburban areas and in rural communities located on State highways, on-street parking should be considered in order to accommodate existing land uses. Where adequate off-street parking facilities are not available, the designer should consider on-street parking, so that the proposed highway improvement will be compatible with the land use. On-street parking as well as off-street parking needs to comply with DIB82. See AASHTO, A Policy on Geometric Design of Highways and Streets for additional guidance related to on-street parking.

### 402.4 Consider All Users

Intersections should accommodate all users of the facility, including vehicles, bicyclists, pedestrians and transit. Bicycles have all the rights and responsibilities as motorist per the California

Vehicle Code, but should have separate consideration of their needs, even separate facilities if volumes warrant. Pedestrians should not be prohibited from crossing one or more legs of an intersection, unless no other safe alternative exists. Pedestrians can be prohibited from crossing one or more legs of an intersection if a reasonable alternate route exists and there is a demonstrated need to do so. All pedestrian facilities shall be ADA compliant as outlined in DIB 82. Transit needs should be determined early in the planning and design phase as their needs can have a large impact on the performance of an intersection. Transit stops in the vicinity of intersections should be evaluated for their effect on the safety and operation of the intersection(s) under study. See Topic 108 for additional information.

### 402.5 Speed-Change Areas

Speed-change areas for vehicles entering or leaving main streams of traffic are beneficial to the safety and efficiency of an intersection. Entering traffic merges most efficiently with through traffic when the merging angle is less than 15 degrees and when speed differentials are at a minimum.

## Topic 403 - Principles of Channelization

### 403.1 Preference to Major Movements

The provision of direct free-flowing high-standard alignment to give preference to major movements is good channelization practice. This may require some degree of control of the minor movements such as stopping, funneling, or even eliminating them. These controlling measures should conform to natural paths of movement and should be introduced gradually to promote smooth and efficient operation.

### 403.2 Areas of Conflict

Large multilane undivided intersection areas are undesirable. The hazards of conflicting movements are magnified when motorists, bicyclists, and pedestrians are unable to anticipate movements of other users within these areas. Channelization reduces areas of conflict by separating or regulating traffic movements into definite paths of travel by the use of pavement markings or traffic islands.

Multilane undivided intersections, even with signalization, are more difficult for pedestrians to cross. Providing pedestrian refuge islands enable pedestrians to cross fewer lanes at a time.

See Index 403.7 for traffic island guidance when used as pedestrian refuge. Curb extensions shorten crossing distance and increase visibility. See Index 303.4 for curb extensions.

### 403.3 Angle of Intersection

A right angle (90°) intersection provides the most favorable conditions for intersecting and turning traffic movements. Specifically, a right angle provides:

- The shortest crossing distance for motor vehicles, bicycles, and pedestrians.
- Sight lines which optimize corner sight distance and the ability of motorists to judge the relative position and speed of approach traffic.
- Intersection geometry that can reduce vehicle turning speeds so collisions are more easily avoided and the severity of collisions are minimized.
- Intersection geometry that sends a message to turning bicyclists and motorists that they are making a turning movement and should yield as appropriate to through traffic on the roadway they are leaving, to traffic on the receiving roadway, and to pedestrians crossing the intersection.

Minor deviations from right angles are generally acceptable provided that the potentially detrimental impact on visibility and turning movements for large trucks (see Topic 404) can be mitigated. However, large deviations from right angles may decrease visibility, hamper certain turning operations, and will increase the size of the intersection and therefore crossing distances for bicyclists and pedestrians, may encourage high speed turns, and may reduce yielding by turning traffic. When a right angle cannot be provided due to physical constraints, the interior angle should be designed as close to 90 degrees as is practical, but should not be less than 75 degrees. Mitigation should be considered for the affected intersection design features. (See Figure 403.3A). A 75 degree angle does not unreasonably increase the crossing distance or generally decrease visibility. Class II

bikeway crossings at railroads follow similar guidance to Class I bikeway crossings at railroads, see Index 1003.5(3), and Figure 403.3B.

A characteristic of skewed intersection angles is that they result in larger intersections.

When existing intersection angles are less than 75 degrees, the following retrofit improvement strategies should be considered:

- Realign the subordinate intersection legs if the new alignment and intersection location(s) can be designed without introducing new geometric or operational deficiencies.
- Provide acceleration lanes for difficult turning movements due to radius or limited visibility.
- Restrict problematic turning movements; e.g. for minor road left turns with potentially limited visibility.
- Provide refuge areas for pedestrians at very long crossings.

For additional guidance on the above and other improvement strategies, consult with the District Design Liaison or HQ Traffic Liaison.

Particular attention should be given to skewed angles on curved alignment with regards to sight distance and visibility. Crossroads skewed to the left have more restricted visibility for drivers of vans and trucks than crossroads skewed to the right. In addition, severely skewed intersection angles, coupled with steep downgrades (generally over 4 percent) can increase the potential for high centered vehicles to overturn where the vehicle is on a downgrade and must make a turn greater than 90 degrees onto a crossroad. These factors should be considered in the design of skewed intersections.

### 403.4 Points of Conflict

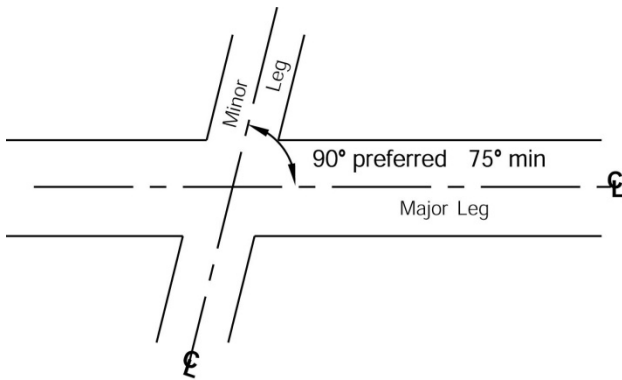
Channelization separates and clearly defines points of conflict within the intersection. Bicyclists, pedestrians and motorists should be exposed to only one conflict or confronted with one decision at a time.

Speed-change areas for diverging traffic should provide adequate length clear of the through lanes to permit vehicles to decelerate after leaving the through lanes.

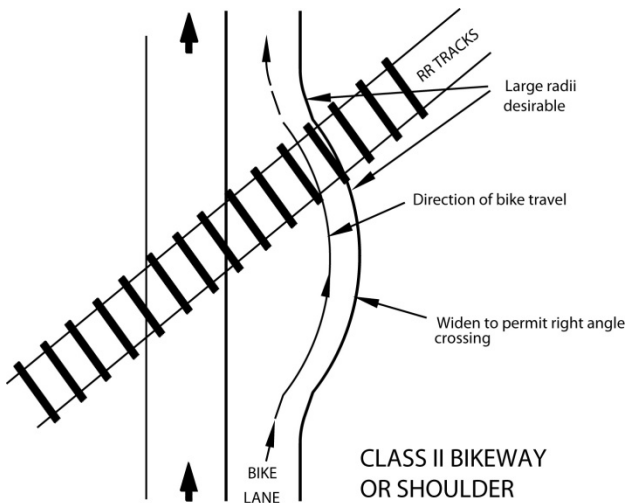
March 7, 2014

See AASHTO, A Policy on Geometric Design of Highways and Streets for additional guidance on speed-change lanes.

**Figure 403.3A**  
**Angle of Intersection**  
**(Minor Leg Skewed to the Right)**



**Figure 403.3B**  
**Class II Bikeway**  
**Crossing Railroad**



#### 403.5 (Currently Not In Use)

#### 403.6 Turning Traffic

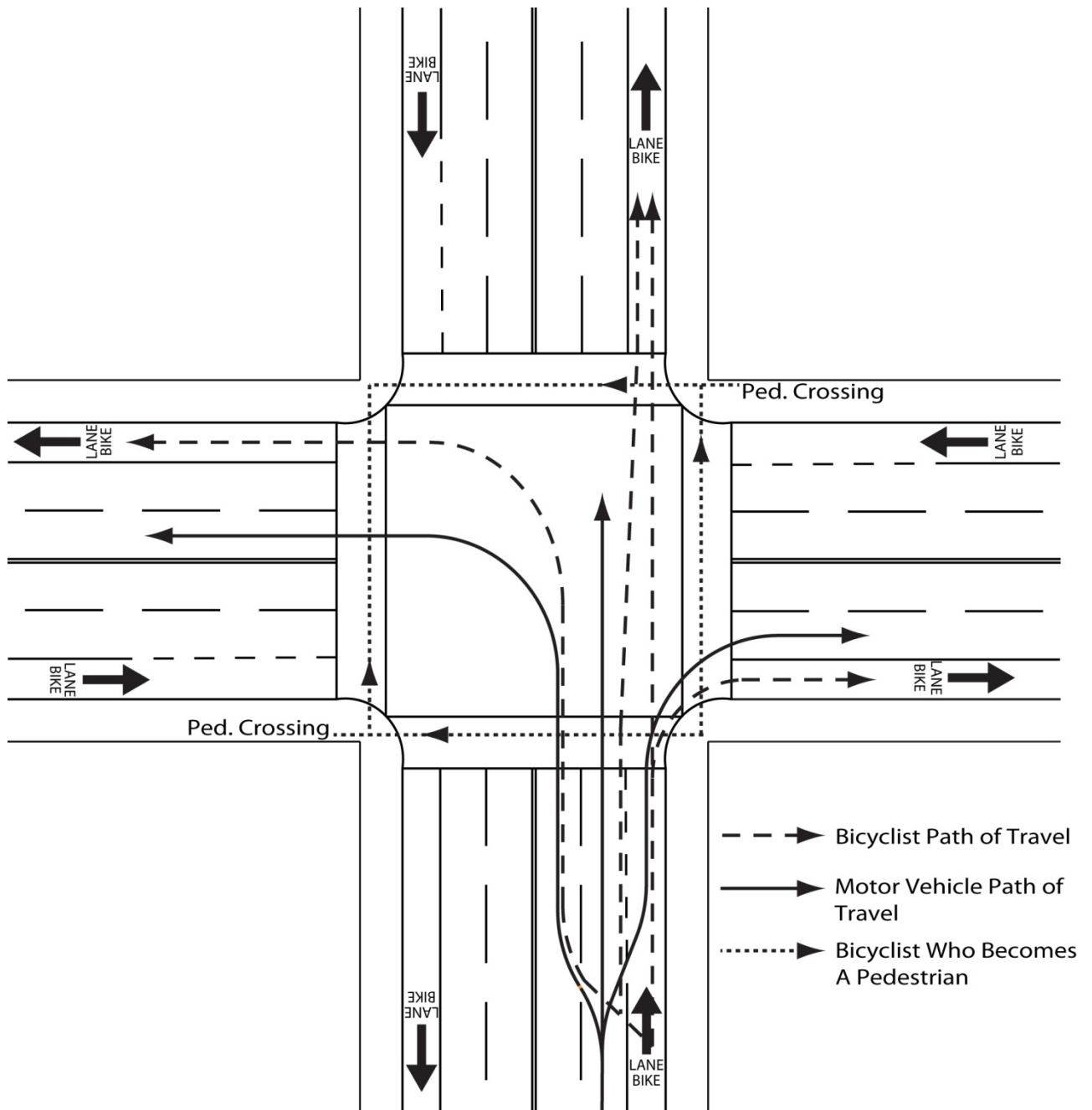
A separate turning lane removes turning movements from the intersection area. Abrupt changes in alignment or sight distance should be avoided, particularly where traffic turns into a separate turning lane from a high-standard through facility.

For wide medians, consider the use of offset left-turn lanes at both signalized and unsignalized intersections. Opposing left-turn lanes are offset or shifted as far to the left as practical by reducing the width of separation immediately before the intersection. Rather than aligning the left-turn lane exactly parallel with and adjacent to the through lane, the offset left-turn lane is separated from the adjacent through lane. Offset left-turn lanes provide improved visibility of opposing through traffic. For further guidance on offset left-turn lanes, see AASHTO, A Policy on Geometric Design of Highways and Streets.

- (1) *Treatment of Intersections with Right-Turn-Only Lanes.* Most motor vehicle/bicycle collisions occur at intersections. For this reason, intersection design should be accomplished in a manner that will minimize confusion by motorists and bicyclists, eliminate ambiguity and induce all road users to operate in accordance with the statutory rules of the road in the California Vehicle Code. Right-turn-only lanes should be designed to meet user expectations and reduce conflicts between vehicles and bicyclists.

Figure 403.6A illustrates a typical at-grade intersection of multilane streets without right-turn-only lanes. Bike lanes or shoulders are included on all approaches. Some common movements of motor vehicles and bicycles are shown. A prevalent crash type is between straight-through bicyclists and right-turning motorists, who do not yield to through bicyclists.

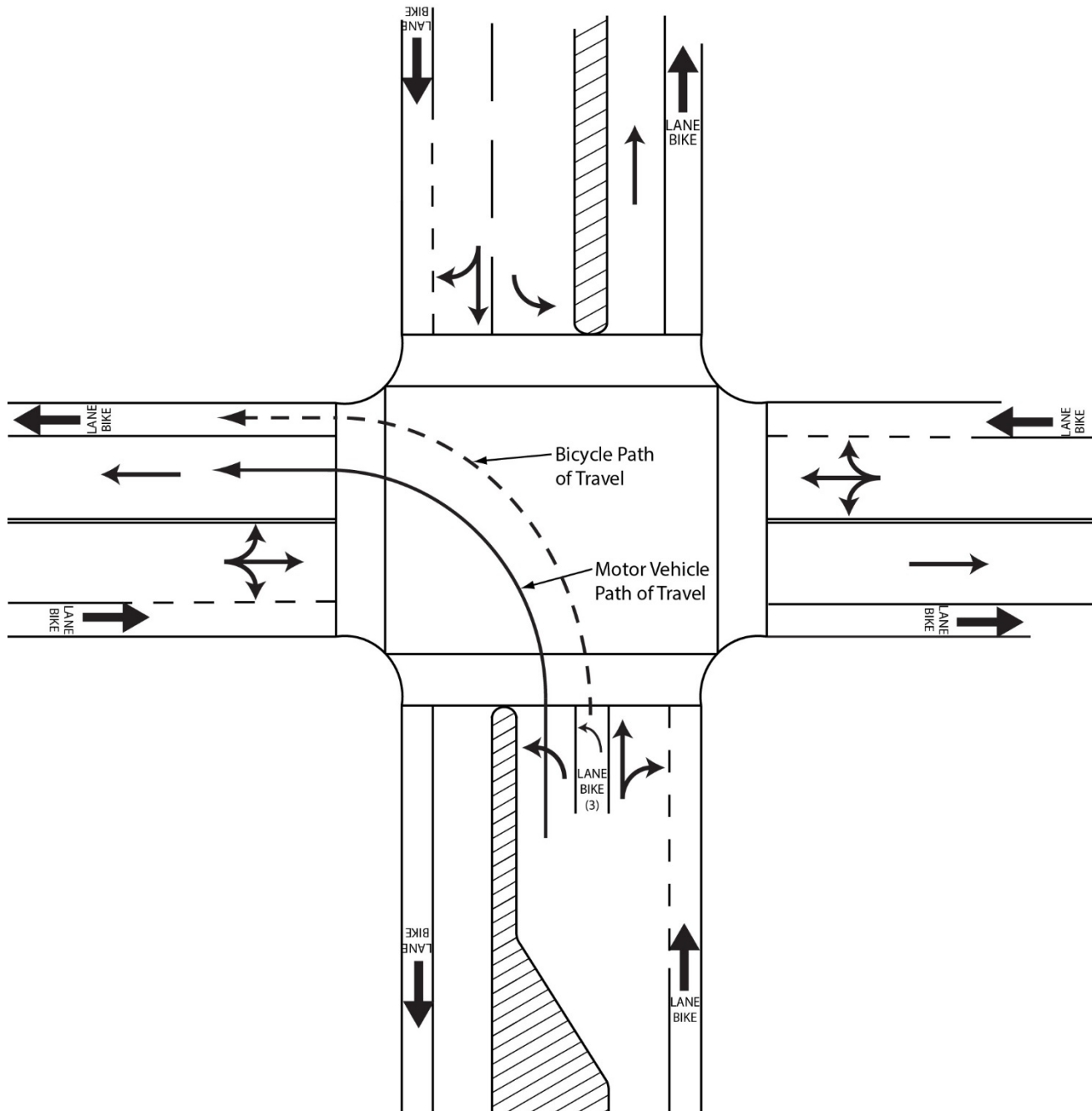
Optional right-turn lanes should not be used in combination with right-turn-only lanes on roads where bicycle travel is permitted. The use of optional right-turn lanes in combination with right-turn-only lanes is not recommended in any case where a Class II bike lane is present. This may increase the need for dual or triple right-turn-only lanes, which have

**Figure 403.6A****Typical Bicycle and Motor Vehicle Movements at Intersections of Multilane Streets without Right-Turn-Only Lanes**

NOTE:

Only one direction is shown for clarity.

**Figure 403.6B**  
**Bicycle Left-Turn-Only Lane**



NOTES:

- (1) For bicycle lane markings, see the California MUTCD.
- (2) Bicycle detectors are necessary for signalized intersections.
- (3) Left-turn bicycle lane should have receiving bike lane or shoulder.



challenges with visibility between turning vehicles and pedestrians. Multiple right-turn-only lanes should not be free right-turns when there is a pedestrian crossing. If there is a pedestrian crossing on the receiving leg of multiple right-turn-only lanes, the intersection should be controlled by a pedestrian signal head, or geometrically designed such that pedestrians cross only one turning lane at a time.

Locations with right-turn-only lanes should provide a minimum 4-foot width for bicycle use between the right-turn and through lane when bikes are permitted, except where posted speed is greater than 40 mph, the minimum width should be 6 feet. Configurations that create a weaving area without defined lanes should not be used.

For signing and delineation of bicycle lanes at intersections, consult District Traffic Operations.

Figure 403.6B depicts an intersection with a left-turn-only bicycle lane, which should be considered when bicycle left-turns are common. A left-turn-only bicycle lane may be considered at any intersection and should always be considered as a tool to provide mobility for bicyclists. Signing and delineation options for bicycle left-turn-only lanes are shown in the California MUTCD.

- (2) *Design of Intersections at Interchanges.* The design of at-grade intersections at interchanges should be accomplished in a manner that will minimize confusion of motorists, bicyclists, and pedestrians. Higher speed, uncontrolled entries and exits from freeway ramps should not be used at the intersection of the ramps with the local road. The smallest curb return radius should be used that accommodates the design vehicle. Intersections with interior angles close to 90 degrees reduce speeds at conflict points between motorists, bicyclists, and pedestrians. The intersection skew guidance in Index 403.3 applies to all ramp termini at the local road.

### 403.7 Refuge Areas

Traffic islands should be used to provide refuge areas for bicyclists and pedestrians. See Index 405.4 for further guidance.

### 403.8 Prohibited Turns

Traffic islands may be used to direct bicycle and motorized vehicle traffic streams in desired directions and prevent undesirable movements. Care should be taken so that islands used for this purpose accommodate convenient and safe pedestrian and bicycle crossings, drainage, and striping options. See Topic 303.

### 403.9 Effective Signal Control

At intersections with complex turning movements, channelization is required for effective signal control. Channelization permits the sorting of approaching bicycles and motorized vehicles which may move through the intersection during separate signal phases. Pedestrians may also have their own signal phase. This requirement is of particular importance when traffic-actuated signal controls are employed.

The California MUTCD has warrants for the placement of signals to control vehicular, bicycle and pedestrian traffic. Pedestrian activated devices, signals or beacons are not required, but must be evaluated where directional, multilane, pedestrian crossings occur. These locations may include:

- Mid-block street crossings;
- Channelized turn lanes;
- Ramp entries and exits; and
- Roundabouts.

The evaluation, selection, programming and use of a chosen device should be done with guidance from District Traffic Operations.

### 403.10 Installation of Traffic Control Devices

Channelization may provide locations for the installation of essential traffic control devices, such as “STOP” and directional signs. See Index 405.4 for information about the design of traffic islands.

### 403.11 Summary

- Give preference to the major move(s).

- Reduce areas of conflict.
- Reduce the duration of conflicts.
- Cross traffic at right angles or skew no more than 75 degrees. (90 degrees preferred.)
- Separate points of conflict.
- Provide speed-change areas and separate turning lanes where appropriate.
- Provide adequate width to shadow turning traffic.
- Restrict undesirable moves with traffic islands.
- Coordinate channelization with effective signal control.
- Install signs in traffic islands when necessary but avoid building conflicts one or more modes of travel.
- Consider all users.

### 403.12 Other Considerations

- An advantage of curbed islands is they can serve as pedestrian refuge. Where curbing is appropriate, consideration should be given to mountable curbs. See Topic 303 for more guidance.
- Avoid complex intersections that present multiple choices of movement to the motorist and bicyclist.
- Traffic safety should be considered. Collision records provide a valuable guide to the type of channelization needed.

## Topic 404 - Design Vehicles

### 404.1 General

Any vehicle, whether car, bus, truck, or recreational vehicle, while turning a curve, covers a wider path than the width of the vehicle. The outer front tire can generally follow a circular curve, but the inner rear tire will swing in toward the center of the curve.

Some terminology is vital to understanding the engineering concepts related to design vehicles. See Index 62.4 Interchanges and Intersection at Grade for terminology.

### 404.2 Design Considerations

It may not be necessary to provide for design vehicle turning movements at all intersections along the State route if the design vehicle's route is restricted or it is not expected to use the cross street frequently. Discuss with Traffic Operations and the local agency before a turning movement is not provided. The goal is to minimize possible conflicts between vehicles, bicycles, pedestrians, and other users of the roadway, while providing the minimum curb radii appropriate for the given situation.

Both the tracking width and swept width should be considered in the design of roadways for use of the roadway by design vehicles.

Tracking width lines delineate the path of the vehicle tires as the vehicle moves through the turn.

Swept width lines delineate the path of the vehicle body as the vehicle moves through the turn and will therefore always exceed the tracking width. The following list of criteria is to be used to determine whether the roadway can accommodate the design vehicle.

#### (1) *Traveled way.*

- (a) To accommodate turn movements(e.g., at intersections, driveways, alleys, etc.),the travel way width and intersection design should be such that tracking width and swept width lines for the design vehicle do not cross into any portion of the lane for opposing traffic. Encroachment into the shoulder and bike lane is permitted.

- (b) Along the portion of roadway where there are no turning options, vehicles are required to stay within the lane lines. **The tracking and swept widths lines for the design vehicle shall stay within the lane as defined in Index 301.1 and Table 504.3A.** This includes no encroachment into Class II bike lanes.

- (2) *Shoulders.* Both tracking width and swept width lines may encroach onto paved shoulders to accommodate turning. For design projects where the tracking width lines are shown to encroach onto paved shoulders, the shoulder pavement structure should be engineered to sustain the weight of the design vehicle. See Index 613 for general traffic loading

considerations and Index 626 for tied rigid shoulder guidance. At corners where no sidewalks are provided and pedestrians are using the shoulder, a paved refuge area may be provided outside the swept width of turning vehicle.

- (3) *Curbs and Gutters.* Tires may not mount curbs. If curb and gutter are present and any portion of the gutter pan is likewise encroached, the gutter pan must be engineered to match the adjacent shoulder pavement structure. See Index 613.5(2)(c) for gutter pan design guidance.
- (4) *Edge of Pavement.* To accommodate a turn, the swept width lines may cross the edge of pavement provided there are no obstructions. The tracking width lines shall remain on the pavement structure, including the shoulder, provided that the shoulder is designed to support vehicular traffic. If truck volumes are high, consideration of a wider shoulder is encouraged in order to preserve the pavement edge.
- (5) *Bicycle Lanes.* Where bicycle lanes are considered, the design guidance noted above applies. Vehicles are permitted to cross a bicycle lane to initiate or complete a turning movement or for emergency parking on the shoulder. See the California MUTCD for Class II bike lane markings.

To accommodate turn movements (e.g., intersections, driveways, alleys, etc. are present), both tracking width and swept width lines may cross the broken white painted bicycle lane striping in advance of the right-turn, entering the bicycle lane when clear to do so.

- (6) *Sidewalks.* Tracking width and swept width lines must not encroach onto sidewalks or pedestrian refuge areas, without exception.
- (7) *Obstacles.* Swept width lines may not encroach upon obstacles including, but not limited to, curbs, islands, sign structures, traffic delineators/channelizers, traffic signals, lighting poles, guardrails, trees, cut slopes, and rock outcrops.
- (8) *Appurtenances.* Swept width lines do not include side mirrors or other appurtenances allowed by the California Vehicle Code, thus,

accommodation to non-motorized users of the facility and appurtenances should be considered.

If both the tracking width and swept width lines meet the design guidance listed above, then the geometry is adequate for that design vehicle. Consideration should be given to pedestrian crossing distance, motor vehicle speeds, truck volumes, alignment, bicycle lane width, sight distance, and the presence of on-street parking.

Note that the STAA Design Vehicle has a template with a 56-foot (minimum) and a 67-foot (longer) radius and the California Legal Design Vehicle has a template with 50-foot (minimum) and 60-foot (longer) radii. The longer radius templates are more conservative. The longer radius templates develop less swept width and leave a margin of error for the truck driver. The longer radius templates should be used for conditions where the vehicle may not be required to stop before entering the intersection.

The minimum radius template can be used if the longer radius template does not clear all obstacles. The minimum radius templates demonstrate the tightest turn that the vehicles can navigate, assuming a speed of less than 10 miles per hour.

For offtracking lane width requirements on freeway ramps, see Topic 504.

### 404.3 Design Tools

District Truck Managers should be consulted early in the project to ensure compliance with the design vehicle guidance contained in Topic 404. Consult local agencies to verify the location of local truck routes. Essentially, two options are available – templates or computer software.

- The turning templates in Figures 404.5A through G are a design aid for determining the swept width and/or tracking width of large vehicles as they maneuver through a turn. The templates can be used as overlays to evaluate the adequacy of the geometric layout of a curve or intersection when reproduced on clear film and scaled to match the highway drawings. These templates assume a vehicle speed of less than 10 miles per hour.
- Computer software such as AutoTURN or AutoTrak can draw the swept width and/or tracking width along any design curve within a CADD drawing program such as MicroStation

or AutoCAD. Dimensions taken from the vehicle diagrams in Figures 404.5A through G may be inputted into the computer program by creating a custom vehicle if the vehicle is not already included in the software library. The software can also create a vehicle turn template that conforms to any degree curve desired.

#### 404.4 Design Vehicles and Related Definitions

(1) *The Surface Transportation Assistance Act of 1982 (STAA).*

(a) **STAA Routes.** STAA allows certain longer trucks called STAA trucks to operate on the National Network. After STAA was enacted, the Department evaluated State routes for STAA truck access and created Terminal Access and Service Access routes which, together with the National Network, are called the STAA Network. Terminal Access routes allow STAA access to terminals and facilities. Service Access routes allow STAA trucks one-mile access off the National Network, but only at identified exits and only for designated services. Service Access routes are primarily local roads. A “Truck Route Map,” indicating the National Network routes and the Terminal Access routes is posted on the Department’s Office of Commercial Vehicle Operations website and is also available in printed form.

(b) **STAA Design Vehicle.** The STAA design vehicle is a truck tractor-semitrailer combination with a 48-foot semitrailer, a 43-foot kingpin-to-rear-axle (KPRA) distance, an 8.5-foot body and axle width, and a 23-foot truck tractor wheelbase. Note, a truck tractor is a non-load-carrying vehicle. There is also a STAA double (truck tractor-semitrailer-trailer); however, the double is not used as the design vehicle due to its shorter turning radius. The STAA Design Vehicle is shown in Figures 404.5A and B.

The STAA Design Vehicle in Figures 404.5A or B should be used on the National Network, Terminal Access, California Legal, and Advisory routes.

(c) **STAA Vehicle – 53-Foot Trailer.** Another category of vehicle allowed only on STAA routes has a maximum 53-foot trailer, a maximum 40-foot KPRA for two or more axles, a maximum 38-foot KPRA for a single axle, and unlimited overall length. This vehicle is not to be used as the design vehicle as it is not the worst case for offtracking due to its shorter KPRA. The STAA Design Vehicle should be used instead.

(2) *California Legal.*

(a) **California Legal Routes.** Virtually all State routes off the STAA Network are California Legal routes. There are two types of California Legal routes, the regular California Legal routes and the KPRA Advisory Routes. Advisory routes have signs posted that state the maximum KPRA length that the route can accommodate without the vehicle offtracking outside the lane. KPRA advisories range from 30 feet to 38 feet, in 2-foot increments. California Legal vehicles are allowed to use both types of California Legal routes. California Legal vehicles can also use the STAA Network. However, STAA trucks are not allowed on any California Legal routes. The Truck Route Map indicating the California Legal routes is posted on the Department’s Office of Commercial Vehicle Operations website.

(b) **California Legal Design Vehicle.** The California Legal vehicle is a truck tractor-semitrailer with the following dimensions: the maximum overall length is 65 feet; the maximum KPRA distance is 40 feet for semitrailers with two or more axles, and 38 feet for semitrailers with a single axle; the maximum width is 8.5 feet. There are also two categories of California Legal doubles (truck tractor-semitrailer-trailer); however, the doubles are not used as the design vehicle due to their shorter turning radii. The California Legal Design Vehicle is shown in Figures 404.5C and D.

The California Legal Design Vehicle in Figures 404.5C and D should only be used

when the STAA design vehicle is not feasible and with concurrence from the District Truck Manager.

(3) *40-Foot Bus.*

- (a) 40-Foot Bus Routes. All single-unit vehicles, including buses and motor trucks up to 40 feet in length, are allowed on virtually every route in California.
- (b) 40-Foot Bus Design Vehicle. The 40-Foot Bus Design Vehicle shown in Figure 404.5E is an AASHTO standard. Its 25-foot wheelbase and 40-foot length are typical of city transit buses and some intercity buses. At intersections where truck volumes are light or where the predominate truck traffic consists of mostly 3-axle units, the 40-foot bus may be used. Its wheel path sweeps a greater width than 3-axle delivery trucks, as well as smaller buses such as school buses.

(4) *45-Foot Bus & Motorhome.*

- (a) 45-Foot Bus & Motorhome Routes. The “45-foot bus and motorhome” refers to bus and motorhomes over 40 feet in length, up to and including 45 feet in length. These longer buses and motorhomes are allowed in California, but only on certain routes.

The 45-foot tour bus became legal on the National Network in 1991 and later allowed on some State routes in 1995. The 45-foot motorhome became legal in California in 2001, but only on those routes where the 45-foot bus was already allowed. A Bus and Motorhome Map indicating where these longer buses and motorhomes are allowed and where they are not allowed is posted on the Department’s Office of Commercial Vehicle Operations website.

- (b) 45-Foot Bus and Motorhome Design Vehicle. The 45-Foot Bus & Motorhome Design Vehicle shown in Figure 404.5F is used by Caltrans for the longest allowable bus and motorhome. Its wheelbase is 28.5 feet. It is also similar to the AASHTO standard 45-foot bus. Typically this should be the smallest design vehicle

used on a State highway. It may be used where the State highway intersects local streets without commercial or industrial traffic.

The 45-Foot Bus and Motorhome Design Vehicle shown in Figure 404.5F should be used in the design of all interchanges and intersections on all green routes indicated on the Bus and Motorhome Map for both new construction and rehabilitation projects. Check also the longer standard design vehicles on these routes as required – the STAA Design Vehicle and the California Legal Design Vehicle in Indexes 404.3(1) and (2).

(5) *60-Foot Articulated Bus.*

- (a) 60-Foot Articulated Bus Routes. The articulated bus is allowed a length of up to 60 feet per CVC 35400(b)(3)(A). This bus is used primarily by local transit agencies for public transportation. There is no master listing of such routes. Local transit agencies should be contacted to determine possible routes within the proposed project.
- (b) 60-Foot Articulated Bus Design Vehicle. The 60-Foot Articulated Bus Design Vehicle shown in Figure 404.5G is an AASHTO standard. The routes served by these buses should be designed to accommodate the 60-Foot Articulated Bus Design Vehicle.

### 404.5 Turning Templates & Vehicle Diagrams

Figures 404.5A through G are computer-generated turning templates at an approximate scale of 1"=50' and their associated vehicle diagrams for the design vehicles described in Index 404.3. The radius of the template is measured to the outside front wheel path at the beginning of the curve. Figures 404.5A through G contain the terms defined as follows:

- (1) *Tractor Width* - Width of tractor body.
- (2) *Trailer Width* - Width of semitrailer body.
- (3) *Tractor Track* - Tractor axle width, measured from outside face of tires.

- (4) *Trailer Track* – Semitrailer axle width, measured from outside face of tires.
- (5) *Lock To Lock Time* - The time in seconds that an average driver would take under normal driving conditions to turn the steering wheel of a vehicle from the lock position on one side to the lock position on the other side. The default in AutoTurn software is 6 seconds.
- (6) *Steering Lock Angle* - The maximum angle that the steering wheels can be turned. It is further defined as the average of the maximum angles made by the left and right steering wheels with the longitudinal axis of the vehicle.
- (7) *Articulating Angle* - The maximum angle between the tractor and semitrailer.

## Topic 405 - Intersection Design Standards

### 405.1 Sight Distance

- (1) *Stopping Sight Distance.* See Index 201.1 for minimum stopping sight distance requirements.
- (2) *Corner Sight Distance.*
  - (a) General--At unsignalized intersections a substantially clear line of sight should be maintained between the driver of a vehicle, bicyclist or pedestrian waiting at the crossroad and the driver of an approaching vehicle. Line of sight for all users should be included in right of way, in order to preserve sight lines.

Adequate time must be provided for the waiting user to either cross all lanes of through traffic, cross the near lanes and turn left, or turn right, without requiring through traffic to radically alter their speed.

The values given in Table 405.1A provide 7-1/2 seconds for the driver on the crossroad to complete the necessary maneuver while the approaching vehicle travels at the assumed design speed of the main highway. The 7-1/2 second criterion is normally applied to all lanes of through traffic in order to cover all possible maneuvers by the vehicle at the crossroad. However, by providing the standard corner

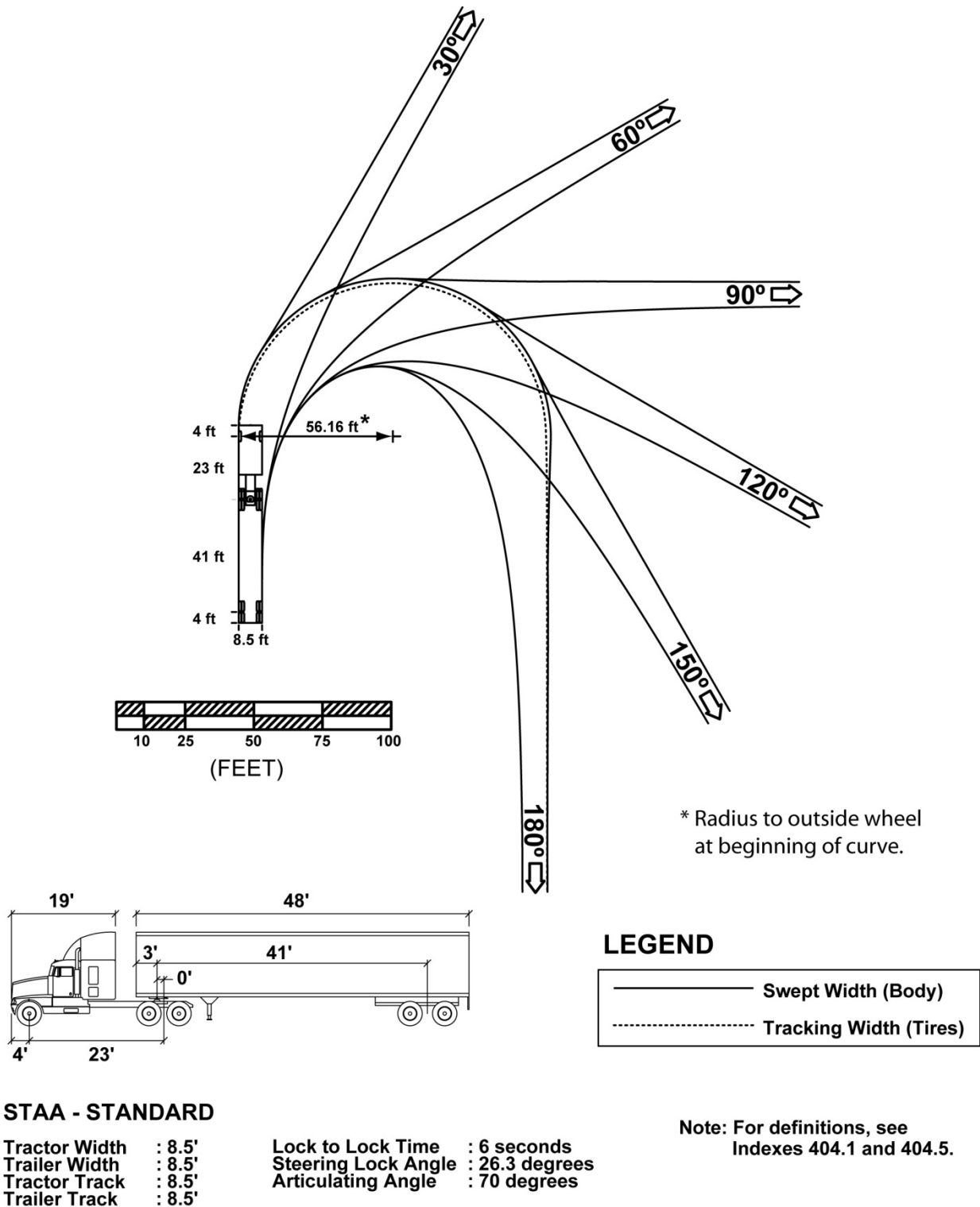
sight distance to the lane nearest to and farthest from the waiting vehicle, adequate time should be obtained to make the necessary movement. On multilane highways a 7-1/2 second criterion for the outside lane, in both directions of travel, normally will provide increased sight distance to the inside lanes. Consideration should be given to increasing these values on downgrades steeper than 3 percent and longer than 1 mile (see Index 201.3), where there are high truck volumes on the crossroad, or where the skew of the intersection substantially increases the distance traveled by the crossing vehicle.

In determining corner sight distance, a set back distance for the vehicle waiting at the crossroad must be assumed. **Set back for the driver of the vehicle on the crossroad shall be a minimum of 10 feet plus the shoulder width of the major road but not less than 15 feet.** Line of sight for corner sight distance is to be determined from a 3 and 1/2-foot height at the location of the driver of the vehicle on the minor road to a 4 and 1/4-foot object height in the center of the approaching lane of the major road as illustrated in Figure 504.3J. If the major road has a median barrier, a 2-foot object height should be used to determine the median barrier set back.

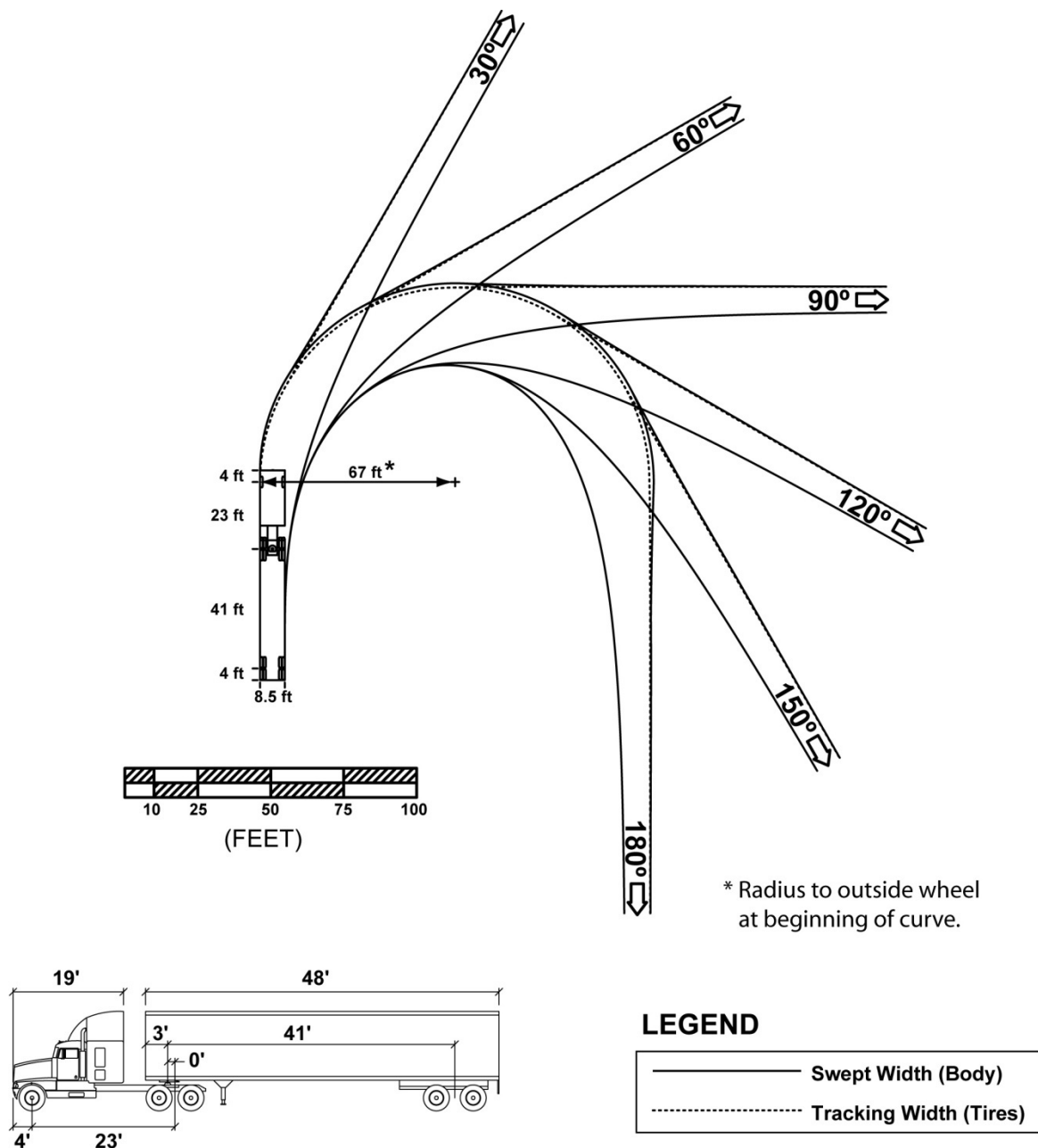
In some cases the cost to obtain 7-1/2 seconds of corner sight distances may be excessive. High costs may be attributable to right of way acquisition, building removal, extensive excavation, or immitigable environmental impacts. In such cases a lesser value of corner sight distance, as described under the following headings, may be used.

- (b) Public Road Intersections (Refer to Topic 205)--At unsignalized public road intersections (see Index 405.7) corner sight distance values given in Table 405.1A should be provided.

**Figure 404.5A**  
**STAA Design Vehicle**  
**56-Foot Radius**

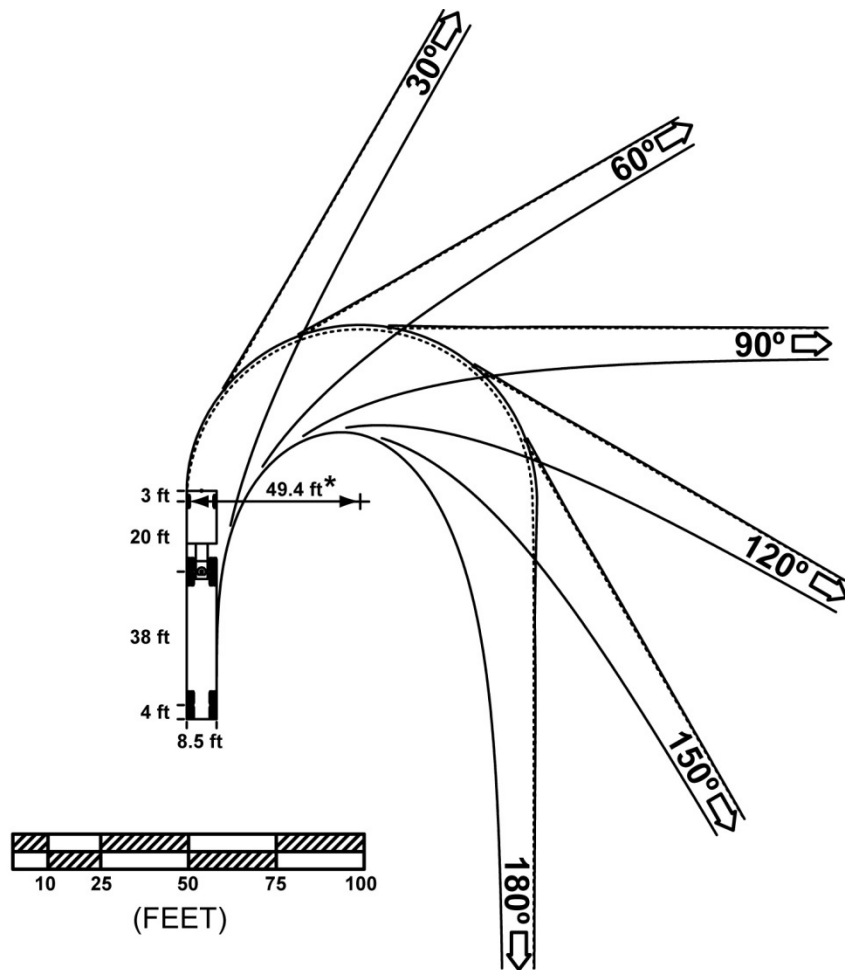


**Figure 404.5B**  
**STAA Design Vehicle**  
**67-Foot Radius**

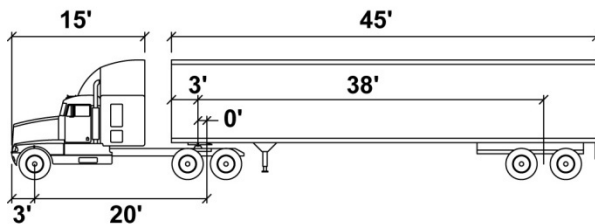




**Figure 404.5C**  
**California Legal Design Vehicle**  
**50-Foot Radius**



\* Radius to outside wheel  
 at beginning of curve.



### LEGEND

- Swept Width (Body)
- - - Tracking Width (Tires)

### CA LEGAL - 65 FT

Tractor Width : 8.5'  
 Trailer Width : 8.5'  
 Tractor Track : 8.5'  
 Trailer Track : 8.5'

Lock to Lock Time : 6 seconds  
 Steering Lock Angle : 26.3 degrees  
 Articulating Angle : 70 degrees

Note: For definitions, see  
 Indexes 404.1 and 404.5.

**Figure 404.5D**  
**California Legal Design Vehicle**  
**60-Foot Radius**

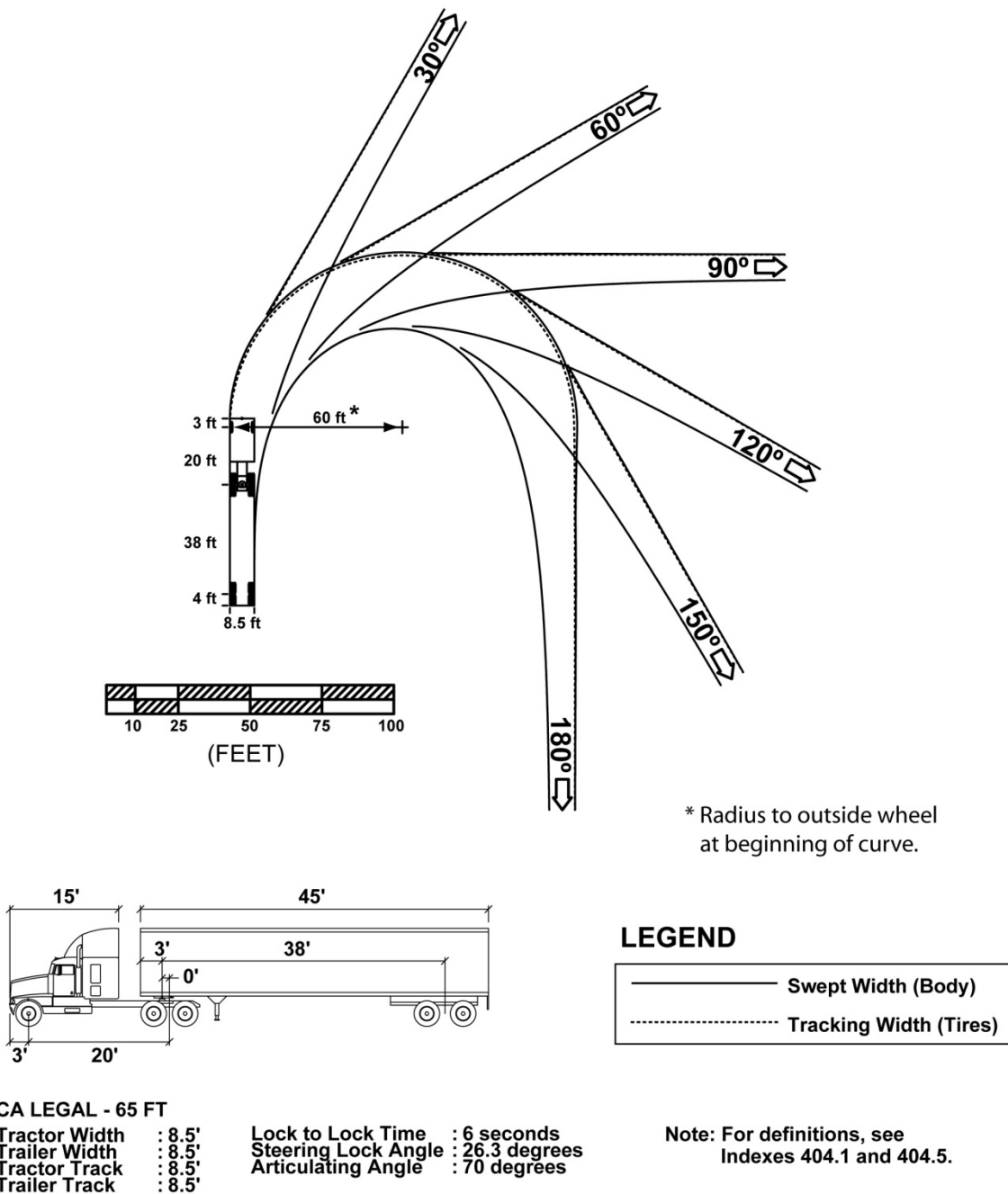
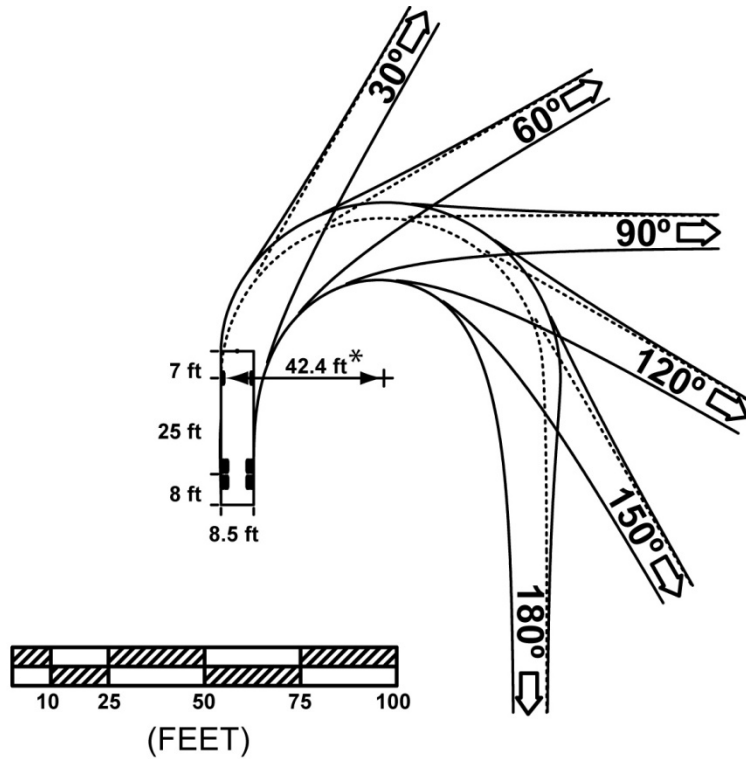
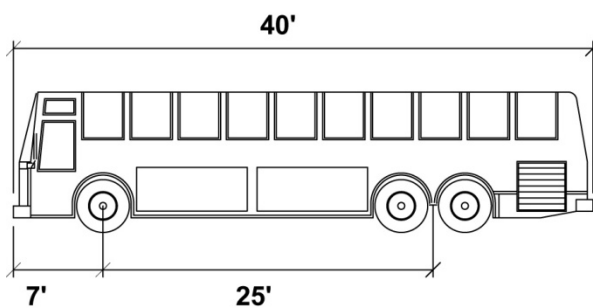


Figure 404.5E

## 40-Foot Bus Design Vehicle



\* Radius to outside wheel  
at beginning of curve.



## LEGEND

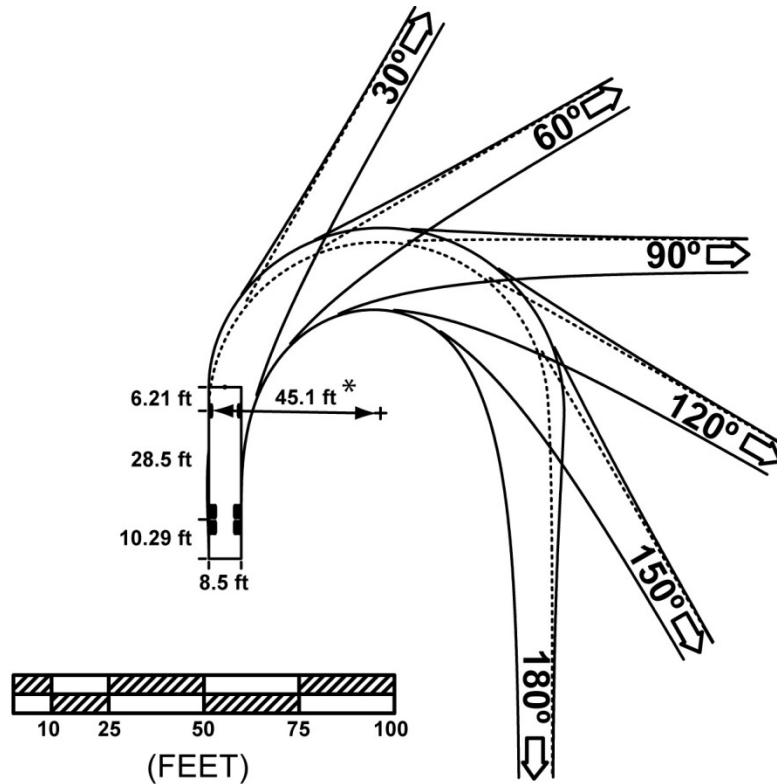
—————	Swept Width (Body)
- - - - -	Tracking Width (Tires)

## 40' BUS

Width : 8.5'  
 Track : 8.5'  
 Lock to Lock Time : 6 seconds  
 Steering Lock Angle: 41.0 degrees

Note: For definitions, see  
Indexes 404.1 and 404.5.

**Figure 404.5F**  
**45-Foot Bus & Motorhome Design Vehicle**



\* Radius to outside wheel  
at beginning of curve.

### LEGEND

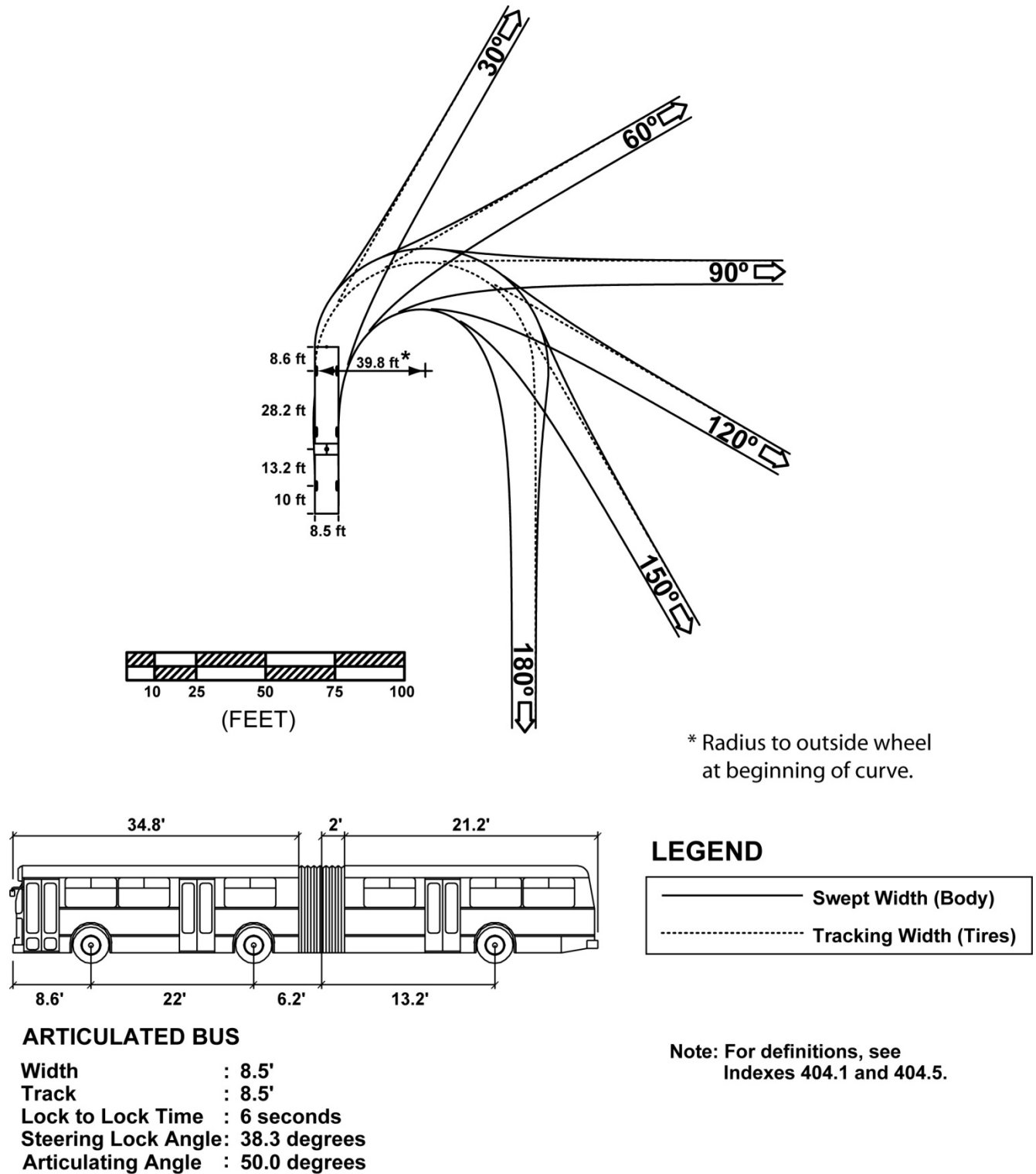
—————	Swept Width (Body)
-----	Tracking Width (Tires)

### 45' BUS

Width : 8.5'  
Track : 8.5'  
Lock to Lock Time : 6 seconds  
Steering Lock Angle: 44.3 degrees

Note: For definitions, see  
Indexes 404.1, and 404.5.

**Figure 404.5G**  
**60-Foot Articulated Bus Design Vehicle**



At signalized intersections the values for corner sight distances given in Table 405.1A should also be applied whenever possible. Even though traffic flows are designed to move at separate times, unanticipated conflicts can occur due to violation of signal, right turns on red, malfunction of the signal, or use of flashing red/yellow mode.

**Table 405.1A  
Corner Sight Distance  
(7-1/2 Second Criteria)**

Design Speed (mph)	Corner Sight Distance (ft)
25	275
30	330
35	385
40	440
45	495
50	550
55	605
60	660
65	715
70	770

Where restrictive conditions exist, similar to those listed in Index 405.1(2)(a), the minimum value for corner sight distance at both signalized and unsignalized intersections shall be equal to the stopping sight distance as given in Table 201.1, measured as previously described.

- (c) Private Road Intersections (Refer to Index 205.2) and Rural Driveways (Refer to Index 205.4)--**The minimum corner sight distance shall be equal to the stopping sight distance as given in Table 201.1, measured as previously described.**
- (d) Urban Driveways (Refer to Index 205.3)--Corner sight distance requirements as described above are not applied to urban driveways.
- (3) Decision Sight Distance. At intersections where the State route turns or crosses another State route, the decision sight distance values

given in Table 201.7 should be used. In computing and measuring decision sight distance, the 3.5-foot eye height and the 0.5-foot object height should be used, the object being located on the side of the intersection nearest the approaching driver.

The application of the various sight distance requirements for the different types of intersections is summarized in Table 405.1B.

**Table 405.1B  
Application of Sight Distance  
Requirements**

Intersection Types	Sight Distance		
	Stopping	Corner	Decision
Private Roads	X	X <sup>(1)</sup>	
Public Streets and Roads	X	X	
Signalized Intersections	X	(2)	
State Route Intersections & Route Direction Changes, with or without Signals	X	X	X

NOTES:

- (1) Per Index 405.1(2)(c), the minimum corner sight distance shall be equal to the stopping sight distance as given in Table 201.1. See Index 405.1(2)(a) for setback requirements.
- (2) Apply corner sight distance requirements at signalized intersections whenever possible due to unanticipated violations of the signals or malfunctions of the signals. See Index 405.1(2)(b).
- (4) *Acceleration Lanes for Turning Moves onto State Highways.* At rural intersections, with "STOP" control on the local cross road, acceleration lanes for left and right turns onto the State facility should be considered. At a minimum, the following features should be evaluated for both the major highway and the cross road:
- divided versus undivided
  - number of lanes

- design speed
- gradient
- lane, shoulder and median width
- traffic volume and composition of highway users, including trucks and transit vehicles
- turning volumes
- horizontal curve radii
- sight distance
- proximity of adjacent intersections
- types of adjacent intersections

For additional information and guidance, refer to AASHTO, A Policy on Geometric Design of Highways and Streets, the Headquarters Traffic Liaison, the District Design Liaison, and the Project Delivery Coordinator.

## 405.2 Left-turn Channelization

- (1) *General.* The purpose of a left-turn lane is to expedite the movement of through traffic by, controlling the movement of turning traffic, increasing the capacity of the intersection, and improving safety characteristics.

The District Traffic Branch normally establishes the need for left-turn lanes.

- (2) *Design Elements.*

- (a) **Lane Width – The lane width for both single and double left-turn lanes on State highways shall be 12 feet.**

**For conventional State highways with posted speeds less than or equal to 40 miles per hour and AADTT (truck volume) less than 250 per lane that are in urban, city or town centers (rural main streets), the minimum lane width shall be 11 feet.**

When considering lane width reductions adjacent to curbed medians, refer to Index 303.5 for guidance on effective roadway width, which may vary depending on drivers' lateral positioning and shy distance from raised curbs.

- (b) **Approach Taper --** On conventional highways without a median, an approach

taper provides space for a left-turn lane by moving traffic laterally to the right. The approach taper is unnecessary where a median is available for the full width of the left-turn lane. Length of the approach taper is given by the formula on Figures 405.2A, B and C.

Figure 405.2A shows a standard left-turn channelization design in which all widening is to the right of approaching traffic and the deceleration lane (see below) begins at the end of the approach taper. This design should be used in all situations where space is available, usually in rural and semi-rural areas or in urban areas with high traffic speeds and/or volumes.

Figures 405.2B and 405.2C show alternate designs foreshortened with the deceleration lane beginning at the 2/3 point of the approach taper so that part of the deceleration takes place in the through traffic lane. Figure 405.2C is shortened further by widening half (or other appropriate fraction) on each side. These designs may be used in urban areas where constraints exist, speeds are moderate and traffic volumes are relatively low.

- (c) **Bay Taper --** A reversing curve along the left edge of the traveled way directs traffic into the left-turn lane. The length of this bay taper should be short to clearly delineate the left-turn move and to discourage through traffic from drifting into the left-turn lane. Table 405.2A gives offset data for design of bay tapers. In urban areas, lengths of 60 feet and 90 feet are normally used. Where space is restricted and speeds are low, a 60-foot bay taper is appropriate. On rural high-speed highways, a 120-foot length is considered appropriate.
- (d) **Deceleration Lane Length --** Design speed of the roadway approaching the intersection should be the basis for determining deceleration lane length. It is desirable that deceleration take place entirely off the through traffic lanes. Deceleration lane lengths are given in Table 405.2B; the bay taper length is

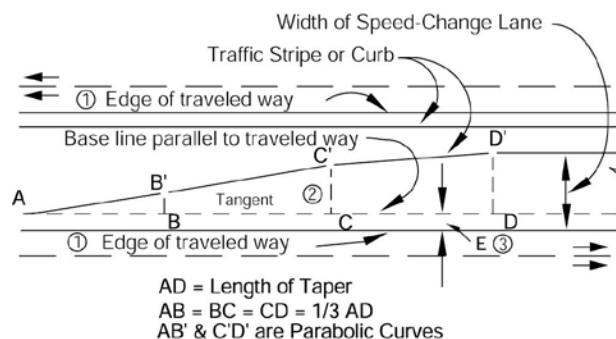
included. Where partial deceleration is permitted on the through lanes, as in Figures 405.2B and 405.2C, design speeds in Table 405.2B may be reduced 10 miles per hour to 20 miles per hour for a lower entry speed. In urban areas where cross streets are closely spaced and deceleration lengths cannot be achieved, the District Traffic branch should be consulted for guidance.

- (e) **Storage Length** -- At unsignalized intersections, storage length may be based on the number of turning vehicles likely to arrive in an average 2-minute period during the peak hour. At a minimum, space for 2 vehicles should be provided at 25 feet per vehicle. If the peak hour truck traffic is 10 percent or more, space for at least one passenger car and one truck should be provided. Bus usage may require a longer storage length and should be evaluated if their use is anticipated.

At signalized intersections, the storage length may be based on one and one-half to two times the average number of vehicles that would store per signal cycle depending on cycle length, signal phasing, and arrival and departure rates. At a minimum, storage length should be calculated in the same manner as unsignalized intersection. The District Traffic Branch should be consulted for this information.

When determining storage length, the end of the left-turn lane is typically placed at least 3 feet, but not more than 30 feet, from the nearest edge of shoulder of the intersecting roadway. Although often set by the placement of a crosswalk line or limit line, the end of the storage lane should always be located so that the appropriate turning template can be accommodated.

**Table 405.2A**  
**Bay Taper for Median**  
**Speed-change Lanes**



LENGTH OF TAPER - feet			OFFSET DISTANCE		
60	90	120	DD' = 10'	DD' = 11'	DD' = 12'
Distance From Point "A"					
-	-	-	0.00	0.00	0.00
5	7.5	10.0	0.16	0.17	0.19
10	15.0	20.0	0.62	0.69	0.75
15	22.5	30.0	1.41	1.55	1.69
B'	20	30.0	2.50	2.75	3.00
	30	45.0	5.00	5.50	6.00
C'	40	60.0	7.50	8.25	9.00
	45	67.5	8.59	9.45	10.31
	50	75.0	9.38	10.31	11.25
	55	82.5	9.84	10.83	11.81
	60	90.0	10.00	11.00	12.00

**NOTES:**

- (1) The table gives offsets from a base line parallel to the edge of traveled way at intervals measured from point "A". Add "E" for measurements from edge of traveled way.
- (2) Where edge of traveled way is a curve, neither base line nor taper between B & C will be a tangent. Use proportional offsets from B to C.
- (3) The offset "E" is usually 2 ft along edge of traveled way for curbed medians; Use "E" = 0 ft. for striped medians.

**Table 405.2B**  
**Deceleration Lane Length**

Design Speed (mph)	Length to Stop (ft)
30	235
40	315
50	435
60	530



- (3) *Double Left-turn Lanes.* At signalized intersections on multilane conventional highways and on multilane ramp terminals, double left-turn lanes should be considered if the left-turn demand is 300 vehicles per hour or more. The lane widths and other design elements of left-turn lanes given under Index 405.2(2) applies to double as well as single left-turn lanes.

The design of double left-turn lanes can be accomplished by adding one or two lanes in the median. See "Guidelines for Reconstruction of Intersections", published by Headquarters, Division of Traffic Operations, for the various treatments of double left-turn lanes.

- (4) *Two-way Left-turn Lane (TWLTL).* The TWLTL consists of a striped lane in the median of an arterial and is devised to address the special capacity and safety problems associated with high-density strip development. It can be used on 2-lane highways as well as multilane highways. Normally, the District Traffic Operations Branch should determine the need for a TWLTL.

**The minimum width for a TWLTL shall be 12 feet (see Index 301.1).** The preferred width is 14 feet. Wider TWLTL's are occasionally provided to conform with local agency standards. However, TWLTL's wider than 14 feet are not recommended, and in no case should the width of a TWLTL exceed 16 feet. Additional width may encourage drivers in opposite directions to use the TWLTL simultaneously.

### 405.3 Right-turn Channelization

- (1) *General.* For right-turning traffic, delays are less critical and conflicts less severe than for left-turning traffic. Nevertheless, right-turn lanes can be justified on the basis of capacity, analysis, and crash experience.

In rural areas a history of high speed rear-end collisions may warrant the addition of a right-turn lane.

In urban areas other factors may contribute to the need such as:

- High volumes of right-turning traffic causing backup and delay on the through lanes.
- Conflicts between crossing pedestrians and right-turning vehicles and bicycles.
- Frequent rear-end and sideswipe collisions involving right-turning vehicles.

Where right-turn channelization is proposed, lower speed right-turn lanes should be provided to reduce the likelihood of conflicts between vehicles, pedestrians, and bicyclists.

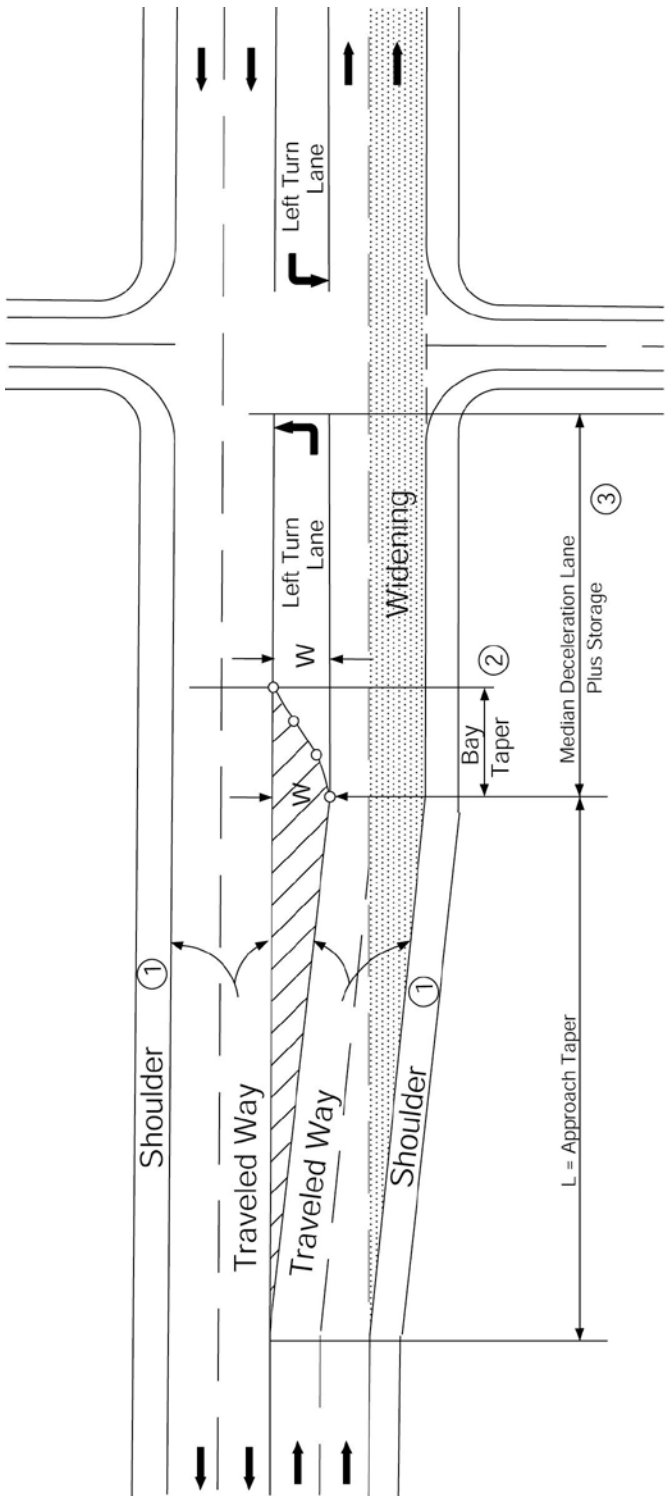
#### (2) *Design Elements.*

- (a) Lane and Shoulder Width--**Index 301.1 shall be used for right-turn lane width requirements. Shoulder width shall be a minimum of 4 feet.** Although not desirable, lane and shoulder widths less than those given above can be considered for right-turn lanes under the following conditions pursuant to Index 82.2:

- In urban, city or town centers (rural main streets) with posted speeds less than 40 miles per hour in severely constrained situations, if truck or bus use is low, consideration may be given to reducing the right-turn lane width to 10 feet.
- Shoulder widths may also be considered for reduction under constricted situations. Whenever possible, at least a 2-foot shoulder should be provided where the right-turn lane is adjacent to a curb. Entire omission of the shoulder should only be considered in constrained situations and where an 11-foot lane can be constructed.

Gutter pans can be included within a shoulder, but cannot be included as part of the travel lane width. Additional right of way for a future right-turn lane should be considered when an intersection is being designed.

Figure 405.2A  
Standard Left-turn Channelization



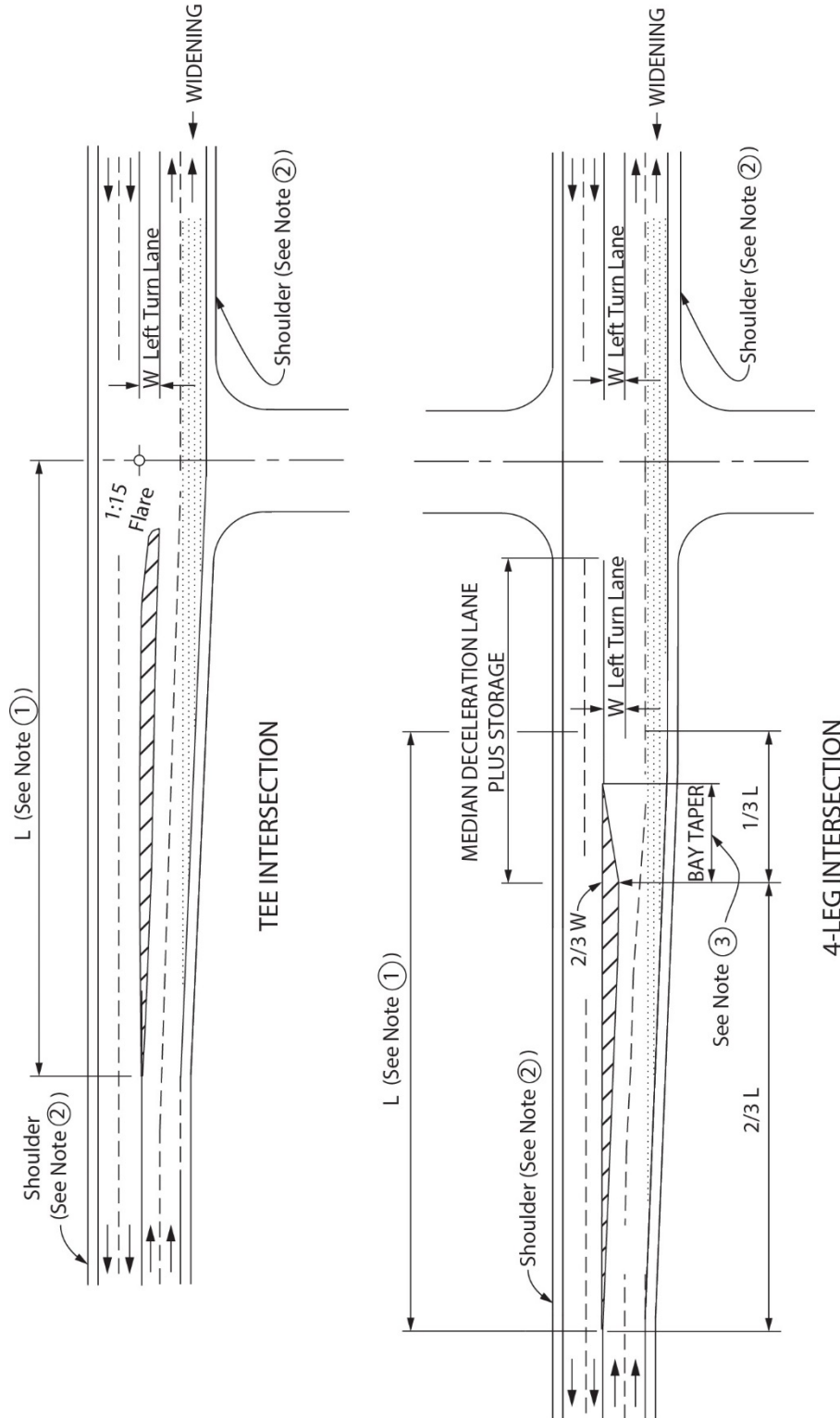
EQUATION:  $L = \text{Use } WV, \text{ for } V \geq 45 \text{ mph}$   
Or  $WV^2/60, \text{ for } V < 45 \text{ mph}$

Where  $L$  = Length of Approach Taper - feet  
 $V$  = Design Speed - mph  
 $W$  = Width of Median Lane - feet

NOTES:

- ① Where width is restricted, shoulder width may be reduced and parking restricted with an approved design exception pursuant to Index 82.2. For bicycle use, a minimum 4-foot shoulder is required (5-foot if gutter is present).
- ② Bay taper length = 60 feet to 120 feet. (See Table 405.2A)
- ③ For deceleration lane length see Table 405.2B.
- ④ Where both sides of roadway are widened, use a fraction of "W" that is proportional to widening on each side.

**Figure 405.2B**  
**Minimum Median Left-turn Channelization**  
**(Widening on one Side of Highway)**



#### NOTES:

- ① L = 500 feet Maximum
- ② Where width is restricted, shoulder width may be reduced and parking restricted with an approved design exception pursuant to Index 82.2. For bicycle use, a minimum 4-foot shoulder is required (5-foot if gutter is required)
- ③ Bay Taper Length 60 feet to 120 feet (See Table 405.2A)

#### EQUATION

Use WW, for  $V \geq 45\text{mph}$

$L =$  Or  $WW^2/60$ , for  $V < 45\text{mph}$

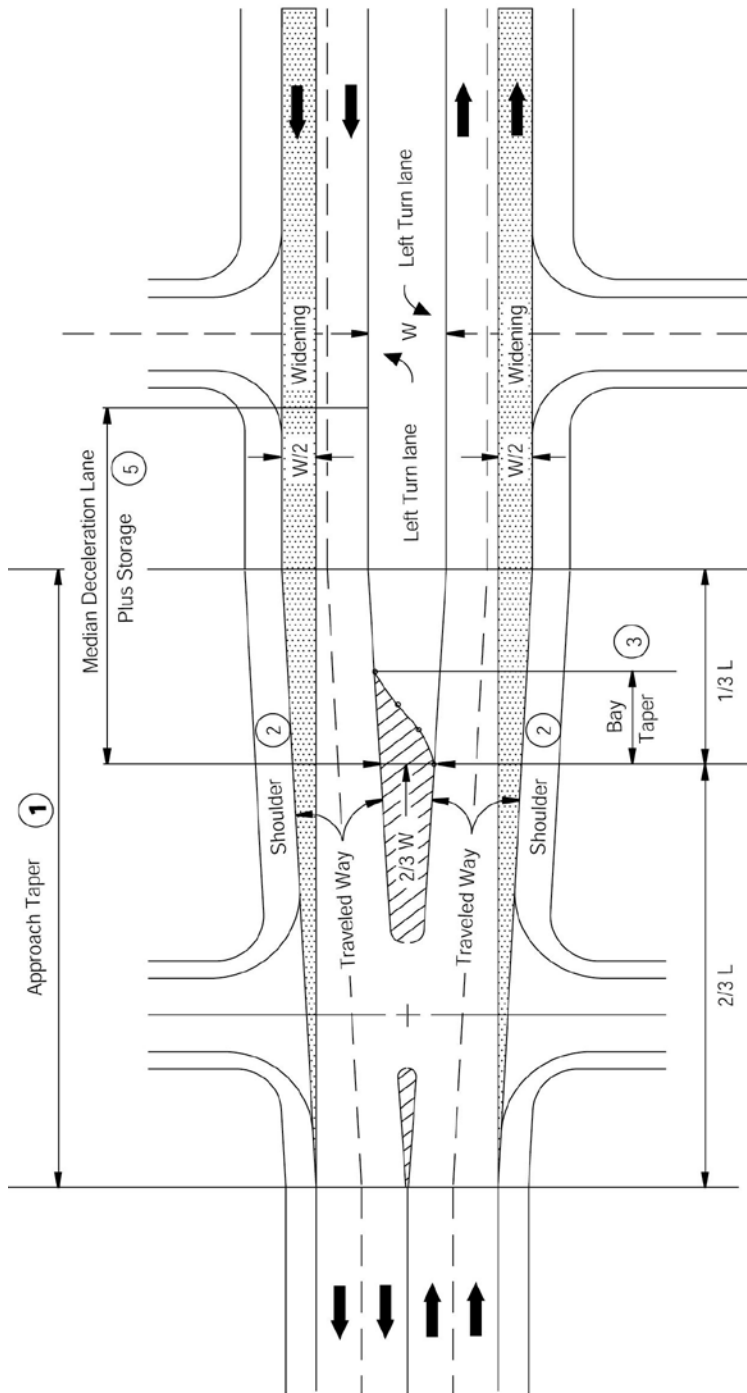
Where:

L = Length of Transition - feet

W = Width of Median Lane - feet

V = Design Speed - mph

**Figure 405.2C**  
**Minimum Median Left-turn Channelization**  
**(Widening on Both Sides in Urban Areas with Short Blocks)**



NOTES:

- ① L = 500 feet Maximum
- ② Where width is restricted, shoulder width may be reduced and parking restricted with an approved design exception pursuant to Index 82.2. For bicycle use, a minimum 4 feet shoulder is required (5 feet if gutter is present).
- ③ Bay taper length = 60 feet to 120 feet. (See Table 405.2A)
- ④ Assumes equal widening each side. Where widening is unequal, use a fraction that is proportional to widening on each side.
- ⑤ For deceleration lane length see Table 405.2B.

EQUATION: ④

$$L = \begin{cases} \text{Use } (1/2)WV, & \text{for } V \geq 45\text{mph} \\ \text{Or } WV^2/120, & \text{for } V < 45\text{mph} \end{cases}$$

Where L = Length of Approach Taper - feet

W = Width of Median Lane - feet

V = Design Speed - mph

- (b) Curve Radius--Where pedestrians are allowed to cross a free right-turning roadway, the curve radius should be such that the operating speed of vehicular traffic is no more than 20 miles per hour at the pedestrian crossing. See NCHRP Report 672, "Roundabouts: An Informational Guide" for guidance on the determination of design speed (fastest path) for turning vehicles. See Index 504.3(3) for additional information.
  - (c) Tapers--Approach tapers are usually unnecessary since main line traffic need not be shifted laterally to provide space for the right-turn lane. If, in some rare instances, a lateral shift were needed, the approach taper would use the same formula as for a left-turn lane.

Bay tapers are treated as a mirror image of the left-turn bay taper.
  - (d) Deceleration Lane Length--The conditions and principles of left-turn lane deceleration apply to right-turn deceleration. Where full deceleration is desired off the high-speed through lanes, the lengths in Table 405.2B should be used. Where partial deceleration is permitted on the through lanes because of limited right of way or other constraints, average running speeds in Table 405.2B may be reduced 10 miles per hour to 20 miles per hour for a lower entry speed. For example, if the main line speed is 50 miles per hour and a 10 miles per hour deceleration is permitted on the through lanes, the deceleration length may be that required for 40 miles per hour.
  - (e) Storage Length--Right-turn storage length is determined in the same manner as left-turn storage length. See Index 405.2(2)(e).
- (3) *Right-turn Lanes at Off-ramp Intersections.* Diamond off-ramps with a free right-turn at the local street and separate right-turn off-ramps around the outside of a loop will likely cause conflict as traffic volumes increase. Serious conflicts occur when the right-turning vehicle must weave across multiple lanes on the local street in order to turn left at a major cross street close to the ramp terminal. Furthermore, free

right-turns create sight distance issues for pedestrians and bicyclists crossing the off-ramp, or pedestrians crossing the local road. Also, rear-end collisions can occur as right-turning drivers slow down or stop waiting for a gap in local street traffic. Free right-turns usually end up with "YIELD", "STOP", or signal controls thus defeating their purpose of increasing intersection capacity.

#### 405.4 Traffic Islands

A traffic island is an area between traffic lanes for channelization of bicycle and vehicle movements or for pedestrian refuge. An island may be defined by paint, raised pavement markers, curbs, pavement edge, or other devices. The California MUTCD should be referenced when considering the placement of traffic islands at signalized and unsignalized locations. For splitter island guidance at roundabouts, see Index 405.10(13).

Traffic islands usually serve more than one function. These functions may be:

- (a) Channelization to confine specific traffic movements into definite channels;
- (b) Divisional to separate traffic moving in the same or opposite direction; and
- (c) Refuge, to aid users crossing the roadway.

Generally, islands should present the least potential conflict to approaching or crossing bicycles and vehicles, and yet perform their intended function.

- (1) *Design of Traffic Islands.* Island sizes and shapes vary from one intersection to another. They should be large enough to command attention. Channelizing islands should not be less than 50 square feet in area, preferably 75 square feet. Curbed, elongated divisional median islands should not be less than 4 feet wide and 20 feet long. All traffic islands placed in the path of a pedestrian crossing must comply with DIB 82. See the Standard Plans for typical island passageway details.

The approach end of each island should be offset 3 feet to the left and 5 feet to the right of approaching traffic, using standard 1:15 parabolic flares, and clearly delineated so that it does not surprise the motorist or bicyclist. These offsets are in addition to the shoulder

widths shown in Table 302.1. Table 405.4 gives standard parabolic flares to be used in island design. On curved alignment, parabolic flares may be omitted for small triangular traffic islands whose sides are less than 25 feet long.

The approach nose of a divisional island should be highly visible day and night with appropriate use of signs (reflectorized or illuminated) and object markers. The approach nose should be offset 3 feet from the through traffic to minimize accidental impacts.

- (2) *Delineation of Traffic Islands.* Generally, islands should present the least potential conflict to approaching traffic and yet perform their intended function. See Index 303.2 for appropriate curb type. Islands may be designated as follows:

- (a) Raised paved areas outlined by curbs.
- (b) Flush paved areas outlined by pavement markings.
- (c) Unpaved areas (small unpaved areas should be avoided).

On facilities with posted speeds over 40 miles per hour, the use of any type of curb is discouraged. Where curbs are to be used, they should be located at or outside of the shoulder edge, as discussed in Index 303.5.

In rural areas, painted channelization supplemented with raised pavement markers may be more appropriate than a raised curbed channelization. This design is as forgiving as possible and decreases the consequence of a driver's or bicyclist's failure to detect or recognize the curbed island. Consideration for snow removal operations should be determined where appropriate.

In urban areas, posted speeds less than or equal to 40 miles per hour allow more frequent use of curbed islands. Local agency requirements and matching existing conditions are factors to consider.

(3) *Pedestrian Refuge*

Pedestrian refuge islands allow pedestrians to cross fewer lanes at a time while judging conflicts separately. They also provide a refuge

so slower pedestrians can wait for a gap in traffic while reducing total crossing distance.

At unsignalized intersections in rural city/town centers (rural main streets), suburban, or urban areas, a pedestrian refuge should be provided between opposing traffic where pedestrians are allowed to cross 2 or more through traffic lanes in one direction of travel, at marked or unmarked crosswalks. Pedestrian islands at signalized crosswalks should be considered, taking into account crossing distance and pedestrian activity. Note that signalized pedestrian crossings must be timed to allow for pedestrians to cross. See the California MUTCD, Chapter 4E, for further guidance.

Traffic islands used as pedestrian refuge are to be large enough to provide a minimum of 6 feet in the direction of pedestrian travel, without exception.

All traffic islands placed in the path of a pedestrian crossing must be accessible, refer to DIB 82 and the Standard Plans for further guidance. An example of a traffic island that serves as a pedestrian refuge is shown on Figure 405.4.

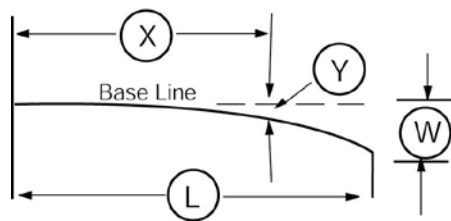
## 405.5 Median Openings

- (1) *General.* Median openings, sometimes called crossovers, provide for crossings of the median at designated locations. Except for emergency passageways in a median barrier, median openings are not allowed on urban freeways.

Median openings on expressways or divided conventional highways should not be curbed except when the median between openings is curbed, or it is necessary for delineation of traffic signal standards and other necessary hardware, or for protection of pedestrians. In these special cases B4 curbs should be used. An example of a median opening design is shown on Figure 405.5.

- (2) *Spacing and Location.* By a combination of interchange ramps and emergency passageways, provisions for access to the opposite side of a freeway may be provided for law enforcement, emergency, and maintenance vehicles to avoid extreme out-of-direction travel. Access should not be more frequent

**Table 405.4**  
**Parabolic Curb Flares Commonly Used**

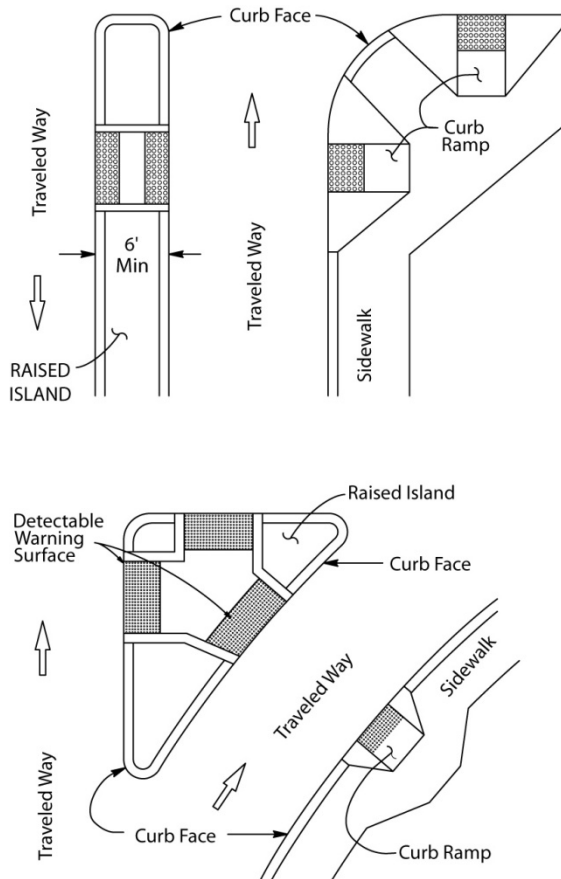


$$Y = \frac{W X^2}{L^2}$$

- (L) = Length of flare in feet  
 (W) = Maximum offset in feet  
 (X) = Distance along base line in feet  
 (Y) = Offset from base line in feet

(W) is shown in table thus  

OFFSET IN FEET FOR GIVEN "X" DISTANCE																
Distance (L) Length of Flare	(X) 10	15	20	25	30	40	45	50	60	70	75	80	90	100	110	120
<b>1:5 FLARES</b>																
25	0.80	1.80	3.20	5.00												
50	0.40		1.60		3.60	6.40		10.00								
<b>1:10 FLARES</b>																
50	0.20		0.80		1.80	3.20		5.00								
100	0.10		0.40		0.90	1.60		2.50	3.60	4.90		6.40	8.10	10.00		
<b>1:15 FLARES</b>																
45	0.15		0.59		1.33	2.37	3.00									
75	0.09		0.36		0.80	1.42		2.22	3.20	4.36	5.00					
90	0.07		0.30		0.67	1.19		1.85	2.67	3.63		4.74	6.00			
120	0.06		0.22		0.50	0.89		1.39	2.00	2.72		3.56	4.50	5.56	6.72	8.00

**Figure 405.4****Pedestrian Refuge Island**

than at three-mile intervals. See Chapter 7 of the Traffic Manual for additional information on the design of emergency passageways.

Emergency passageways should be located only where decision sight distance is available (see Table 201.7).

Median openings at close intervals on other types of highways create conflicts with high speed through traffic. Median openings should be spaced at intervals no closer than 1600 feet. If a median opening falls within 300 feet of an access opening, it should be placed opposite the access opening.

- (3) *Length of Median Opening.* For any three or four-leg intersection on a divided highway, the length of the median opening should be at least as great as the width of the crossroads pavement, median width, and shoulders. An

important factor in designing median openings is the path of the design vehicle making a minimum left turn at 5 miles per hour to 10 miles per hour. The length of median opening varies with width of median and angle of intersecting road.

Usually a median opening of 60 feet is adequate for 90 degree intersections with median widths of 22 feet or greater. When the median width is less than 22 feet, a median opening of 70 feet is needed. When the intersection angle is other than 90 degrees, the length of median opening should be established by using truck turn templates (see Index 404.3).

- (4) *Cross Slope.* The cross slope in the median opening should be limited to 5 percent. Crossovers on curves with super elevation exceeding 5 percent should be avoided. This cross slope may be exceeded when an existing 2-lane roadbed is converted to a 4-lane divided highway. The elevation of the new construction should be based on the 5 percent cross slope requirement when the existing roadbed is raised to its ultimate elevation.
- (5) *References.* For information related to the design of intersections and median openings, "A Policy on Geometric Design of Highways and Streets," AASHTO, should be consulted.

### 405.6 Access Control

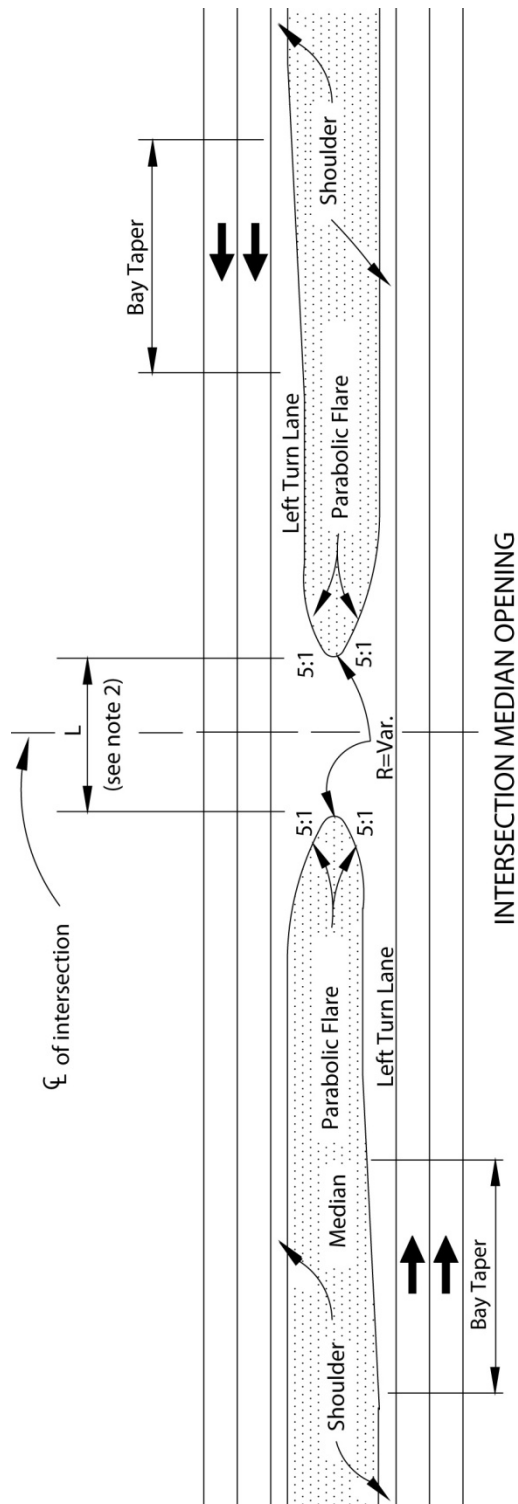
The basic guidance which govern the extent to which access rights are to be acquired at interchanges (see Topic 104, Index 205.1 and 504.8 and the PDPM) also apply to intersections at grade on expressways. Cases of access control which frequently occur at intersections are shown in Figure 405.7. This illustration does not presume to cover all situations. Where required by traffic conditions, access should be extended in order to ensure proper operation of the expressway lanes. Reasonable variations which observe the basic principles referred to above are acceptable.

However, negative impacts on the mobility needs of pedestrians, bicyclists, equestrians, and transit users need to be assessed. Pedestrians and bicyclists are sensitive to additional out of direction travel.



Figure 405.5

## Typical Design for Median Openings



## NOTES:

- ① For length of bay taper, see Table 405.2A.
- ②  $L$  = Length of median opening: varies with width of median and angle of intersecting road. Usually for  $90^\circ$  intersection,  $L = 60$  feet for median of 22 feet and wider.  $L = 70$  feet for medians narrower than 22 feet.
- ③ See Index 405.2.
- ④ Pedestrian and bicycle features are not shown on figure.

### 405.7 Public Road Intersections

The basic design to be used at right-angle public road intersections on the State Highway System is shown in Figure 405.7. The essential elements are sight distance (see Index 405.1) and the treatment of the right-turn on and off the main highway. Encroachment into opposing traffic lanes by the turning vehicle should be avoided or minimized.

- (1) *Right-turn Onto the Main Highway.* The combination of a circular curve joined by a 2:1 taper on the crossroads and a 75-foot taper on the main highway is designed to fit the wheel paths of the appropriate turning template chosen by the designer.

It is desirable to keep the right-turn as tight as practical, so the “STOP” or “YIELD” sign on the minor leg can be placed close to the intersection.

- (2) *Right-turn Off the Main Highway.* The combination of a circular curve joined by a 150-foot taper on the main highway and a 4:1 taper on the crossroads is designed to fit the wheel paths of the appropriate turning template and to move the rear of the vehicle off the main highway. Deceleration and storage lanes may be provided when necessary (see Index 405.3).

- (3) *Alternate Designs.* Offsets are given in Figure 405.7 for right angle intersections. For skew angles, roadway curvature, and possibly other reasons, variations to the right-angle design are permitted, but the basic rule is still to approximate the wheel paths of the design vehicle.

A three-center curve is an alternate treatment that may be used at the discretion of the designer.

Intersections are major consideration in bicycle path design as well. See Indexes 403.6 and 1003.1(4) for general bicycle path intersection design guidance. Also see Section 5.3 of the AASHTO Guide for the Planning, Design, and Operation of Bicycle Facilities.

### 405.8 City Street Returns and Corner Radii

The pavement width and corner radius at city street intersections is determined by the type of vehicle to

be accommodated and the mobility needs of pedestrians and bicyclists, taking into consideration the amount of available right of way, the types of adjoining land uses, the place types, the roadway width, and the number of lanes on the intersecting street.

At urban intersections, the California truck or the Bus Design Vehicle template may be used to determine the corner radius. Where STAA truck access is allowed, the STAA Design Vehicle template should be used giving consideration to factors mentioned above. See Index 404.3.

Smaller radii of 15 feet to 25 feet are appropriate at minor cross streets where few trucks or buses are turning. Local agency standards may be appropriate in urban and suburban areas.

Encroachment into opposing traffic lanes must be avoided.

### 405.9 Widening of 2-lane Roads at Signalized Intersections

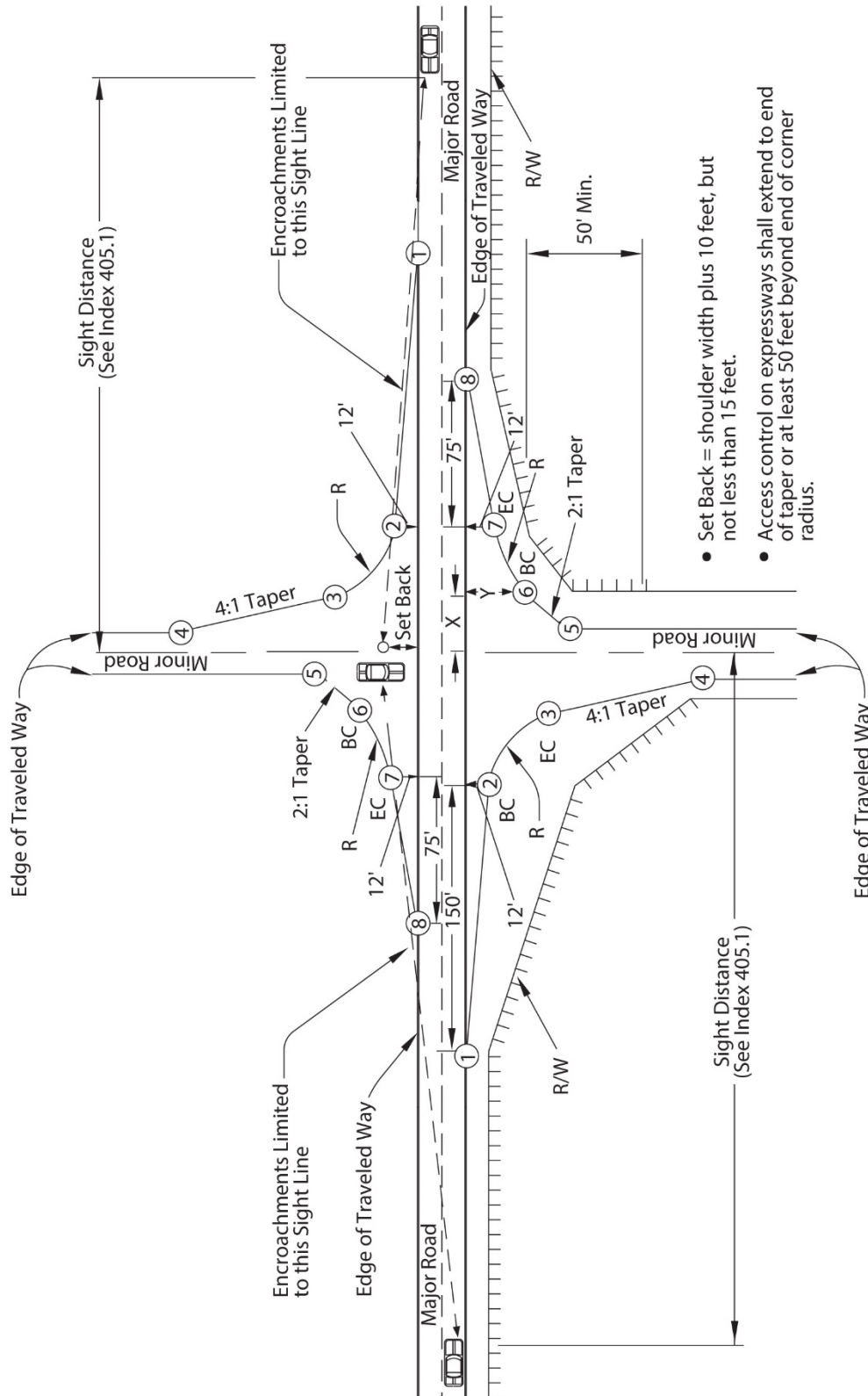
Two-lane State highways may be widened at intersections to 4-lanes whenever signals are installed. Sometimes it may be necessary to widen the intersecting road. The minimum design is shown in Figure 405.9. More elaborate treatment may be warranted by the volume and pattern of traffic movements. Unusual turning movement patterns may possibly call for a different shape of widening.

The impact on pedestrian and bicycle traffic mobility of larger intersections should be assessed before a decision is made to widen an intersection.

### 405.10 Roundabouts

Roundabout intersections on the State highway system must be developed and evaluated in accordance with National Cooperative Highway Research Program (NCHRP) Report 672 entitled “Roundabouts: An Informational Guide, 2nd ed.” (NCHRP Guide 2) dated October 2010 and Traffic Operations Policy Directive (TOPD) Number 13-02. Also see Index 401.5 for general information and guidance. See Figure 405.10 Roundabout Geometric Elements for nomenclature associated with roundabouts. Signs, striping and markings at roundabouts are to comply with the California MUTCD.

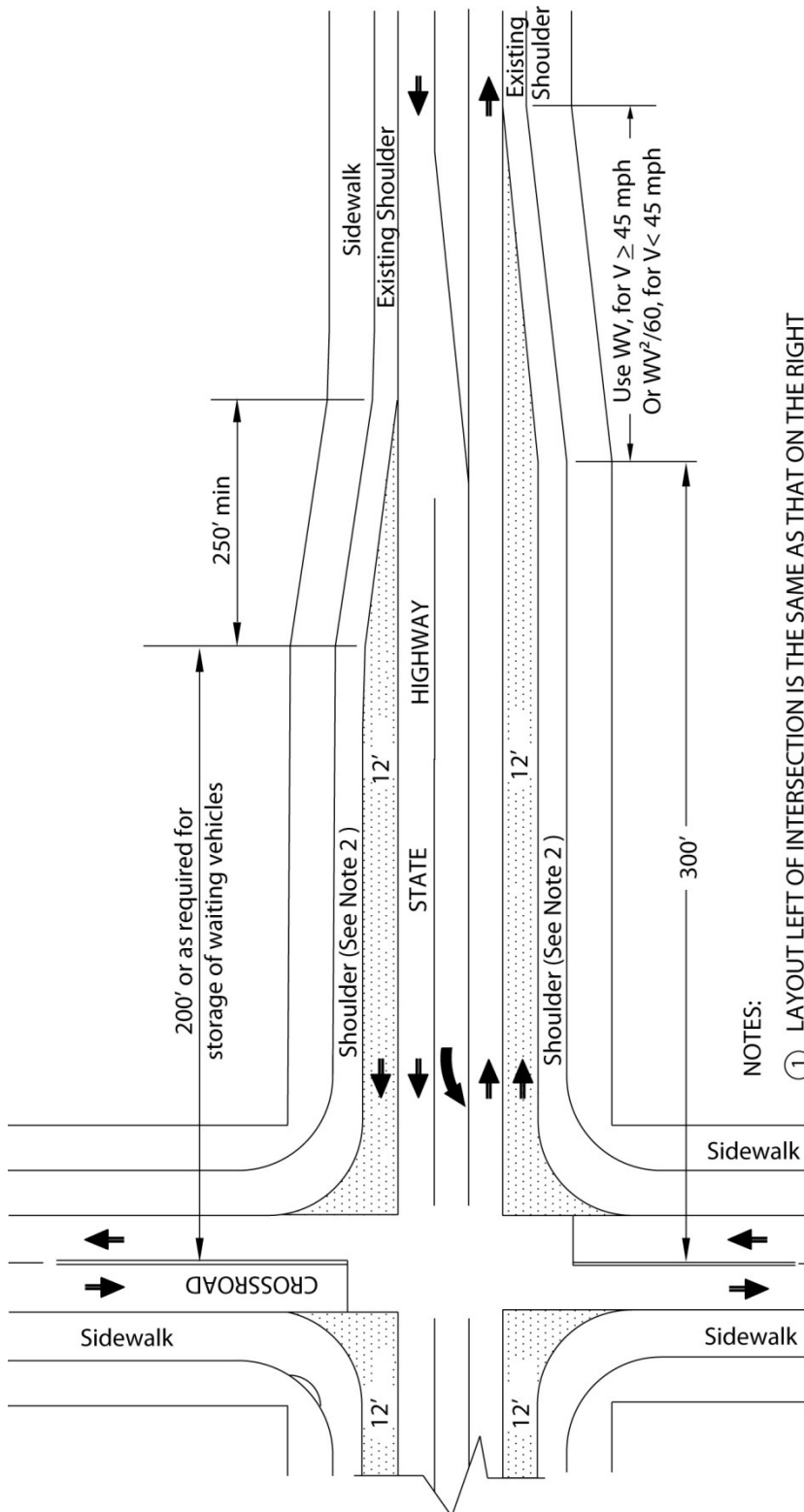
**Figure 405.7**  
**Public Road Intersections**



X - Distance measured from centerline of minor road along major road - feet.  
Y - Offset distance measured from edge of traveled way of major road to any given point - feet.

Radius of Curve	Design Vehicle	Pt ①		Pt ②		Pt ③		Pt ④		Pt ⑤		Pt ⑥		Pt ⑦		Pt ⑧	
		X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
30'	Bus	204.20	0.0	54.20	12.0	27.49	34.63	12.0	96.58	12.0	40.66	18.23	28.21	40.32	12.0	115.32	0.0
40'	California	215.08	0.0	65.08	12.0	29.46	42.17	12.0	112.03	12.0	53.35	21.87	33.61	51.33	12.0	126.33	0.0
50'	STAA	226.09	0.0	76.09	12.0	31.57	49.71	12.0	127.98	12.0	75.63	30.31	39.01	67.13	12.0	142.13	0.0

**Figure 405.9**  
**Widening of Two-lane Roads at Signalized Intersections**



**NOTES:**

- ① LAYOUT LEFT OF INTERSECTION IS THE SAME AS THAT ON THE RIGHT
- ② WHERE WIDTH IS RESTRICTED SHOULDER WIDTH MAY BE REDUCED AND PARKING RESTRICTED WITH AN APPROVED DESIGN EXCEPTION PURSUANT TO INDEX 82.2.
- ③ FOR BICYCLE USE IN RURAL AREAS NON MAIN STREET PLACE TYPES, THE BIKE LANE IN THIS FIGURE IS PART OF THE SHOULDER. SEE INDEX 302.1 FOR FURTHER GUIDANCE.
- ④ CURB RAMPS NOT SHOWN. CURB RAMPS ARE TO BE PROVIDED PER DIB 82.

WIDENING

A roundabout is a form of circular intersection in which traffic travels counterclockwise around a central island and entering traffic must yield to the circulating traffic. Roundabouts feature, among other things, a central island, a circulatory roadway, and splitter islands on each approach. Roundabouts rely upon two basic and important operating principles:

- (a) Speed reduction at the entry and through the intersection will be achieved through geometric design and,
- (b) The yield-at-entry rule, which requires traffic entering the intersection to yield to traffic that is traveling in the circulatory roadway.

Benefits of roundabouts are:

- Fewer conflict points typically result in fewer collisions with less severity. Over half of vehicle to vehicle points of conflict associated with intersections are eliminated with the use of a roundabout. Additionally, a roundabout separates the points of conflict which eases the ability of the users to identify a conflict and helps prevent conflicts from becoming collisions.
- Roundabouts are designed to reduce the vehicular speeds at intersections. Lower speeds lessens the vehicular collision severity. Likewise, studies indicate that pedestrian and bicyclist collisions with motorized vehicles at lower speeds significantly reduce their severity.
- Roundabouts allow continuous free flow of vehicles and bicycles when no conflicts exist. This results in less noise and air pollution and reduces overall delays at roundabout intersections.

Except as indicated in this Index, the standards elsewhere in this manual do not apply to roundabouts. For the application of design standards, the approach ends of the splitter islands define the boundary of a roundabout intersection, see Figure 405.10. The design standards elsewhere in this manual apply to the approach legs beyond the approach ends of the splitter islands.

*(1) Design Period.*

First consider the design of a single lane roundabout per the design period guidance in

Index 103.2. If a second lane is not needed until 10 or more years, it may be better to phase the improvements. Construct the first phase of the roundabout so at the 20-year design period, an additional lane can be easily added. In order to comply with the 10-year design period guidance provided in Index 103.2, the initial project must provide the right of way needed for utility relocations, a shared-use path designed for a Class I Bikeway, and all other features other than pavement, lighting, and striping in their ultimate locations.

In some locations, it may not be practical to build a single lane roundabout that will operate for 10 years. Geometric constraints and other conflicts may preclude widening to the ultimate configuration. In such cases, other intersection configurations or control strategies addressed in Index 401.5 may need to be considered.

When staging improvements, see NCHRP Guide 2, Section 6.12.

*(2) Design Vehicles - See Topic 404.*

The turning path for the design vehicle, see Index 404.5, dictates many of the roundabout dimensions. The design vehicle tracking and swept width are to be used when designing all the entries and exits, where design vehicles are unrestricted (see Index 404.2), and the circulatory roadway. The percentage of trucks and their lane utilization is an important consideration on multilane roundabouts when determining if the design will allow trucks to stay within their own lane or encroach into the adjacent lane. If permit vehicles larger than the design vehicle occasionally use the proposed roundabout, they can be accommodated by having removable signs or other removable features in the central island or around the circular path to ensure their swept path can negotiate the roundabout. Roundabouts should not be overdesigned for the occasional permit vehicle.

To accurately simulate the design vehicle swept width traveling through a roundabout, the minimum speed of the design vehicle used in computer simulation software (e.g., Auto

TURN) should be 10 mph through the roundabout.

(3) *Inscribed Circle Diameter.*

At single lane roundabouts, the size of the inscribed circle is largely dependent upon the turning requirements of the design vehicle. The inscribed circle diameter must be large enough to accommodate: (a) the STAA design vehicle for all roundabouts on the National Network and on Terminal Access routes; and, (b) the California Legal design vehicle on all non-STAA route intersections on California Legal routes and California Legal KPRA Advisory routes, while maintaining adequate deflection curvature to ensure appropriate travel speeds for smaller vehicles. The design vehicle is to navigate the roundabout with the front tractor wheels off the truck apron, if one is present. Transit vehicles, fire engines and single-unit delivery vehicles are also to be able to navigate the roundabout without using the truck apron, if one is present. The inscribed circle diameter for a single lane roundabout generally ranges between 105 feet to 150 feet to accommodate the California Legal design vehicle and 130 feet to 180 feet to accommodate the STAA design vehicle.

At multilane roundabouts, the inscribed circle diameter is to achieve adequate alignment of the natural vehicle path while maintaining deflection curvature to ensure appropriate travel speeds. To achieve both of these design objectives requires a slightly larger diameter than used for a single lane roundabout. The inscribed circle diameter for a multilane (2-lane) roundabout generally ranges between 150 feet to 220 feet to accommodate the California Legal design vehicle for non-STAA route intersections on California Legal routes and California Legal KPRA Advisory routes, and 165 feet to 220 feet to accommodate the STAA design vehicle for roundabouts on the National Network and on Terminal Access routes. Similar to a single lane roundabout, the design vehicle is to be able to navigate a multilane roundabout with the front tractor wheels staying off the truck apron, if one is present. Transit vehicles, fire engines and single-unit delivery vehicles are also to be

able to navigate the roundabout without using the truck apron, if one is present.

(4) *Entry Speeds.*

Lowering the speed of vehicles entering and traveling through the roundabout is a primary design objective that is achieved by approach alignment and entry geometry.

The following entry speeds should not be exceeded:

- Single lane roundabouts, 25 mph.
- Multilane roundabouts, 30 mph.

For fastest path evaluation, see NCHRP Guide 2, Section 6.7.1.

(5) *Exit Design.*

Similar to entry design, exit design flexibility is required to achieve the optimal balance between competing design variables and project objectives to provide adequate capacity and, essentially, safety while minimizing excessive property impacts and costs. Thus, the selection of a curved versus tangential design is to be based upon the balance of each of these criteria. Exit design is influenced by the place type, pedestrian demand, bicyclist needs, the design vehicle and physical constraints. The exit curb radii are usually larger than the entry curb radii in order to minimize the likelihood of congestion and crashes at the exits. However, the desire to minimize congestion at the exits needs to be balanced with the need to maintain an appropriate operating speed through the pedestrian crossing. Therefore, the exit path radius should not be significantly greater than the circulating path radius to ensure low speeds are maintained at the pedestrian crossing.

(6) *Number of Legs Serving the Roundabout.*

Intersections with more than four legs are often difficult to manage operationally. Roundabouts are a proven traffic control device in such situations. However, it is necessary to ensure that the design vehicle can maneuver through all unrestricted legs of the roundabout.

(7) *Pedestrian Use.*

Sidewalks around the circular roadway are to be designed as shared-use paths, see Index 405.10(8)(c). However, the guidance in Design Information Bulletin (DIB) 82 Pedestrian Accessibility Guidelines for Highway Projects must also be followed when designing these shared-use facilities around a roundabout. If there is a difference in the standards, the guidance in DIB 82 is to be followed. In addition,

- (a) Pedestrian curb ramps need to be differentiated from bike ramps:
  - The detectable warning surface (truncated domes) differentiates a pedestrian curb ramp from a bicycle ramp.
  - Detectable warning surface is required on curb ramps. They are not to be used on a bike ramp.
- (b) Truck aprons and mountable curbs are not to be placed in the pedestrian crossing areas.
- (c) See the California MUTCD for the signs and markings used at roundabouts.

(8) *Bicyclist Use.*

- (a) General. Bicyclists may choose to travel in the circular roadway of a roundabout by taking a lane, while others may decide to travel using the shared-use path to bypass the circular roadway. Therefore, the approach and circular roadways, as well as the shared-use path all need to be designed for the mobility needs of bicyclists. See the California MUTCD for the signs and markings used at roundabouts.
- (b) Bicyclist Use of the Circular Roadway. Single lane roundabouts do not require bicyclists to change lanes in the circular roadway to select the appropriate lane for their direction of travel, so they tend to be comfortable for bicyclists to use. Even two-lane roundabouts, which may have straighter paths of travel that can lead to faster vehicular traveling speeds, appear

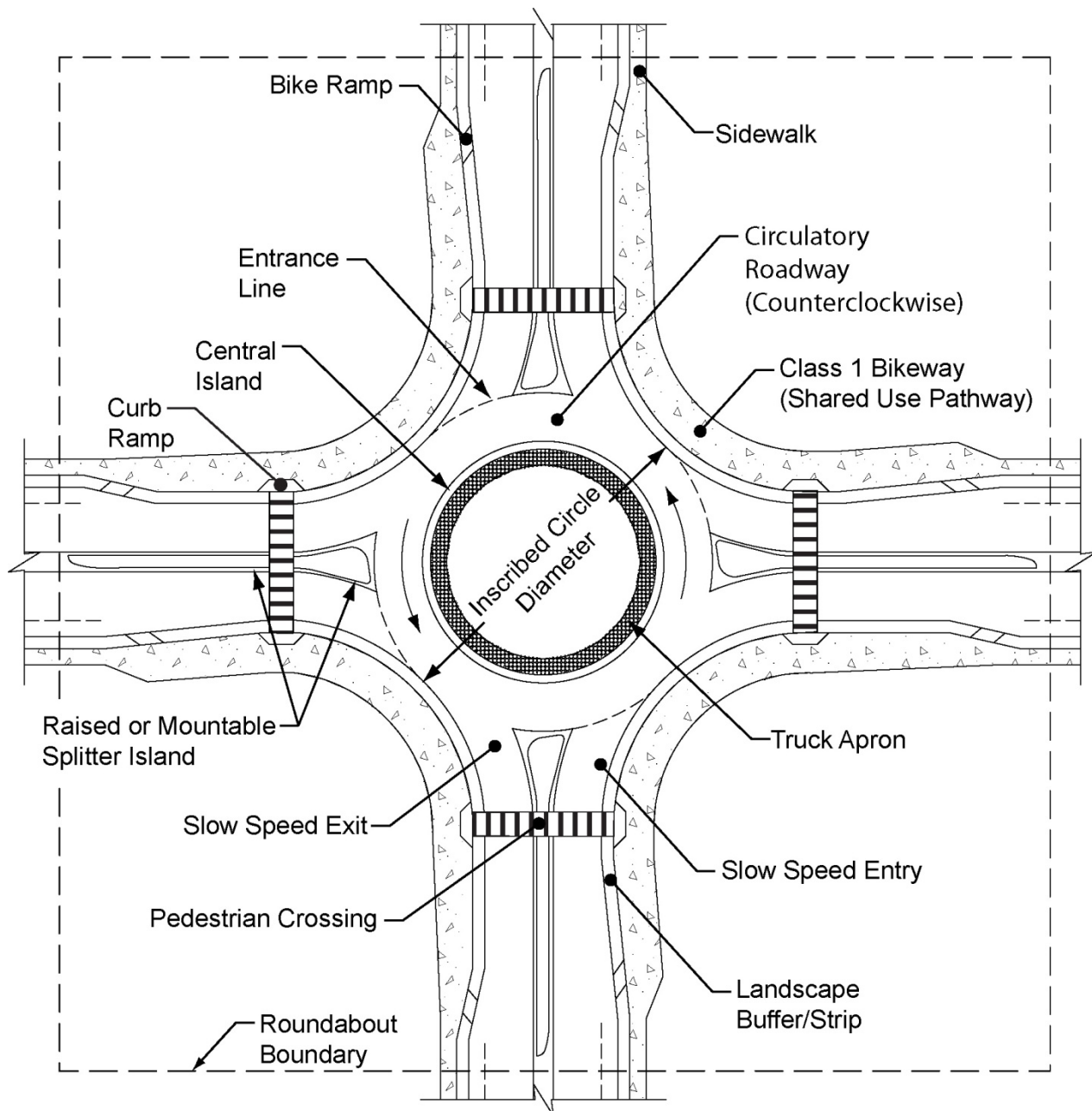
to be comfortable for bicyclists that prefer to travel like vehicles. Roundabouts that have more than two circular lanes can create complexities in signing and striping (see the California MUTCD for guidance), and their operating speed may cause some bicyclists to decide to bypass the circular roadway and use the bicycle ramp that provides access to the shared-use path around the roundabout.

- (c) Bicyclists Use of the Shared-Use Path. The shared-use path is to be designed using the guidance in Index 1003.1 for Class I Bikeways and in NCHRP Guide 2 Section 6.8.2.2. However, the accessibility guidance in DIB 82 must also be followed when designing these shared-use facilities around a roundabout. If there is a difference in the standards, the accessibility guidance in DIB 82 is to be followed to ensure the facility is accessible to pedestrians with disabilities.

Bicycle ramps are to be located to avoid confusion as curb ramps for pedestrians. Also see Index 405.10(7) for guidance on how to differentiate the two types of ramps. The design details and width of the ramp are also important to the bicyclist. Bicyclists approaching the bicycle ramp need to be provided the choice of merging left into the lane or moving right to use the bicycle ramp. Bicycle ramps should be placed at a 35 to 45 degree angle to the departure roadway and the sidewalk to enable the bicyclists to use the ramp and discourage bicyclists from entering the shared-use path at a speed that is detrimental to the pedestrians. The shared-use path should be designated as Class I Bikeways; however, appropriate regulatory signs may need to be posted if the local jurisdiction has a law(s) that prohibit bicyclists from riding on a sidewalk.

A landscape buffer or strip between the shared-use/Class I Bikeway and the circular roadway of the roundabout is needed and should be a minimum of 2 feet wide.

**Figure 405.10**  
**Roundabout Geometric Elements**



**NOTE:**

This figure is provided to only show nomenclature and is not to be used for design details.



Pedestrian crossings may also be used by bicyclists; thus, these shared-use crossings need to be designed for both bicyclist and pedestrian needs.

(9) *Transit Use.*

Transit vehicles and buses will not have difficulty negotiating a roundabout when it has been designed using the California Legal design vehicle or the STAA design vehicle. However, to minimize passenger discomfort, a roundabout should be designed such that the transit vehicle or bus does not use the truck apron, if one is present.

(10) *Stopping Sight Distance and Visibility.*

See Index 201.1 for stopping sight distance guidance at roundabouts.

It is desirable to create a domed or mounded central island, between 3.5 to 6 feet high, to focus attention on the approach and through roundabout alignment. A domed central island provides a visual screen from downstream alignment and other distractions.

(11) *Speed Consistency.*

Consistency in operating speeds between the various movements within the roundabout can minimize collisions between traffic streams. The operating speeds between competing traffic streams and between consecutive geometric elements should be minimized such that the maximum speed differential between them is no more than 15 mph; it is preferred that the operating speed differential be less than 10 mph.

(12) *Path Alignment (Natural Path).*

As two traffic streams approach the roundabout in adjacent lanes, drivers and bicyclists will be guided by lane markings up to the entrance line. At the yield point, they will continue along their natural trajectory into the circulatory roadway. The speed and orientation of the design vehicle at the entrance line determines what can be described as its natural path. The geometry of the exits also affects the natural path that the design vehicle travels. The natural path of two

vehicles are not to overlap, see NCHRP Guide 2, Section 6.7.2.

(13) *Splitter Islands.*

Splitter islands (also called separator islands, divisional islands, or median islands) will be provided on all roundabouts. The purpose is to provide refuge for pedestrians, assist in controlling speeds, guide traffic into the roundabout, physically separate entering and exiting traffic streams, and deter wrongway movements.

The total length of the raised island should be at least 50 feet although 100 feet is desirable. On higher speed roadways, splitter island lengths of 150 feet or more is beneficial. Additionally, the splitter island should extend beyond the end of the exit curve to prevent exiting traffic from crossing into the path of approaching traffic. The splitter island width should be a minimum of 6 feet at the pedestrian crossing to adequately provide refuge for pedestrians.

Posted speeds on the approach roadway greater than or equal to 45 mph require the splitter island length, as measured from the inscribed circle diameter, to be 200 feet. In some instances, a longer splitter island may be desirable. Concrete curb is to be provided on the right side of the approach roadway equal to the length of the splitter island from the inscribed circle diameter.

(14) *Access Control.*

The access control standards in Index 504.3(3) and 504.8 apply to roundabouts at interchange ramp intersections. The dimensions shown in Index 504.8 are to be measured from the inscribed circle diameter.

Driveways should not be placed within 100 feet from the inscribed circle diameter.

(15) *Lighting.*

Lighting is required at all roundabouts. See the Traffic Manual Chapter 9 as well as consult with the District Traffic Operations Branch.

*(16) Landscaping.*

Landscaping should be designed such that drivers and bicyclists can observe the signing and shape of the roundabout as they approach, allowing adequate visibility for making decisions within the roundabout. The landscaping of the central island can enhance the intersection by making it a focal point, by promoting lower speeds and by breaking the headlight glare of oncoming vehicles or bicycles. It is desirable to create a domed or mounded central island, between 3.5 to 6 feet high, to increase the visibility of the intersection on the approach. Contact the District Landscape Architecture Unit to provide technical assistance in designing the roundabout landscaping.

*(17) Vertical Clearance.*

The vertical clearance guidance provided in Index 309.2 applies to roundabouts.

*(18) Drainage Design.*

See Chapter 800 to 890 for further guidance.

*(19) Maintenance.*

In climate regions where snowfall occurs and the use of snow removal equipment is necessary, consider tapering the approach ends of curbs. Contact the District Maintenance Engineer and appropriate Regional Manager for maintenance strategies and practices including seasonal operations, maintenance resources, and specialized equipment. Special equipment or procedures may be needed. Maintenance responsibilities may also include multiple state, county, and city agencies where coordination of maintenance efforts and funding is needed.

- (a) Ramp Intersection Analysis--For the typical local street interchange there is usually a critical intersection of a ramp and the crossroads that establishes the capacity of the interchange. The capacity of a point where lanes of traffic intersect is 1500 vehicles per hour. This is expressed as intersecting lane vehicles per hour (ILV/hr). Table 406 gives values of ILV/hr for various traffic flow conditions.

If a single-lane approach at a normal intersection has a demand volume of 1000 vph, for example, then the intersecting single-lane approach volume cannot exceed 500 vph without delay.

The three examples that follow illustrate the simplicity of analyzing ramp intersections using this 1500 ILV/hr concept.

- (b) Diamond Interchange--The critical intersection of a diamond type interchange must accommodate demands of three conflicting travel paths. As traffic volumes approach capacity, signalization will be needed. For the spread diamond (Figure 406A), basic capacity analysis is made on the assumption that 3-phase signalization is employed. For the tight diamond (Figure 406B), it is assumed that 4-phase signal timing is used.
- (c) 2 Quadrant Cloverleaf--Because this interchange design (Figure 406C) permits 2-phase signalization, it will have higher capacities on the approach roadways. The critical intersection is shared two ways instead of three ways as in the diamond case.

## Topic 406 - Ramp Intersection Capacity Analysis

The following procedure for ramp intersection analysis may be used to estimate the capacity of any signalized intersection where the phasing is relatively simple. It is useful in analyzing the need for additional turning and through traffic lanes. For a more complete analysis refer to the Highway Capacity Manual.

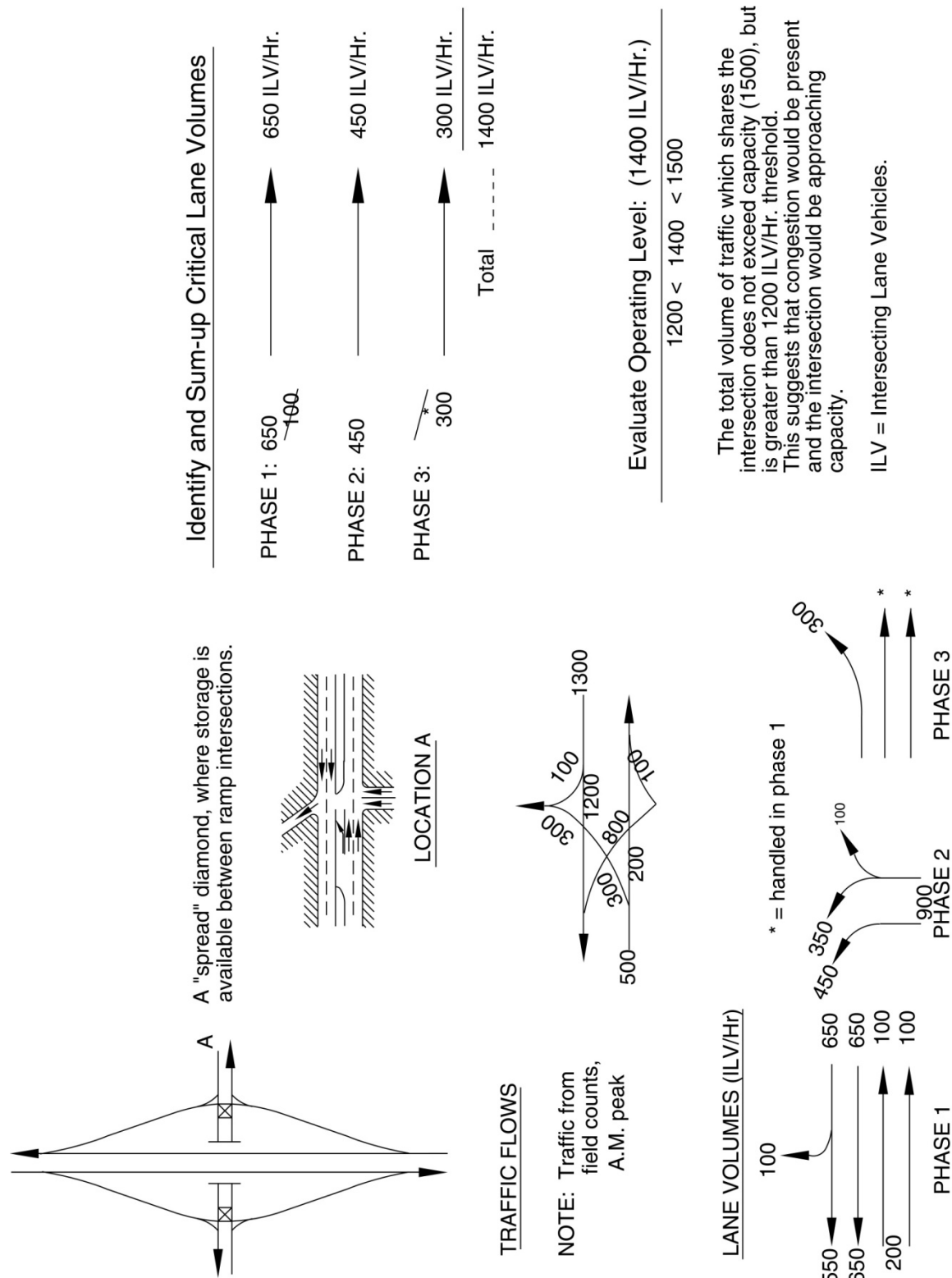
**Table 406****Vehicle Traffic Flow Conditions at Intersections at Various Levels of Operation**

<i>ILV/hr</i>	Description
<hr/>	
<i>&lt; 1200:</i>	
	Stable flow with slight, but acceptable delay. Occasional signal loading may develop. Free midblock operations.
<hr/>	
<i>1200-1500:</i>	
	Unstable flow with considerable delays possible. Some vehicles occasionally wait two or more cycles to pass through the intersection. Continuous backup occurs on some approaches.
<hr/>	
<i>1500 (Capacity):</i>	
	Stop-and-go operation with severe delay and heavy congestion <sup>(1)</sup> . Traffic volume is limited by maximum discharge rates of each phase. Continuous backup in varying degrees occurs on all approaches. Where downstream capacity is restrictive, mainline congestion can impede orderly discharge through the intersection.

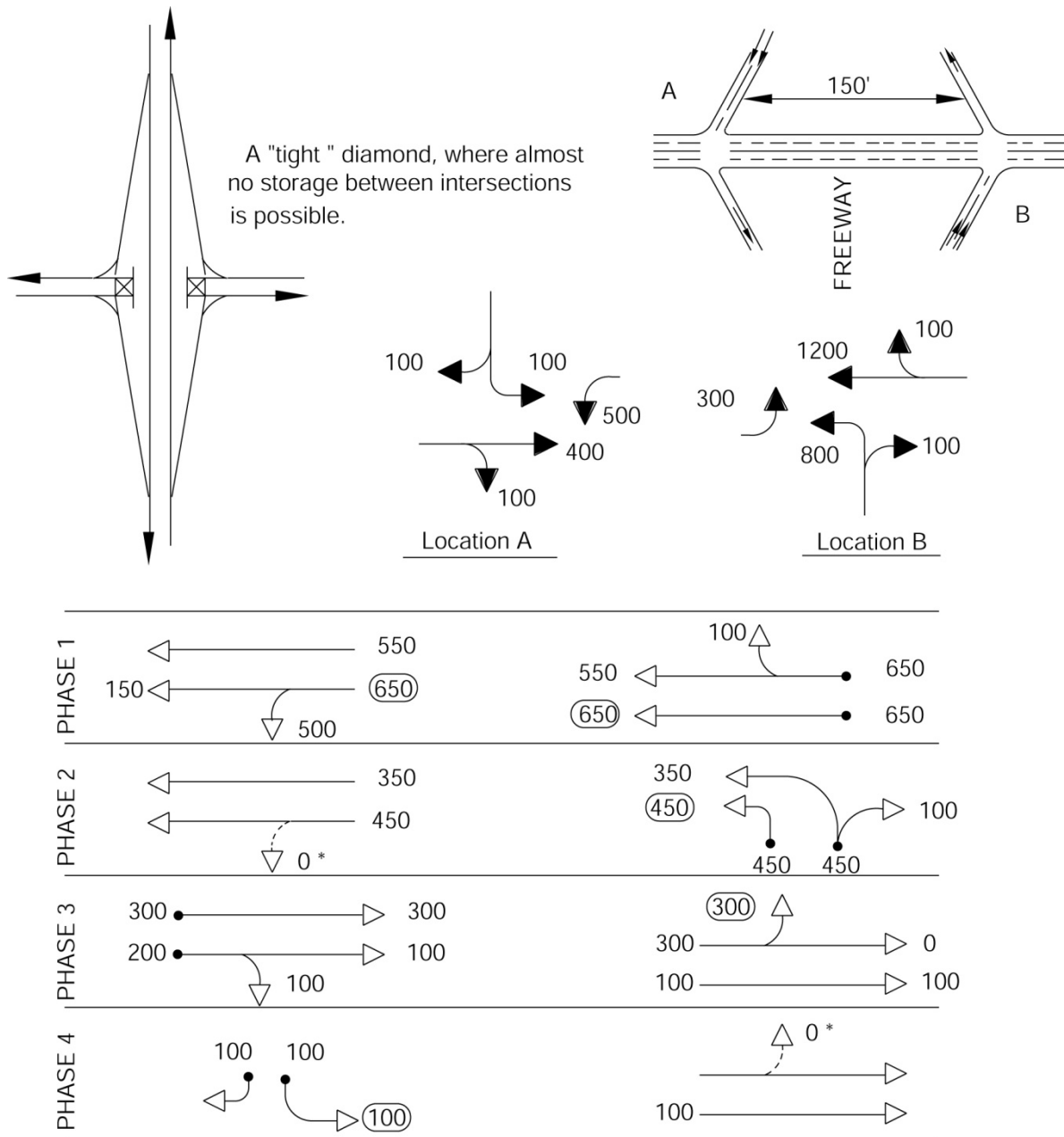
**NOTE:**

- (1) The amount of congestion depends on how much the ILV/hr value exceeds 1500. Observed flow rates will normally not exceed 1500 ILV/hr, and the excess will be delayed in a queue.

Figure 406A  
Spread Diamond



**Figure 406B  
Tight Diamond**



\*NOTE: When no storage at all is permitted, left-turn movement is cleared during this phase.

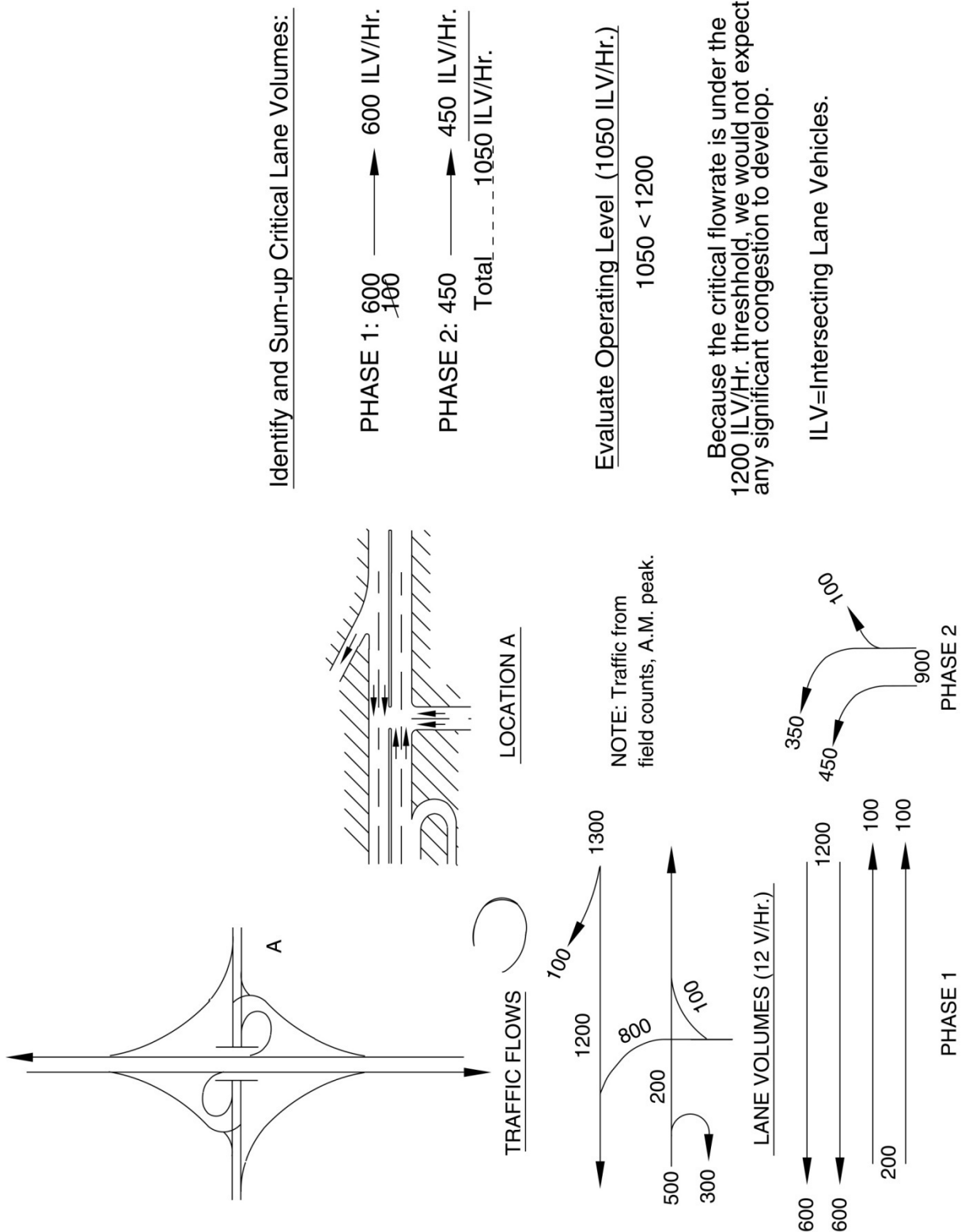
Critical Lane Volumes:

650  
450  
300  
100

ILV=Intersecting Lane Vehicles.

1500 ILV/Hr.

**Figure 406C**  
**Two-quadrant Cloverleaf**



**HAMPTON INN & SUITES  
REPORT OF WASTE DISCHARGE  
TECHNICAL REPORT**

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**WASTEWATER TREATMENT SYSTEM  
FOR THE PROPOSED**

**HAMPTON INN & SUITES**

**40758 SIERRA DRIVE, THREE RIVERS, CALIFORNIA 93271  
APN #068-100-010 and #068-080-010**

**Prepared by ALD GENERAL ENGINEERING, INC.**

**September 8, 2020**

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## **1.0 BACKGROUND**

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### ***1.1 INTRODUCTION***

This report is prepared pursuant to the guidance in State Water Resources Control Board Order WQ 2014-0153-DWQ, Attachment B-1.

This report provides details for the proposed Hampton Inn Hotel and future service station, market, and subway, or equivalent, onsite wastewater treatment system in Three Rivers, California (See Appendix B for Vicinity Map and Site Plan).

The project is comprised of two undeveloped parcels (APN# 068-080-010<sup>1</sup> and 068-100-010<sup>2</sup>) that cumulatively comprise 4.39 acres and are located at 40758 Sierra Drive in Three Rivers, California<sup>3</sup>. The site is located on the east side of Highway 198 about 1.2 miles south of Three Rivers in Tulare County, California (See Appendix B for Vicinity Map and Site Plan). These properties are owned by Satwant Sanghera. The proposed development of the aforementioned parcels has site limitations (e.g. setbacks to wells, available space) that require the installation of a single wastewater system for the two parcels.

The proposed Hampton Inn Hotel (APN #068-080-010) is a 105-room hotel (185 beds) that will provide lodging for the traveling public. The calculated total average monthly influent rate for the hotel is 13,725 gpd. The future Commercial Development on frontage lot (APN #068-100-010) includes a service station with 3 pump islands<sup>4</sup> and a market, and Subway restaurant, or equivalent<sup>5</sup>. The calculated total average monthly influent rate for the future development of the frontage lot, based on uses identified by the client, is 3,420 gpd. The cumulative anticipated flow is 17,145 gallons per day. The proposed facilities will be located at the site shown in Appendix B.

The proposed wastewater treatment facility will be constructed in two phases. Phase I will include all wastewater treatment facilities, with the exception of the STEP tank (septic tank with effluent pump) independently sized for the future commercial development of the frontage. The STEP tank is the sole component for Phase II (See Appendix B for Site Plan and Figure 1 for visualization of Phase I and II).

### ***1.2 FACILITY DESCRIPTION – GENERAL OVERVIEW***

The proposed wastewater treatment facility is a media bed filtration system (Orenco AX-MAX system) with disinfection (ultraviolet treatment process), producing tertiary treated water which is discharged to the proposed subsurface drip field. The system is designed with the capability to treat a maximum flow of 17,145 gallons per day. The system will run 24 hours a day over 365 days a year.

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<sup>1</sup> 2.81 acres

<sup>2</sup> 1.58 acres

<sup>3</sup> Section 26, Township 17 South, Range 28 East, Mount Diablo Base and Meridian.

<sup>4</sup> 2 multi-pump dispensers per island

<sup>5</sup> Or equivalent type of restaurant with limited/minimal amounts of FOG (Fats, Oils, and Grease). Cumulative Grease and Oil contribution to the advanced treatment unit below 25 mg/L.

## 2.0 WASTEWATER TREATMENT FACILITY

---

### 2.1 DOMESTIC WASTEWATER CHARACTERIZATION (UNTREATED WASTEWATER)

Wastewater will be generated at the proposed hotel by domestic sources that include: sinks, toilets, showers, laundry, and limited food preparation and associated dish washing/dish washer. The proposed hotel will serve breakfast, which consists of reheating prepackaged food in their food prep area and washing of cook wear used in the reheating process. All dinnerware and flatware will be disposable.

Wastewater will be generated at the future development of the frontage lot (service station and market, and Subway restaurant) primarily via a public restroom (e.g. sinks, toilets) and limited food production for a Subway Restaurant, or equivalent.

#### 2.1.1 Anticipated Flow Rates

The anticipated domestic wastewater flow rates for the proposed uses is 17,145 gallons per day (Qmax) (see Table 1 for summary) (See Table 2 and 3 for details), based on estimated waste / sewage flow rates from the 2019 California Plumbing Code (CPC Table H 201.1(4)).

**Table 1** Summary of Anticipated Flows.

Facility	Flow Rates
Hotel	13,725 gpd
Frontage Lot – Future Commercial Development	3,420 gpd
<b>TOTAL</b>	<b>17,145 gpd</b>

#### *Hotel Flow Rate:*

We evaluated the flow per room at 60 gpd/bed (per 2 person), and the flow for the laundry based on ½ load (cycle) per room per day, with a typical commercial washing unit use rate of 50 gallons per cycle. Flow rates are based on an average occupancy rate of 100 percent capacity. See Table 2 for itemized flow values.

We verified the anticipated flow rates with a water study provided by Chris Ott, HTL Hospitality Advisor for the project, for one of their network hotels. The reference entitled, a Water Savings Analysis for the St. Regis Resort, summarizes water conservation studies completed for the hotel sector for various hotel type (e.g. deluxe/resort, luxury, mid-market, economy). The total water usage by hotel type for a mid-market hotel is 100 gallons per day per room<sup>6</sup>, and regardless of the hotel type the domestic<sup>7</sup> water use is 53 gallons per day per room, based on an average occupancy of 1.5 guest per room and an occupancy rate of 80 percent. Extrapolating the aforementioned value from 80 to 100 percent occupancy (Qmax), changes the value from 100 to 125 gallons per day per room. The typical percentage of the daily water use for laundry vs. other uses (restrooms, food service, HVAC, landscaping, other) is 20 percent.

Thus, we compared our anticipated flow per room at 130.7 gpd to the typical total water usage for a mid-

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<sup>6</sup> Domestic, kitchen, laundry, HVAC, landscaping, etc.

<sup>7</sup> toilets, hand washing, misc. use, showers

market hotel at 100 (80 percent occupancy) and 125 (100 percent occupancy) gallons per day, which matches the studies values well. And we compared the ratio of our anticipated flow for laundry versus the flow per room (25 gpd / 130.7 gpd) at 19.1 percent, which matches the typical value from the study (20 percent). Therefore, we believe that anticipated flow rates accurately represent the proposed hotels wastewater demand.

**Table 2** Flow Rates – Hotel

Hotel	No. Rooms/Beds	Unit Flow	Anticipated Flow
Based on Beds	185 Beds <sup>1,2</sup>	60 gpd/bed	11,100 gpd
Addition for Laundry	0.5 cycles/room/day	50 gal/cycle	2,625 gpd
<b>Total Hotel Anticipated Flow</b>			<b>13,725 gpd</b>

<sup>1</sup> The number of guestrooms, by type, for the proposed hotel are listed in Table A.1 in Appendix A.

<sup>2</sup> The hotel shall have low-flow fixtures, reducing the wastewater demand on the overall facility.

#### ***Future Commercial Development Flow Rate:***

We evaluated the flow for the future development based on an estimated number of employees, gas pump island, retail space, and restaurant space, provided by the client. See Table 3 for itemized flow. Since these numbers characterize a future development, the type of uses and anticipated flows must be verified prior to implementation.

**Table 3** Flow Rates – Future Commercial Development on Frontage Lot.

Service Stations and Market	Number	Unit Flow	Anticipated Flow
Employees	6 Employees	20 gpd/employee	120 gpd
Pump Islands	3 Pump Islands <sup>1</sup>	1000 gpd for 1 <sup>st</sup> island 500 gpd for each additional pump island	2,000 gpd
4,000 sq.ft. retail space	4,000 sq.ft.	1 gpd/10 sq.ft.	400 gpd
1,000 sq.ft. fast food restaurant space (Subway)	100 Meals per day peak	2 gpd/single service 7 gpd/toilet use	900 gpd
<b>Future Commercial Development Anticipated Flow Applied</b>			<b>3,420 gpd</b>

<sup>1</sup> 1 Pump Island has 2 multi-pump dispensers.

#### ***2.1.2 Wastewater Characteristics***

The water discharged to the subsurface will be made up entirely of domestic wastewater that has been treated to the tertiary level. Table 4 and Table 5 describes the influent<sup>8</sup> and effluent quality of wastewater, respectively. Since the facility falls below 20,000 gpd no nitrogen evaluation is necessary.

<sup>8</sup> Septic Tank effluent is approximately equal to half the waste strength of the raw wastewater influent.

**Table 4** Raw Wastewater Influent Quality. See Table A.7 in Appendix A for detailed calculations<sup>9</sup>.

	<b>BOD (mg/L)</b>	<b>TSS (mg/L)</b>
Hotel and Frontage Lot Dev.	510	150

For comparison purposes only, Orenco asserts the typical BOD waste strength for hotels and a Subway restaurant is 150 mg/L and 500 mg/L, respectively. These waste strengths combined with the aforementioned flow rates, have a weighted average value of 220 mg/L. Thus, the calculated value (255 mg/L) is 16 percent higher, or contains an effective 16 percent safety factor, when compared to Orenco.

**Table 5** Effluent Water Quality Limitations.

<b>Constituent</b>	<b>Unit</b>	<b>Average Monthly Limit</b>	<b>7-Day Average Limit</b>
Biochemical Oxygen Demand (BOD)	Milligrams per liter (mg/L)	30	45
Total Suspended Solids (TSS)	mg/L	30	45

According to the manufacturer of the media bed filtration system (AX-MAX), "when loaded at or below the application loading rates, AdvanTex systems typically achieve treatment levels of <10 mg/L BOD<sub>5</sub> and TSS (30-day average or 30-day arithmetic mean), and they typically provide reduction of Total Nitrogen (TN) >60%, with nitrification exceeding 95%." And pursuant to the manufacturer, Grease and Oil contribution to the AX-Max unit must not exceed 25 mg/L.

Influent flows and waste strength, and effluent waste strength needs to be measured once the expansion is completed and the system is installed to confirm design values. Confirmation testing shall also include oil and grease values to confirm values are < 25 mg/L. If O&G values exceed 25 mg/L, pre-aeration is required. Adjustments may need to be made if actual waste strengths or flows differ from design values. Any changes in usage that may affect flows or waste strength require a review by the designer.

## **2.2 WASTEWATER TREATMENT SYSTEM**

The proposed wastewater treatment system consists of two meander septic tanks, a media bed filtration system (Orenco AX-MAX system), ultraviolet (UV) disinfection system integrated in the AX-MAX, and subsurface drip field.

Wastewater from the hotel is conveyed to a 42-ft (15,000 gallon) Orenco T-Max traffic rated meander septic tank, and wastewater from the service station, market, and Subway is conveyed to a 14-ft (5,000 gallons) Orenco T-Max traffic rated Meander septic tank, by way of a gravity sewer main. Meander septic tanks will provide primary treatment. Sludge, scum, and biosolids captured in the septic tanks will be pumped by a licensed pumper and transported to an authorized disposal facility.

<sup>9</sup> Table A.7 quantifies the septic tank effluent quality. Influent values shown in Table 4 are calculated by multiplying effluent values by a factor of 2.

From the septic tanks, the primary treatment effluent is then pumped, via a Biofilter duplex pump, to the media bed filtration system. A duplex pump allows for continued operations in the event one pump needs to be shut down for cleaning or repair. The media bed filtration system is comprised of two AX-MAX pods to accommodate the required amount of filtration surface area.

In the media bed filtration system, effluent is distributed on a media bed via sprinklers. Effluent trickles through the media and is then either conveyed to the subsurface irrigation system or returned to the beginning of the media bed filtration system for additional treatment (up to four times).

From the advanced treatment system and associated equipment, the wastewater is disinfected using an ultraviolet (UV) treatment system, by Sanitron, and is discharged to a subsurface drip field. The systems cumulative calculated total average monthly influent rate is 17,145 gpd. The wastewater system will be located as shown in Appendix B – Site Plan.

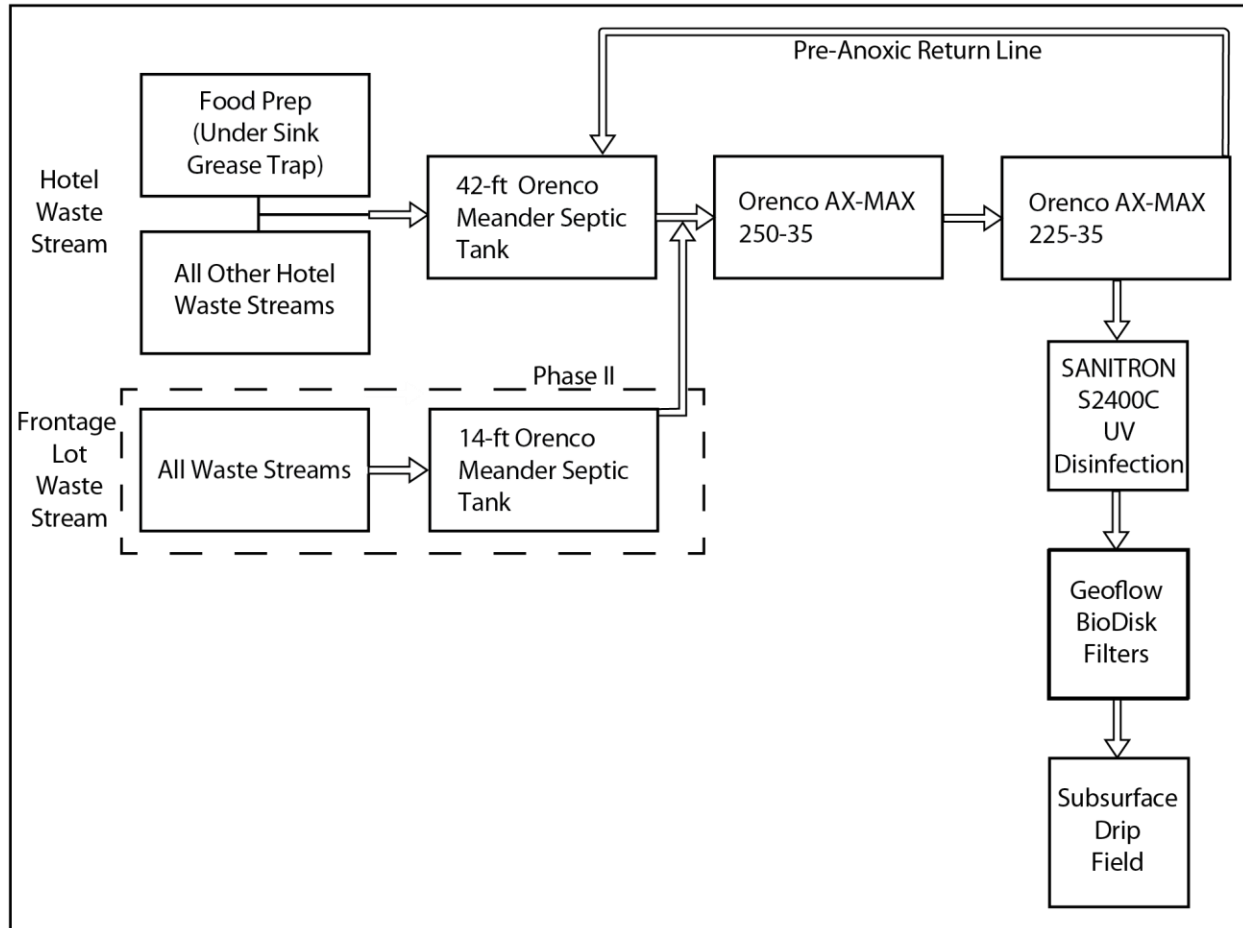
### ***2.2.1 Wastewater Treatment Schematic***

See

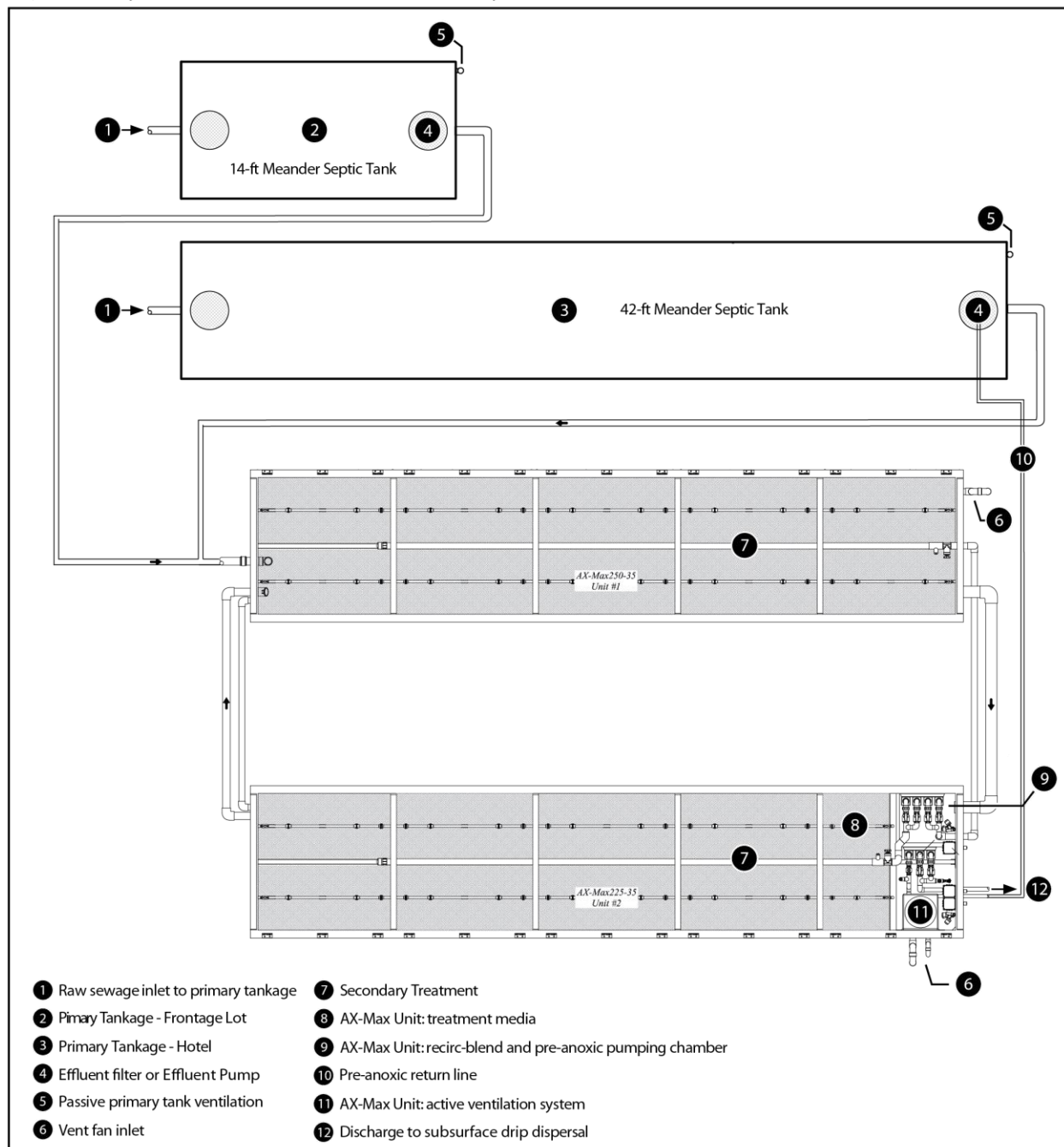
Figure 1 and Figure 2 for simplified layouts/schematics of wastewater treatment system. See Appendix B

for Site Plan.

**Figure 1** Wastewater Treatment System Flow Sheet. Pre-Anoxic Return Line will be plumbed into the 2<sup>nd</sup> compartment of the 15,000-gallon meander septic tank. AdvanTex AX-Max units are configured with integral recirculation-blend capacity and do not require an external recirculation-blend tank. Phase II components will be built in the future as part of the future frontage lot development, all other components will be built at this time.



**Figure 2** Layout of the Wastewater Treatment System (Modified from Orenco Document NDA-ATX-1).



## 2.2.2 System Components

### 2.2.2.1 Pretreatment Components (grease traps.)

Any septic system that receives high strength wastewater from a commercial food service facility must have an approved and properly sized and functioning oil/grease interceptor. The hotel food prep area requires a grease interceptor with a minimum rating capacity of 35 gpm and 70-pounds grease to be installed downstream of the food prep's 3-compartment sink and dishwasher (see Section A.1 in



Appendix A for sizing calculations). Sizing and installation must conform to the manufacturers recommendations and based on PDI<sup>10</sup> Guide Lines.

The future subway on the frontage lot will require an appropriately sized grease interceptor that must be verified by the system designer prior to implementation.

See Section 2.3 for grease interceptor maintenance requirements.

#### **2.2.2.2 Primary Treatment Equipment**

Properly sized septic tanks are imperative in order to reduce commercial strength wastewater to an acceptable level prior to advanced treatment. We propose to use an Orenco Meander Septic Tank with 30 gpm Biofilter duplex<sup>11</sup> effluent pumps. For meander tank sizing and justification see Orenco's Design Review Letter (Attachment D).

See Table 6 for Septic Tank Specifications. For comparison purposes, tankage calculations based on the anticipated flow and drainage fixture units are included in Section A.2 in Appendix A.

**Table 6** Summary of Septic Tank Sizes.

<b>Facility</b>	<b>Septic Tank</b>
Hotel	42-ft (15,000 gallon) Orenco T-Max traffic rated meander septic tank
Frontage Lot – Future Commercial Development	14-ft (5,000 gallon) Orenco T-Max traffic rated meander septic tank

The use of a pre-Anoxic tank for primary treatment of Type 5 waste is recommended by the manufacturer (1x peak daily flow), but the manufacturer approved the omission of a pre-anoxic tank requirement for Type 5 Waste (Orenco's waste classification for Hotels/Motels) because there is no nitrogen limit for flow rates less than 20,000 gpd (State Water Resources Control Board Order WQ 2014-0153-DWQ).

#### **2.2.2.3 Media Bed Filtration System Equipment**

The proposed Orenco AdvanTex treatment system is the AX-MAX unit. The filter treatment area is sized based on organic loading rate (OLR for BOD<sub>5</sub>) and hydraulic loading rate (HLR). The area required for the OLR is most restrictive; therefore, the system requirements is designed based on the OLR. The minimum treatment surface area based on OLR is 457 square feet. The proposed treatment surface area is 475 square feet, and is achieved by using the following AX Pods: (1) AX-MAX250-35 and (2) AX-MAX225-35.

See Section A.3 in Appendix A for sizing calculations.

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<sup>10</sup> Plumbing and Drainage Institute (PDI)

<sup>11</sup> Duplex pumps work by alternating from one dose to the next.

#### **2.2.2.4 Disinfection System Equipment**

Disinfection of the treated wastewater is incorporated into the wastewater treatment system to mitigate the fast percolation rates (1 minute per inch or faster). Disinfection shall be performed by UV treatment, using two (2) Sanitron's S2400C treatment units installed in series to allow for system redundancy and resilience. The units are each rated for flows of 40 gpm.

#### **2.2.2.5 Treated Effluent Disposal Method**

The proposed effluent disposal method is subsurface drip dispersal using Geoflow's WasteFlow PC (pressure compensating) 1.0 gph drip line with 2-foot emitter spacing. The subsurface drip irrigation system will be installed at 8-inches below the surface with an area of approximately 0.33 acres. The size is based on an average percolation rate of 0.45 minutes per inch (mpi), a design loading rate of 1.2 gal/ft<sup>2</sup>/day, and a capacity of 17,145 gpd.

The dosing tank and 30 gpm duplex discharge pumps are integrated into the AX-MAX unit.

See Sections 2.2.3 below for supporting site conditions (soils, groundwater, surface water, water supply, setbacks). See Geoflow Subsurface Drip Design Spreadsheet for design details and calculations.

The subsurface disposal systems shall hold in reserve sufficient land area for possible future 100-percent replacement of the subsurface disposal system. The 100-percent replacement area is shown in Appendix B – Site Plan.

### **2.2.3 Site Conditions**

#### **2.2.3.1 Soils**

In general, the soils encountered within the proposed effluent dispersal area and 100 percent expansion area consists primarily of fine to medium-grained sand (SP) to a maximum explored depth of 5 feet. The parent material is alluvium derived from granitic bedrock. Percolation testing of the dispersal area and 100 percent expansion area suggest that the soils have a very high absorption potential (0.45 minutes per inch). The site evaluation from The Dirt Guys is provided for reference in Appendix C.

The design loading rate is based on the manufacturers (Geoflow) loading rate for drip line in sandy clay loam with a treated effluent strength of <30mg/L (BOD<sub>5</sub> and TSS) is 1.2 gpd/sq.ft

#### **2.2.3.2 Groundwater**

Seasonally high Groundwater is located at approximately 10 to 12 feet below ground surface, as determined during The Dirt Guys site evaluation.

Pursuant to WDR Attachment 1, Table 5, Minimum Depth to Groundwater and Minimum Soil Depth from the Bottom of Dispersal System, for Perc Rates less than or equal to 1 MPI, require additional treatment. This requirement coupled with the groundwater depth in sandy soils, the proposed system must use disinfection.

#### **2.2.3.3 Surface Water**

The westside of the frontage lot is located about 210 feet from the nearest point to the active channel of the Kaweah River. No treated wastewater will be discharged directly to any water body.

A man-made pond is located about 50-feet west of the hotel parcel (See Site Plan in Appendix B). The pond is located more than 200-feet (setback requirement) from the proposed dispersal area and as such the pond is not discussed further in this report.

#### **2.2.3.4 Water Supply**

Potable water will be served to the hotel and frontage lot via a new commercial well that will be located more than 150 ft away from all the wastewater treatment system components (See Appendix B for Site Plan). A shared well agreement will be established for the frontage lot. See accompanying maps in Appendix B that identify the location of all groundwater wells within 150-feet of the subject parcels.

The frontage lot contains an existing well that must be properly abandoned (destroyed) (See Appendix B for Site Plan). A permit is required for the destruction of water wells anywhere in Tulare County. All well work must be done by a contractor having a valid C-57 license as issued by the Contractors State License Board. The well must be properly abandoned prior to the final inspection of the septic system by the designer.

The neighboring lot (APN #068-100-041) contains an abandoned commercial building. The lot is of insufficient size to develop a well, and as such contains a water agreement with the neighboring Comfort Inn & Suites (APN #068-360-028). The proposed dispersal field will maintain a 5-foot setback to the property line of the aforementioned neighboring lot without a well, which is reasonable because it will not impact their development potential for the aforementioned reasons.

#### **2.2.3.5 Setbacks**

The wastewater treatment system must maintain all setbacks described in Table 3 of the General order, as well as the following setback requirements, as summarized in the Table 7.

**Table 7** Summary of Setbacks.

Equipment or Activity	Domestic Well	Flowing Stream (see 1. Below)	Ephemeral Stream Drainage (see 2. Below)	Property Line
Septic Tank, Treatment System, or Collection System (see 3. Below)	150 ft. (see 4. below)	50 ft. (see 6. below)	50 ft.	5 ft. (see 6. below)
Leach Field (see 5. below)	100 ft, (see 6 and 7. below)	100 ft. (see 6. below)	5 ft	5 ft. (see 6. below)

1. A flowing stream shall be measured from the ordinary high-water mark established by fluctuations of water elevation and indicated by characteristics such as shelving, changes in soil character, vegetation type, presence of litter or debris, or other appropriate means.
2. Ephemeral Stream Drainage denotes a surface water drainage feature that flows only after rain or snowmelt and does not have sufficient groundwater seepage (baseflow) to maintain a condition of

flowing surface water. The drainage shall be measured from a line that defines the limit of the ordinary high-water mark (described in “a” above). Irrigation canals are not considered ephemeral streams drainage.

3. Septic Tank, Treatment System, or Collection System addresses equipment located below ground or that impedes leak detection by routine visual inspection
4. Setback established by Onsite Wastewater Treatment System Policy, section 7.5.6.
5. Leach Field includes all subsurface dispersal systems, including mound systems except seepage pits.
6. Setback established by California Plumbing Code, Table K-1.
7. California Well Standards, part II, section 8.

## **2.3 OPERATIONS AND MAINTENANCE**

With certain exceptions<sup>12</sup>, anyone performing construction work in California must be licensed by the California Contractors’ State License Board. Septic tank and/or leach field service (repairs, pumping, etc.) shall be performed only by a California licensed General Engineering (A), Plumbing (C-36), or Sanitation System (C-42) contractor.

A maintenance agreement with a certified Orenco Maintenance provider and pump contractor will have to be provided to the permitting authority prior to final approval. The maintenance agreement must state that they assume responsibility to maintain the system continuously for the life of the system, or until another maintenance provider is hired and a copy of such maintenance agreement is provided.

The MANUFACTURER shall provide the services of a trained representative for training the OWNER’S service provider, inspecting all AX-MAX units, wiring, and unit placement and installation.

### **2.3.1 Describe Routine Operation and Maintenance Procedures**

The Discharger shall maintain a record of all septic service activities for a minimum of five years. At a minimum, the record shall include the date, nature of service, service company name, and service company state contractor license number.

Septic tanks shall be pumped when any one of the following conditions exists:

- The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment.
- The scum layer is within 3 inches of the outlet device.
- The sludge layer is within 6 inches of the outlet device.

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<sup>12</sup> Limited repairs may be performed by homeowners or contractors as allowed by the Business and Professions Code (Bus. & Prof. Code, §§ 7044, 7048).



**Figure 3** Orenco’s suggested scheduled maintenance activities and times (from Orenco Document No. AIM-OM-ATX-4). However, system discharge limits and influent loads dictate actual O&M requirements.

Scheduled Maintenance Reference Chart		Recommended Activity Period					
		Monthly	Quarterly	Semi-annually	Annually	Biennially	
Activity	Visually Inspect Tank Liquid Levels	• <sup>1</sup>	•				
	Check Biotube® Effluent Filters; Clean as Required	• <sup>1</sup>	•		•		
	Check Biotube® Pump Vault Filters; Clean as Required	• <sup>1</sup>	•		•		
	Record Elapsed Time Meters and Event Counters for All Pumps	•					
	Inspect Spin Nozzles, Clean as Required	• <sup>2</sup>		•			
	Confirm Proper Operation of Automatic Distributing Valve (if applicable)	•					
	Sample Influent and Effluent Quality Parameters <sup>3</sup>		• <sup>1</sup>	•			
	Confirm and Record Pump Voltages and Amperages		• <sup>1</sup>		•		
	Inspect Distribution of Effluent in AX-Max Units; Clean as Required			•			
	Record Scum and Sludge Accumulation in Tanks				•		
	Flush Distribution Laterals in AX-Max Units				•		
	Inspect Pumping System Components; Clean as Required				•		
	Replace Lithium Battery in TCOM Control Panel (if applicable)					•	

<sup>1</sup>This maintenance schedule is only required during the first year of system operation.

<sup>2</sup>This maintenance schedule is only required during the first quarter of system operation.

<sup>3</sup>Recommended guidelines only. Sampling should be scheduled according to regulatory requirements.

- The service provider should be present during installation, so they are familiar with the system, especially those service lines, conduits, and connections that get buried. Ideally all system components are documented using aerial photography to maintain an accurate record of all system components. A detailed as-built drawing must be maintained on-site.
- DO NOT dispose of toxics or chemicals into system, such as restaurant degreasers, cleansers, wax strippers for linoleum, carpet shampoo and its waste products, and other toxics. As a general

rule, nothing should go into any wastewater treatment system that hasn't been ingested, other than toilet tissue, mild detergents, and wash water. Every system user and qualified service provider should be familiar with the basic guidelines below:

- No septic additives
  - No flammable or toxic products
  - No excessive household cleaners
  - No chlorine bleach, chlorides, and pool or spa products
  - No pesticides, herbicides, or agricultural chemicals or fertilizers
  - No RV waste (unless the system is specifically designed and engineered to treat such waste)
  - No water softener backwash
  - No surface runoff or stormwater runoff
  - No excessive amounts of fats, oils and grease (FOG)
  - No food byproducts
  - No cigarette butts
  - No paper towels, newspapers, sanitary napkins, diapers, disposable wipes, floss, gum or candy wrappers, etc.
- According to the manufacturer: Kitchen dishwashing appliances used in conjunction with AdvanTex treatment must be high-temperature appliances. For systems with low-temperature, chemical-type appliances, pre-aeration will be necessary. Grease and Oil contribution to the AX-Max unit must not exceed 25 mg/L.

**GEOFLOW** (dispersal system manufacturer) maintenance requirements:

- Consult the Manufacturers Design, Installation, and Maintenance Guide available on their website. If additional information is needed, contact Geoflow.
- The BioDisk Filter Battery is a T filter setup for self-cleaning via automatic back washing. Two filters, with a max flow rate of 70 gpm, are placed on the manifold, allowing clean water from one filter to wash the other filter.
- The field flush valves are automatic and flush the field once a day.
- Geoflow Specific Routine and Preventative Maintenance Includes:
  - With the pump in the “manual” position, check the pressure in the drip field by using a pressure gauge on the Schrader valve located on the air vents and by reading the pressure gauge located in the Wasteflow Headworks box. The pressure should be the same as shown on the initial installation records.

- Periodically remove and clean the air vents, field flush and filter flush valves.
- Visually check and report the condition of the drip field, including any noticeable wetness.

**SANITRON** (disinfection (UV Treatment) system manufacturer) maintenance requirements:

- Consult the Manufacturers Installation, Operation, and Maintenance Manual available on their website. If additional information is needed, contact Sanitron.
- Lamp replacement is recommended every 10,000 hours of operation, approximately 12 months of continuous service. Lamps contain small amounts of mercury and as such should not be placed in the trash. Properly dispose of lamps, in a manner suitable to the local authority.
- Cleaning of the quartz sleeve, when conditions warrant. It is recommended that the inspection of quartz sleeve be performed after one month of use. If quartz sleeve is found to be coated (not clear), then frequency of cleaning must be done more often. Deposits or discoloration on the surface of quartz sleeve are caused by excessive levels of the subject contaminant within the water that is in contact with the quartz sleeve. Most deposits on the quartz sleeve are caused by an excess of calcium (hardness), iron or manganese. If quartz sleeve is clean (clear) then frequency of cleaning may be extended.
- SANITRON® Ultraviolet water purifiers are equipped with a manual wiping mechanism making the process of routine cleaning easier and therefore, recommended weekly or at the very least monthly to insure your performance.
- During inspections, confirm that approved GFCI receptacle is still operational and that water purifier is plugged into this GFCI.
- The system must be connected to the Orenco Control Panel to monitor the level of germicidal ultraviolet energy that penetrates the quartz sleeve and the water within the water purifier. This will signal a need for system cleaning or repair.

**GREASE INTERCEPTOR** best practices and interceptor maintenance requirements: even the best-designed interceptors properly installed will fail if they are not maintained. The precise requirements for maintenance will be dependent upon the amount of F.O.G. and sediment in the wastewater.

- The interceptor has a rated retention capacity equal to twice its flow rate expressed in pounds. The user must determine the cleaning schedule by measuring how much grease has been trapped over a period of time. Grease typically weighs about 8 pounds per gallon.



- The amount of solids entering the grease trap will increase the frequency of cleaning the interceptor. Eliminate solids entering the interceptor as much as possible. If excessive solids are passing into the line, the user must install a solids interceptor ahead of the grease trap.
- Dishwashing personnel must thoroughly scrape cookware to remove all food waste, especially cooking oils and creamy sauces and gravies which are high in grease, before rinsing dishes. Thorough scraping of dishes will prevent the majority of grease in your waste stream from entering the OWTS.
- Frequency of cleaning helps eliminate most of the odors associated with interceptors and increases its efficiency.
- When the interceptor is being cleaned, extra attention should be given to make certain that inlet, outlet, and air relief ports are clear of obstructions. Always take proper care to ensure a safe and healthy environment while cleaning the interceptor.
- Follow all manufacturer requirements and service provider requirements for proper maintenance and disposal.
- Grease and any other waste matter that has been removed from the interceptor should not be introduced into any drain, sewer, or natural body of water. This waste matter should be placed in proper containers for disposal. Depending on the amount of grease generated, an appropriately sized indoor storage container or outdoor storage bin. The client shall have a service agreement with a service provider that is certified to properly dispose of grease, in a manner suitable to the local authority. The frequency of grease disposal depends on the size of the trap, volume of grease produced, and storage bin capacity.

### ***2.3.1 Manufacturer (Orenco & Sanitron) Monitoring Requirements***

Regulatory monitoring requirements applicable to the treatment disposal methods will be identified in the Notice of Applicability (NOA) Letter.

Manufacturer monitoring requirements include:

#### **ORENCO:**

Take and Test Influent and Effluent Samples: Samples should be taken quarterly for the first year to establish a baseline. Subsequent testing after the first year may be reduced based on the establishment of this baseline. Regular samples will provide valuable information for ongoing maintenance and troubleshooting. All results obtained should be reported to the appropriate people, including Orenco.

#### **SANITRON:**

To ensure proper operation of the water purifier, regular biological testing of the purifier output water should be performed at minimum; (1) at installation, (2) quarterly for the first year of service and annually after first year of service, (3) at lamp replacement. Additional testing should be performed

whenever modifications, change, or additions are made to plumbing system, pumps, well source water etc. to ensure adequate disinfection under new condition.

### ***2.3.2 Treatment Operator Training and Qualifications Requirements***

The MANUFACTURER shall provide the services of a trained representative for training the OWNER'S service provider, inspecting all AX-MAX units, wiring, and unit placement and installation. All the equipment and materials required to perform testing shall be the responsibility of the CONTRACTOR. The MANUFACTURER shall submit a detailed start-up checklist for each unit, according to the manufacturer's inspection and startup procedures.

Orenco offers training courses via webinars and live workshop, both at their corporate headquarters and through local distributors. Contact Orenco at their headquarters or your local Orenco distributor for training and certification questions.

### ***2.3.3 Contingency plans for Repairs/Spills/Treatment Issues***

The wastewater treatment components that require repairs are installed in duplicate systems (e.g. septic tank effluent pumps, recirculation pumps, discharge pumps, UV treatment units) that alternate or are installed in series, and in the event one requires repairs, the other continues to operate.

## **3.0 DESIGN REFERENCES**

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This design meets the minimum requirements of Tulare County Environmental Health Department, including the County Local Agency Management Program (LAMP) pertaining to onsite wastewater treatment systems (OWTS) and State Water Resources Control Board Order WQ 2014-0153-DWQ.

Advanced Treatment Design requirements are all based on Technical Data Sheets and Design Manuals published by the Manufacturer (form: NDA-ATX-1 and NDA-EFS-1). And the design is reviewed and approved by the Manufacturer's (Orenco) Engineers Prior to submittal (see attached manufacturers Final Design Review Letter).

Additionally, all subsurface drip dispersal sizing and design criteria is based on manufactured pre-engineered data published by Geoflow, Inc., titled Subsurface Drip Dispersal and Reuse – Design, Installation, and Maintenance Guidelines.

## **4.0 LIMITATIONS**

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Design Criteria is based on field data (e.g. soil profiles and percolation testing) collected under the professional responsibility of The Dirt Guys. We shall be notified if variations or undesirable conditions are encountered during installation so that a re-evaluation can be made. The client should recognize that exposure of unexpected adverse conditions would require additional costs at the rate of \$125.00 per hour,

portal-to-portal. The same rate applies to additional inspections or trips to job site that are made due to circumstances beyond our control.

This project/technical report is based upon the calculated flows and waste strengths for the purpose of serving the Hampton Inn and Suites and frontage lot project. Influent flows, and influent and effluent waste strengths will need to be measured once the facility is operational to confirm design values. Adjustments may need to be made if actual waste strengths or flows differ from design values. Any changes in business operations that may affect flows or waste strength require a review by the system designer.

The choice to not include a pre-anoxic tank to allow for additional nitrogen reduction was based on the fact that the anticipated flow is below the threshold value that mandates nitrogen mitigations.

We prepared this report for the exclusive use of the owner, installer, and project design consultants and approval by the regulatory agencies. The report has been prepared in accordance with the Water Board State Water Resources Control Board Order WQ 2014-0153-DWQ. Services performed have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our agreement and included in this report.

General Conditions required for final installation approval:

- A shared well agreement must be established for the frontage lot.
- A utility easement must be established for the wastewater treatment facilities installed on the frontage lot (e.g. dispersal field, lines, 100-percent replacement area).



# MEMORANDUM

To: Dave Bryant, Chief Planner, Special Projects  
County of Tulare Resource Management Agency

Date: December 12, 2017

From: Greg Young

Subject: Abbreviated Water Supply Evaluation to support the Three Rivers  
Community Plan EIR

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As the lead agency under the California Environmental Quality Act (“CEQA”), Tulare County (“County”) is assessing the potential environmental impacts associated with the Three Rivers Community Plan (hereafter the “Plan”). This memorandum has been prepared to support the CEQA analysis regarding the availability and sufficiency of water supplies to meet the forecast water demands allowed by the Plan.<sup>1</sup>

## **1.1 Relation to Water Code 10910 (Water Supply Assessment)**

Section 10910 et seq. of the California Water Code (“Water Code”) requires the preparation and approval of a Water Supply Assessment (“WSA”) for certain projects as defined by Section 10912. General Plans and Community Plans generally do not meet the definition of projects as contained in Section 10912 as they do not contemplate specific projects.<sup>2</sup>

However, the County’s CEQA analysis will need to evaluate the adequacy and potential impacts of water resources necessary to meet the water needs of the land uses contemplated by the Plan. This memorandum provides a basis for the CEQA analysis in a manner that is similar to elements of a WSA.

## **1.2 Overview of Three Rivers Community Plan**

In May 2016, the County noticed its intent to prepare a Draft Environmental Impact Report (“DEIR”) for an update to the Three Rivers Community Plan.<sup>3</sup> According to the County’s notice:

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<sup>1</sup> The updated Plan allows for growth, which may or may not occur, depending on many factors. This analysis conservatively anticipates the growth will occur in order to assess availability and sufficiency of water supplies.

<sup>2</sup> Water Code § 10912, subdivision (a).

<sup>3</sup> <http://www.tularecounty.ca.gov/rma/index.cfm/planning/environmental-planning/notice-of-preparation-nop/notice-of-preparation-update-to-the-three-rivers-community-plan-general-plan-amendment-no-14-004/>

*“Three Rivers is a rural unincorporated community of approximately 2,278 persons (as of 2014) located in the eastern portion of Tulare County, approximately 30 miles northeast of the City of Visalia along State Route 198....The community is a rural service and residential/recreational area, surrounded on the north and east by agricultural grazing lands and the Sequoia National Park, and on the south and west by agricultural grazing lands.” (May 5, 2016, County Notice of Preparation).*

**Figure 1** represents the Three Rivers area as included in the Plan. The County’s notice also highlighted several goals and objectives that directly affect the future water needs of the area. Specifically, the notice states the Plan will:

- ◆ Create a Town Center with a concentration of commercial, retail, and social uses to help strengthen Three Rivers as a livable community.
- ◆ Ensure adequate land use supplies for residential, commercial, industrial and public uses to accommodate future growth and ensure the community’s economic viability.
- ◆ Development of a community park

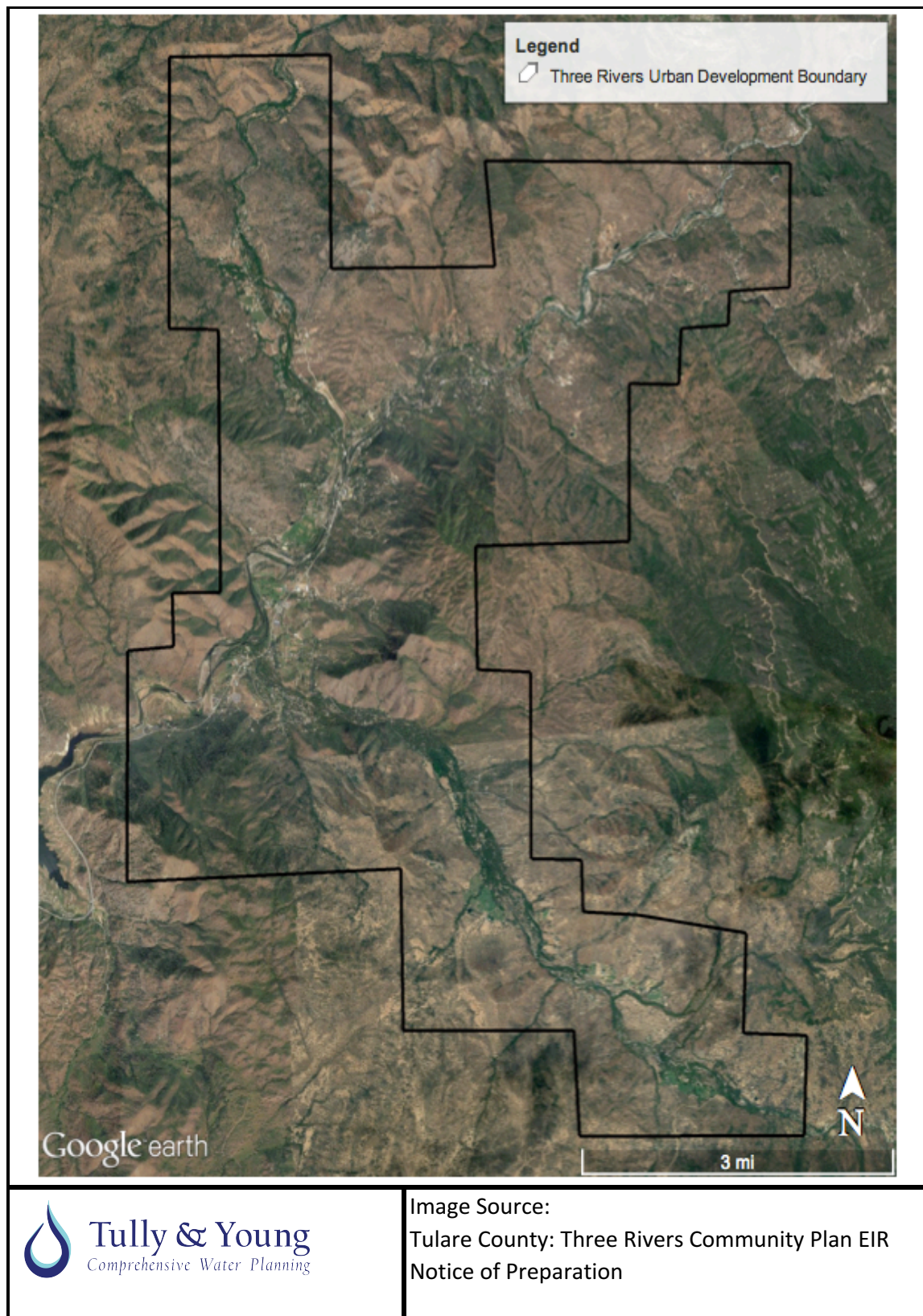
To be consistent with the County’s General Plan, population growth within the Three Rivers Community Plan boundary depicted in **Figure 1** will be assumed at 1.3 percent per year.<sup>4</sup> This will result in an increase in the number of residences constructed from the baseline discussed later in this memo.

Details regarding assumed baseline conditions, as well as future land use and water demand characterizations are provided in Section 2.

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<sup>4</sup> The growth rate is presented in the *Tulare County General Plan: Background Report* (February 2010), Table 2-15, p. 2-30.

**Figure 1 – Three Rivers Community Plan Area<sup>5</sup>**



<sup>5</sup> Urban Development Boundary obtained from the County's May 2016 Notice of Preparation.

## 2. Estimating Future Water Demands

This section describes the methodology, and provides the supporting evidence used to derive the estimated future annual water demand that would result should the land-uses contemplated by the Three Rivers Community Plan all come to fruition. Estimating future water demand that could manifest under the allowed land-uses contemplated by the Plan relies on understanding three primary water use categories:

1. The estimated current demand of existing residents and businesses
2. The estimated future demand of existing residents and businesses that will likely be lower than the current use due to on-going conservation and water use efficiency efforts
3. The estimated future demand of future residents and businesses.

The water demands associated with each category is discussed below.

### 2.1 Water Demands of Existing Users

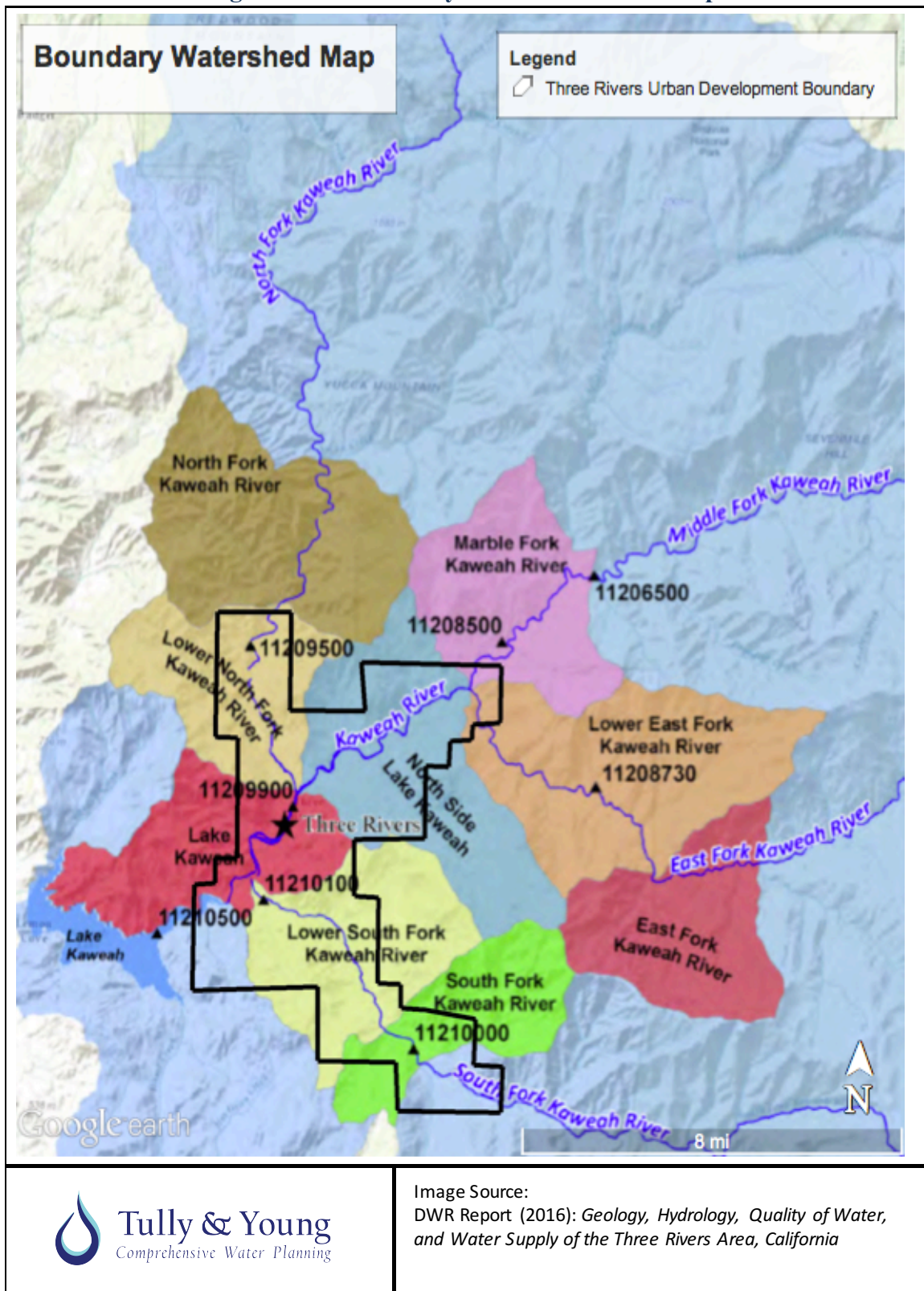
In 2016, the Department of Water Resources finalized a detailed report entitled: *Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California* (hereafter the “DWR Study”).<sup>6</sup> Among other data, the DWR Study provides a supportable basis for determining current water use within the Plan area. Although the geographic coverage of the DWR Study varies from that of the Plan, with the DWR Study covering a greater area, the vast majority of current residents and businesses exist within the concurrent areas (see **Figure 2**). As reported by the DWR Study, an estimated 1,273 residential services are located in the area (DWR Study, Table 35). While some residences are located outside of the Plan area but contained within the DWR Study’s area, the number is negligible. For purposes of this memo, the DWR Study values are assumed to all be within the Plan area.

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<sup>6</sup> The DWR Study is available from the County at: <http://tularecounty.ca.gov/rma/index.cfm/planning/three-rivers-community-plan-revised/dwr-geology-hydrology-quality-of-water-and-water-supply-of-the-three-rivers-area-california/>



Figure 2 – DWR Study and Plan Area Overlap<sup>7</sup>



<sup>7</sup> The DWR Study boundary is from the DWR Study Figure 16.

Using data from a residential water use analysis, the DWR Study determined the average residential water use per connection is 310 gallons per day – translating to approximately 440 acre-feet per year (DWR Study, p. 29).

The DWR Study did not estimate the water needs of existing non-residential users. However, based upon representations in other foothill communities, the ratio of residential to non-residential use indicates residential use is typically 60% to 80% of the overall demand.<sup>8</sup> While the exact ratio in the Plan area is not known, a conservative value for purposes of estimating total existing water use can be developed using this range. If commercial demands are assumed to represent 40% of the total, the estimated Plan area total water use would be approximately 730 acre-feet. If commercial demands are assumed to only represent 20% of the demand, the total water use would be approximately 550 acre-feet.

The higher, more conservative total demand value of 730 acre-feet per year will be assumed for purposes of this memo. This represents an existing residential demand of 440 acre-feet and an existing commercial demand of 290 acre-feet per year.

In the future, these existing water users would be expected to decrease their individual water use as a result of implementing various water conservation measures, installing more water efficient appliances and fixtures over time, and generally adopting a water-conserving mindset.<sup>9</sup> Some of these drivers are detailed in the next section. However, because the intent of this memo is to assess the availability of water supplies to serve existing and future uses, existing uses are conservatively assumed to see no reduction in the future – instead remaining at the annual estimate of 730 acre-feet.

## 2.2 Factors Affecting Future Water Use

To estimate the additional water demands that could result from growth consistent with the Plan’s land uses, unique demand factors for future residential and commercial uses need to be developed. There are several considerations that affect the development of unit water demand factors, ranging from state landscape mandates to changes in the plumbing and building codes. The most important factors for this analysis are described below.

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<sup>8</sup> The ratio of residential to non-residential varies by community. But, reporting by urban water suppliers to the State Water Resources Control Board beginning in July 2015 through December 2016 includes representative “percent residential use” listed by each supplier as part of determining residential per-capita water use rates (see [http://www.waterboards.ca.gov/water\\_issues/programs/conservation\\_portal/conservation\\_reporting.shtml](http://www.waterboards.ca.gov/water_issues/programs/conservation_portal/conservation_reporting.shtml)). Three Rivers also has a tourism industry catering to those visiting the local state and federal parks. These uses would be “non-residential” and likely result in the Three Rivers area having a residential to non-residential ratio closer to the lower end of the range.

<sup>9</sup> The Governor’s May 2016 Executive Order has directed state agencies to push for greater water conservation and for all Californians to make conservation a way of life (see <https://www.gov.ca.gov/news.php?id=19408>).

### 2.2.1 Water Conservation Objectives

In May 2016, Governor Brown issued Executive Order B-37-16 directing the Department of Water Resources and the State Water Resources Control Board to develop “*new water use targets as part of a permanent framework for urban water agencies. These new water use targets shall build upon the existing state law requirements that the state achieve a 20% reduction in urban water usage by 2020.*” California became the first state to adopt a water use efficiency target with the passage of SB X7-7 in 2009, which established a statewide goal of achieving a 20 percent reduction in urban per capita water use by 2020 for urban retail water suppliers.<sup>10</sup> While the Governor’s new directive has yet to be incorporated into statute, the directive will effectively reduce the water use per resident or per connection for all existing and future water uses beyond the 20% goal previously established.

### 2.2.2 Indoor Infrastructure Requirements

Beginning in January 2010, the California Building Standards Commission adopted the statewide mandatory Green Building Standards Code (hereafter the “CAL Green Code”) requiring the installation of water-efficient indoor and outdoor infrastructure for all new projects after January 1, 2011. The CAL Green Code was incorporated as Part 11 into Title 24 of the California Code of Regulations, and was revised in 2013 and again in 2016 with the revisions taking effect on January 1 of the following year. However, these revisions have not had substantial implications to the water use already contemplated by the 2010 Cal Green Code.<sup>11</sup> The primary impact of the 2013 update was applicability of the Cal Green Code to re-models. The focus of the 2016 update was to address changes to the MEWLO in response to emergency regulations adopted during the drought.<sup>12</sup>

The CAL Green Code applies to the planning, design, operation, construction, use and occupancy of every newly constructed or remodeled building or structure. Any new residences or commercial facilities built per the Plan must satisfy the indoor water use infrastructure standards necessary to meet the CAL Green Code as well as the outdoor requirements described by the Model Water Efficient Landscape Ordinance (MWELO) described below. All future permitted construction in the Three Rivers community will likely satisfy these indoor requirements through the use of appliances and fixtures such as high-efficiency toilets, faucet aerators, on-demand water heaters, or other fixtures, as well

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<sup>10</sup> California Water Code § 10608.20

<sup>11</sup> The 2010 CAL Green Code was evaluated for updates during the 2012 Triennial Code Adoption Cycle. The State evaluated stakeholder input, changes in technology, implementation of sustainable building goals in California, and changes in statutory requirements. As such, the scope of CAL Green was increased to include both low-rise and high-residential structures, additions and alterations. Guide to the 2013 California Green Building Standards Code (Residential), California Department of Housing and Community Development, 2013.

<sup>12</sup> The 2016 Triennial Code Adoption Cycle consisted primarily of the MWELO updates adopted in response to the drought. Indoor infrastructure changes were limited to some minor non-residential fixture changes and changes to the voluntary Tier1 and Tier2 requirements. Additionally, the Code was updated to match the new Title 20 Appliance Efficiency Regulations. *2015 Report to the Legislature, Status of the California Green Building Standards Code.*

as Energy Star and California Energy Commission-approved appliances. Outdoor requirements are discussed in the following subsection.

### **2.2.3 California Model Water Efficient Landscape Ordinance and County Ordinances**

The Water Conservation in Landscaping Act was enacted in 2006, requiring the California Department of Water Resources (DWR) to update the Model Water Efficient Landscape Ordinance (MWELo).<sup>13</sup> In 2009, the Office of Administrative Law (OAL) approved the updated MWELo, which required a retail water supplier or a county to adopt the provisions of the MWELo by January 1, 2010, or enact its own provisions equal to or more restrictive than the MWELo provisions.<sup>14</sup>

In response to the Governor's executive order dated April 1, 2015, (EO B-29-15), DWR updated the MWELo and the California Water Commission approved the adoption and incorporation of the updated State standards for MWELo on July 15, 2015.<sup>15</sup> The changes included a reduction to 55 percent for the maximum amount of water that may be applied to a landscape for residential projects, which effectively reduces the landscape area that can be planted with high water use plants. The MWELo applies to all types of new construction with a landscape area greater than 500 square feet (the prior MWELo applied to landscapes greater than 2,500 sf).<sup>16</sup> For residential projects, the coverage of high water use plants is reduced due to the new 55 percent water maximum and turf is limited. For the purposes of this memo it is assumed that the County will require landscaping plans to comply with MWELo as required by law.

It is difficult to predict the ultimate impact of the MWELo requirements on future water demand. While the requirement is for development of a landscape design plan that uses plants and features that are estimated to use no more than 55 percent of ETo (the MWELo's residential landscaping requirement), some provision must be made for the inherent tendency to over-water even with irrigation controllers installed, piecemeal changes in landscape design, and reductions in irrigation efficiency through product use.

## **2.3 Future Water Use Forecast**

This subsection describes the methodology and resulting forecast water demand for the growth allowed by the Plan.

As presented in Section 1, assuming the unincorporated area annual growth rate assumed by the in the County's General Plan of 1.3 percent, the current number of residences

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<sup>13</sup> Gov. Code §§ 65591-65599

<sup>14</sup> California Code of Regulations (CCR), Tit. 23, Div. 2, Ch. 27, Sec. 492.4. The MWELo provides the local agency discretion to calculate the landscape water budget assuming a portion of landscape demand is met by precipitation, which would further reduce the outdoor water budget.

<sup>15</sup> These updated changes have been incorporated into California Code of Regulations (CCR), Tit. 23, Div. 2, Ch. 27, Sec. 490-495.

<sup>16</sup> CCR Tit. 23, Div. 2, Ch. 27, Sec. 490.1.

(housing units) increases from 1,273 units to 1,759 units by 2035 – an increase of 486 residential units spread throughout the Plan growth boundary.

Although the type of home, occupancy rates, landscaping and other factors affecting water use are unknown, an estimate of the demand for each new residence can be made based upon the conservation factors discussed previously and the following assumptions:

1. Occupancy averages 2 people per home (the current occupancy rate is 1.7 people per house, as presented in the DWR Study's review of 2010 census data (DWR Study, p. 17).
2. Residential indoor use is based upon 55 gallons per person per day.<sup>17</sup>
3. Residential outdoor use is equivalent to the indoor use, assuming implementation of new MWELO (e.g. 50% of the total residential demand is for outdoor needs, and 50% is for indoor).
4. Non-residential use is equivalent to 40% of the new residential use (consistent with the assumption for existing demand).
5. To reflect anticipated new community parks, potential increased tourism activities (restaurant use, hotel and campground stays, etc.), and various distribution system losses,<sup>18</sup> the incremental demand estimate is increased by an additional 25%.

These assumptions result in a conservative estimate for residential use equal to 220 gallons per person per day (compared to the 310-gallon value presented for current residents). If the entire allowed growth were to occur, the potential 486 new residential units would demand approximately 120 acre-feet annually.

Non-residential use would add approximately 48 acre-feet, for a total estimated demand of 168 acre-feet annually. With the conservative addition of 25%, the incremental demand to meet the allowable land use in the Plan is forecast to be 210 acre-feet annually. This would increase the total demand from 730 acre-feet to 940 acre-feet

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<sup>17</sup> The assumed per-person rate of 55 gallons per day is derived from California Water Code Section 10608.20(b)(2)(A), which states a value of 55 gallons per capita (i.e., per person) per day (gpcd) be used for estimating indoor residential use targets.

<sup>18</sup> Often, distribution system losses represent water that is lost due to system leaks, fire protection, unauthorized connections, and inaccurate meters. Essentially, this is the water that is pumped from surface or groundwater sources that does not make it to an end user. In most instances, the predominant source of distribution system losses is from leaks that inevitably exist in pipes and fitting that bring water from the source to an end-user (whether part of a community water system or personal well).



annually, representing a 28% increase in water demand associated with the 38% increase in residences and associated non-residential uses.<sup>19</sup>

### 3. Water Supply and Reliability

Domestic and municipal water demands in the Three Rivers area are generally met with groundwater, although some of the existing personal and small community water systems also divert surface water from the Kaweah River or its tributaries as defined in various water rights.<sup>20</sup> This is detailed in the previously referenced DWR Study:

*“Public water supplies rely on surface water from the Kaweah River for 16 percent of the total demand. Groundwater provides the remaining 81 percent of the water supply through water wells, plus an additional 3 percent from spring water.”* (DWR Study, p. 28)

#### 3.1 Groundwater and Surface Water Supply Characteristics

Surface and groundwater resources are both dependent on the greater Kaweah River watershed of the Southern Sierra Nevada range. Precipitation falling within the watershed boundaries becomes streamflow in the Kaweah and its tributaries, percolates into fractured bedrock, and fills the alluvial aquifer in the Three Rivers area.

The DWR Study provides a detailed characterization of the Kaweah River surface water hydrology and local groundwater hydrology. Rather than restating the detailed information, the relevant excerpts from the DWR Study are included as **Attachment A** to this memo.

#### 3.2 Water Supply Availability

The availability of water to serve the existing as well as the plausible residential and non-residential growth contemplated by the Plan is based upon the quantity of precipitation in the watershed, the geologic and hydrogeologic characteristics of the fractured rock and alluvial aquifers, the location, depth and pumping capabilities of wells and diversion facilities, and the timing of supply in relation to demand.

Once again, the DWR Study provides detailed information and analysis that can be utilized for understanding this availability. Specifically, the DWR Study provides a comparative analysis of existing water demands (see prior discussion in Section 2) to the

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<sup>19</sup> Agricultural water use is not included in this analysis and is expected to remain consistent under both the existing and the Plan’s with-growth conditions. This memo assesses the impact to water availability associated with the increased municipal demands contemplated by the County’s Three Rivers Community Plan.

<sup>20</sup> For example, Statement of Diversion and Use reports are available at the State Water Resource Control Board’s web site (<http://ciwqs.waterboards.ca.gov/ciwqs/ewrims/EWMenuPublic.jsp>) for S011476, S008181, and S016103 (among others). Most, if not all, are riparian or pre-1914 water right claims to surface water on the Kaweah River and its tributaries.

availability of water – especially groundwater – based upon an assessment of groundwater recharge. **Table 1** provides the DWR Study’s representation of recharge based upon a detailed analytic process (see **Attachment A**). The primary message from the analysis is the availability of over 50,000 acre-feet of total groundwater recharge within the DWR Study’s boundary (see **Figure 2**) during average precipitation years.

**Table 1 – Groundwater Recharge in the Three Rivers Area (source: DWR Study)<sup>21</sup>**

Kaweah River Tributary	Watershed	Area of Watershed (acres)	Groundwater Recharge per Watershed (AF)	Groundwater Recharge per Tributary (AF)
<b>North Fork</b>	N. Fork Kaweah River	11,722	8,417	
	Lower N. Fork Kaweah River	7,425	1,656	
	Lake Kaweah	7,901	1,026	11,100
<b>Middle Fork</b>	Marble Fork Kaweah River	8,512	5,544	
	N. Side Lake Kaweah	11,326	3,886	9,430
<b>East Fork</b>	E. Fork Kaweah River	8,191	14,889	
	Lower E. Fork Kaweah River	12,712	17,775	32,664
<b>South Fork</b>	S. Fork Kaweah River	5,984	2,461	
	Lower S. Fork Kaweah River	8,863	1,399	3,860
<b>Total, All Watersheds:</b>		<b>82,636</b>	<b>57,053</b>	<b>57,053</b>

Importantly, however, the DWR Study also notes, but does not detail, that “[o]n the other hand, periods of extended drought, such as the current four-year drought, would produce a water balance significantly different than that shown above.” (DWR Study, p. 30). The DWR Study goes on to speculate that during 2014 and 2015, the water balance may have been negative.

While the recharge versus use may have been negative for a given year or years, the aquifer would generally have stored water or water from prior year’s percolation still available. This fact is demonstrated when evaluating the number of wells that failed in

<sup>21</sup> This table is Table 32 of the DWR Study. Supporting information regarding the derivation of values is detailed in the DWR Study at page 28.

the Three Rivers area during the most recent drought period. As documented by the County as part of its monthly assessment and reporting of well conditions throughout the County, as of January 2017, six groundwater wells in the Three Rivers area have been documented by the County as having failed in some manner.<sup>22</sup> Reviewing the archived reports between fall 2014 and the most recent 2017 reports, the number of wells reported to the County as failing never exceeded six.

According to the DWR Study, there are over 800 active community and personal wells operating in the Plan area to serve the over 1,200 residences and associated non-residential operations. While concerning, the failure of less than 1% of the wells during the unprecedented drought of the past several years indicates the resilience of the fractured bedrock and alluvial aquifers to meet the vast majority of the existing water demands during extremely dry hydrologic conditions. The limited effect of the drought on water supply availability demonstrates the beneficial magnitude of the differential between the more than 50,000 acre-feet of annual recharge and the existing annual demands of approximately 730 acre-feet.

#### **4. Sufficiency of Water Supplies**

As presented in Section 2, the future demand is anticipated to be approximately 940 acre-feet annually, which represents less than two percent of the over 50,000 acre-feet of average groundwater recharge in the watershed. On a watershed basis, there is and will continue to be sufficient water supplies recharging the fractured rock and alluvial aquifers to meet the forecast future demands. For purposes of this memo, all new water demands will be met by groundwater resources rather than surface rights.<sup>23</sup>

The location and characteristics of each new well, however, will have more of a potential impact on the sufficiency and available of water than the overall demands effect on the available quantity of groundwater. To further address this potential availability and sufficiency limitation, this section provides suggested answers to common CEQA impact analysis questions, as well as offers County policies that can provide additional assurance and mitigation mechanisms to ensure future demands are met with no or less than significant impacts on existing water resources and existing water users.

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<sup>22</sup> <http://tularecounty.ca.gov/emergencies/index.cfm/drought/drought-effects-status-updates/2017/week-of-january-2-2017/>

<sup>23</sup> Because new surface rights are difficult to obtain, and use of surface water for domestic water use would likely require treatment, the future water demands would be expected to be met with individual wells or new or expanded small community system wells, either relying on the existing aquifer systems.



#### 4.1 Potential Impact Determinations

The County's CEQA analysis will need to address the potential for significant impact to water resources that could result from the allowable growth. The following provides information the County can use to inform the CEQA document for specific impact assessment questions.

Question: Will growth contemplated by the Plan substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Answer: (Less than significant impact) As presented in Section 2, the allowed growth contemplated by the Plan would increase current water demand from approximately 730 acre-feet annually to approximately 940 acre-feet annually. This demand is significantly less than the average annual groundwater recharge that exceeds 50,000 acre-feet as determined by the DWR. Furthermore, as represented by the very few wells reported by the County in the Three Rivers area as failing during the most recent drought period, the small increment of additional demand from Plan growth would not be expected to substantially deplete groundwater supplies during future drought circumstances.

However, the placement of individual wells could have an adverse impact on other local wells if not properly spaced or otherwise constructed to protect existing well operations. The County's General Plan includes specific policies to provide adequate protections so as to cause this potential impact to be less than significant, if any. Specific policies are discussed under Section 4.2. The County also maintains a well permitting process, allowing an assessment of the unique circumstances for each potential new well to assure setbacks from other wells and from septic systems are appropriate.

The combination of the policies and permitting/approval procedures will assure that new wells will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

Question: Will growth contemplated by the Plan require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Answer: (Less than significant impact) The growth would result in construction of new domestic or small community water system wells to serve the anticipated additional residences and non-residential enterprises. All new wells and associated infrastructure will be constructed in accordance with County regulations and will obtain permits and approval as specified with such regulations. The construction of new wells would not result in significant environmental effects.

Question: Will the growth contemplated by the Plan have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Answer: (Less than significant impact) Water needed to meet the anticipated growth will be obtain from groundwater sources in compliance with State overlying or appropriative groundwater laws, where overlying rights apply to individual private wells and appropriative rights will apply to any new or expanded small community system.

#### **4.2 Recommendations to Assure No Impact or Less than Significant Impact**

The County's General Plan includes several policies protecting existing water resources and existing water users – especially existing well owners – from adverse impact associated with the Three Rivers Community Plan. The following selected policies will provide the assurances necessary to render the impacts to local water resources as less than significant:

LU-3.6 Project Design: The County shall require residential project design to consider natural features, noise exposure of residents, visibility of structures, circulation, access, and the relationship of the project to surrounding uses. Residential densities and lot patterns will be determined by these and other factors. As a result, the maximum density specified by General Plan designations or zoning for a given parcel of land may not be attained.

WR-1.1 Groundwater Withdrawal: The County shall cooperate with water agencies and management agencies during land development processes to help promote an adequate, safe, and economically viable groundwater supply for existing and future development within the County. These actions shall be intended to help the County migrate the potential impact on ground water resources identified during planning and approval processes.

WR-2.1 Protect Water Quality: All major land use and development plans shall be evaluated as to their potential to create surface and groundwater contamination hazards from point and non-point sources. The County shall confer with other

appropriate agencies, as necessary, to assure adequate water quality review to prevent soil erosion; direct discharge of potentially harmful substances; ground leaching from storage of raw materials, petroleum products, or wastes; floating debris; and runoff from the site.

WR-2.9 Private Wells: The County shall ensure that private wells are adequately constructed to provide protection from bacteriological and chemical contamination and do not provide a hazard as to contaminate the aquifer.

WR-3.3 Adequate Water Availability: The County shall review new development proposals to ensure the intensity and timing of growth will be consistent with the availability of adequate water supplies. Projects must submit a Will-Serve letter as part of the application process, and provide evidence of adequate and sustainable water availability prior to approval of the tentative map or other urban development entitlement.

WR-3.5 Use of Native and Drought Tolerant Landscaping: The County shall encourage the use of low water consuming, drought-tolerant and native landscaping and emphasize the importance of utilizing water conserving techniques, such as night watering, mulching, and drip irrigation.

PFS-1.3 Impact Mitigation: The County shall review development proposals for their impacts on infrastructure (for example, sewer, water, fire stations, libraries, streets, etc.). New development shall be required to pay its proportionate share of the costs of infrastructure improvements required to serve the project to the extent permitted by State law. The lack of available public or private services or adequate infrastructure to serve a project, which cannot be satisfactorily mitigated by the project, may be grounds for denial of a project or cause for the modification of size, density, and/or intensity of the project.

PFS-1.4 Standards of Approval: The County should not approve any development unless the following conditions are met:

- (a) The applicant can demonstrate all necessary infrastructure will be installed and adequately financed,
- (b) Infrastructure improvements are consistent with adopted County infrastructure plans and standards, and;
- (c) Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project.

PFS-1.9 New Special Districts: When feasible, the County shall support the establishment of new special districts, including community service districts and public utility districts, to assume responsibility for public facilities and services.

PFS-2.1 Water Supply: The County shall work with agencies providing water service to ensure that there is an adequate quantity and quality of water for all uses, including water for fire protection, by, at a minimum, requiring a demonstration by the agency providing water service of sufficient and reliable water supplies and water management measures for proposed urban development.

PFS-2.2 Adequate Systems: The County shall review new development proposals to ensure that the intensity and timing of growth will be consistent with the availability of adequate production and delivery systems. Projects must provide evidence of adequate system capacity prior to approval.

PFS-2.3 Well Testing: The County shall require new development that includes the use of water wells to be accompanied by evidence that the site can produce the required volume of water without impacting the ability of existing wells to meet their needs.

PFS-2.4 Water Connections: The County shall require all new development in UDBs, UABs, Community Plans, Hamlet Plans, Planned Communities, Corridor Areas, Area Plans, existing water district service areas, or zones of benefit, to connect to the community water system, where such system exists. The County may grant exceptions in extraordinary circumstances, but in these cases, the new development shall be required to connect to the water system when service becomes readily available.

PFS-2.5 New Systems or Individual Wells: Where connection to a community water system is not feasible per PFS-2.4: Water Connections, service by individual wells or new community systems may be allowed if the water source meets standards for quality and quantity.

PFS-3.1 Private Sewage Disposal Standards: The County shall maintain adequate standards for private sewage disposal systems (e.g., septic tanks) to protect water quality and public health.

PFS-3.4 Alternative Rural Wastewater Systems: The County shall consider alternative rural wastewater systems for areas outside of community UDBs and HDBs that do not have current systems or system capacity. For individual users, such systems include elevated leach fields, sand filtration systems,

evapotranspiration beds, osmosis units, and holding tanks. For larger generators or groups of users, alternative systems, including communal septic tank/leach field systems, package treatment plants, lagoon systems, and land treatment, can be considered.

PFS-3.5 Wastewater System Failures: The County shall require landowners to repair failing septic tanks, leach field, and package systems that constitute a threat to water quality and public health or connect to an existing community system through applicable County and/or Regional Water Quality Control Board standards and requirements.

PFS-3.6 Care of Individual Systems: The County shall promote and support programs to educate homeowners on the care and maintenance of private sewage disposal systems.

## NOTICE OF PREPARATION – Three Rivers Hampton Inn

AGENCY / ENTITY	DOCUMENTS SENT						DELIVERY METHOD					COMMENTS RECEIVED
	Electronic				Hard Copy		Hand Delivered/ Interoffice	E-mail	FedEx	US Mail	Return Receipt	
	NOC	NOP	Electronic Submittal Form	Notice	Notice	NOP						
<b>AVAILABILITY OF PUBLIC VIEWING</b>												
Tulare County Website: <a href="https://tularecounty.ca.gov/rma/index.cfm/planning-building/environmental-planning/environmental-impact-reports/hampton-inn-suites-three-rivers/">https://tularecounty.ca.gov/rma/index.cfm/planning-building/environmental-planning/environmental-impact-reports/hampton-inn-suites-three-rivers/</a>												
Kaweah Commonwealth (unofficial notice): <a href="https://3riversnews.com/hampton-inn-suites-coming-to-3r/">https://3riversnews.com/hampton-inn-suites-coming-to-3r/</a>												
Tulare County Public Library	Not available in hard copy at libraries per the County's Covid-19 threat/response protocols.											
Tulare County Resource Management Agency 5961 S. Mooney Blvd. Visalia, CA 93277-9394					X	X	11/2/20					
Tulare County Clerk's Office County Civic Center Courthouse, Room 105 221 S. Mooney Blvd. Visalia, CA 93291					X		11/2/20					
<b>STATE CLEARINGHOUSE</b>	X	X	X	X			11/2/20 (direct upload)					11/2/20, 12:28 pm – documents posted under SCH# 2020110016
<ul style="list-style-type: none"> <li>Air Resources Board</li> </ul>												
<ul style="list-style-type: none"> <li>California Highway Patrol</li> </ul>												
<ul style="list-style-type: none"> <li>Caltrans District #6</li> </ul>												See below.
<ul style="list-style-type: none"> <li>Department of Conservation</li> </ul>												
<ul style="list-style-type: none"> <li>Energy Commission</li> </ul>												
<ul style="list-style-type: none"> <li>Department of Fish and Wildlife Region #4</li> </ul>												See below.
<ul style="list-style-type: none"> <li>Department of Food and Agriculture</li> </ul>												
<ul style="list-style-type: none"> <li>Department of Forestry and Fire Protection</li> </ul>												
<ul style="list-style-type: none"> <li>Department of General Services</li> </ul>												
<ul style="list-style-type: none"> <li>Native American Heritage Commission</li> </ul>												11/3/20, letter received via mail
<ul style="list-style-type: none"> <li>Office of Emergency Services</li> </ul>												
<ul style="list-style-type: none"> <li>Office of Historic Preservation</li> </ul>												
<ul style="list-style-type: none"> <li>Public Utilities Commission</li> </ul>												
<ul style="list-style-type: none"> <li>Regional Water Quality Control Board District #5F</li> </ul>												
<ul style="list-style-type: none"> <li>Resources Agency</li> </ul>												
<ul style="list-style-type: none"> <li>State Water Resources Control Board – Water Quality</li> </ul>												

NOTICE OF PREPARATION – Three Rivers Hampton Inn												
AGENCY / ENTITY	DOCUMENTS SENT						DELIVERY METHOD					COMMENTS RECEIVED
	Electronic			Hard Copy								
	NOC	NOP	Electronic Submittal Form	Notice	Notice	NOP	Hand Delivered/ Interoffice	E-mail	FedEx	US Mail	Return Receipt	
<ul style="list-style-type: none"><li>Department of Toxic Substances Control</li></ul>												
<ul style="list-style-type: none"><li>Department of Water Resources</li></ul>												
MILITARY												
Mr. David S. Hulse Naval Facilities Engineering Command Community Plans Liaison Officer (CPLO) 1220 Pacific Highway AM-3 San Diego, CA 92132					X					10/30/20		
FEDERAL AGENCIES												
U.S. Army Corps of Engineers Sacramento District 1325 J Street, Room 1350 Sacramento, CA 95814-2922					X					10/30/20		
U.S. Fish and Wildlife Service Sacramento Fish & Wildlife Office 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846					X					10/30/20		
U.S. Forest Service 1400 Independence Ave SW, Room 5105-A Washington DC 20250-1111					X					10/30/20		
Sequoia National Forest Supervisor’s Office 1839 South Newcomb Street Porterville, CA 93257					X					10/30/20		
National Park Service Pacific West Region Attn: Laura Joss, Regional Director 333 Bush Street, Suite 500 San Francisco, CA 94104-2828					X					10/30/20		
USDA - Natural Resources Conservation Service 1400 Independence Ave SW Room 5105-A Washington, DC 20250-1111					X					10/30/20		

NOTICE OF PREPARATION – Three Rivers Hampton Inn												
AGENCY / ENTITY	DOCUMENTS SENT						DELIVERY METHOD					COMMENTS RECEIVED
	Electronic				Hard Copy							
	NOC	NOP	Electronic Submittal Form	Notice	Notice	NOP	Hand Delivered/ Interoffice	E-mail	FedEx	US Mail	Return Receipt	
USDA - Natural Resources Conservation Service Visalia Service Center Attn: Lurana Strong 3530 W. Orchard Ct. Visalia, CA 93277-7055					X					10/30/20		
STATE & REGIONAL AGENCIES												
CA Environmental Protection Agency P.O. Box 2815 Sacramento, CA 95812-2815					X					10/30/20		
CA Department of Conservation Division of Land Resources Protection 801 K Street, MS 24-01 Sacramento CA 95814					X					10/30/20		
CA Dept. of Fish and Wildlife Region 4 – Central Region 1234 E. Shaw Avenue Fresno, CA 93710 <a href="mailto:R4CEQA@wildlife.ca.gov">R4CEQA@wildlife.ca.gov</a>				X	X			11/2/20		10/30/20		12/2/20, letter from Julie Vance, Regional Planner, received via OPR CEQAnet.
CA Dept. of Food & Agriculture 1220 N Street Sacramento, CA 95814					X					10/30/20		
CA Dept. Forestry & Fire Protection 1234 E. Shaw Ave Fresno CA 93710					X					10/30/20		
CA Dept. of Toxic Substances Control P.O. Box 806 Sacramento, CA 95812-0806					X					10/30/20		
CA Dept. of Transportation, District 6 1352 W. Olive Ave P.O. Box 12616 Fresno, CA 93778-2616 <a href="mailto:david.deel@dot.ca.gov">david.deel@dot.ca.gov</a> <a href="mailto:lorena.mendibles@dot.ca.gov">lorena.mendibles@dot.ca.gov</a>				X	X			11/2/20		10/30/20		1/8/20, letter from David Deel, Associate Transportation Planner, received via email.
CA Department of Water Resources 1416 Ninth Street Sacramento, CA 95814					X					10/30/20		
CA Natural Resources Agency 1416 Ninth Street, Suite 1311 Sacramento, CA 95814					X					10/30/20		



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CA Office of Emergency Services 3650 Schriever Avenue Mather, CA 95655					X					10/30/20		
CA Office of Historic Preservation 1725 23rd Street, Suite 100 Sacramento, CA 95816					X					10/30/20		
CA Public Utilities Commission 770 L. Street Sacramento, CA 95841					X					10/30/20		11/9/20, envelope returned to RMA as “Not Deliverable as Addressed, Unable to Forward”
Native American Heritage Commission 1550 Harbor Blvd, Suite 100 West Sacramento, CA 95691 <a href="mailto:NAHC@nahc.ca.gov">NAHC@nahc.ca.gov</a>				X	X			11/2/20		10/30/20		
State Water Resources Control Board P.O. Box 100 Sacramento, CA 95812					X					10/30/20		
Regional Water Quality Control Board Region 5 – Central Valley 1685 E Street Fresno, CA 93706 <a href="mailto:CentralValleyFresno@waterboards.ca.gov">CentralValleyFresno@waterboards.ca.gov</a>				X	X			11/2/20		10/30/20		
San Joaquin Valley APCD Permit Services – CEQA Division 1990 E. Gettysburg Ave. Fresno, CA 93726 <a href="mailto:CEQA@valleyair.org">CEQA@valleyair.org</a>				X	X			11/2/20		10/30/20		11/23/20, letter received via email
Southern California Edison Attn: Calvin Rossi, Region Manager Local Public Affairs 2425 S. Blackstone St. Tulare, CA 93274 <a href="mailto:calvin.rossi@sce.com">calvin.rossi@sce.com</a>				X	X			11/2/20		10/30/20		
LOCAL AGENCIES												
Tulare County Agricultural Commissioner 4437 S. Laspina Street Tulare CA 93274 <a href="mailto:TTucker@co.tulare.ca.us">TTucker@co.tulare.ca.us</a>				X	X		11/2/20	11/2/20				

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Tulare County Association of Governments Attn: Ted Smalley 210 N. Church Street, Suite B Visalia, CA 93291 <a href="mailto:TSmalley@tularecog.org">TSmalley@tularecog.org</a>				X	X		11/2/20	11/2/20				
Tulare County Farm Bureau Tricia Stever Blattler, Exec. Director P.O. Box 748 Visalia, CA 93291 <a href="mailto:pstever@tulcofb.org">pstever@tulcofb.org</a>				X	X			11/2/20		10/30/20		
Tulare County Fire Warden 835 S. Akers Street Visalia, CA 93277					X		11/2/20					
Tulare County Health & Human Services Agency Environmental Health Department Attn: Allison Shuklian 5957 S. Mooney Blvd Visalia, CA 93277 <a href="mailto:AShuklia@tularehhsa.org">AShuklia@tularehhsa.org</a>				X	X		11/2/20	11/2/20				
Tulare County Local Agency Formation Commission 210 N. Church Street, Suite B Visalia, CA 93291					X		11/2/20					
Tulare County Office of Emergency Services Attn: Sabrina Bustamante / Megan Fish 5957 S. Mooney Blvd Visalia, CA 93277 <a href="mailto:slbustamante@co.tulare.ca.us">slbustamante@co.tulare.ca.us</a> <a href="mailto:mfish@co.tulare.ca.us">mfish@co.tulare.ca.us</a>				X	X		11/2/20	11/2/20				
Tulare County Resource Management Agency - 5961 S. Mooney Blvd. Visalia, CA 93277  Economic Development - <a href="mailto:jmartinez2@co.tulare.ca.us">jmartinez2@co.tulare.ca.us</a>  Fire – <a href="mailto:gportillo@co.tulare.ca.us">gportillo@co.tulare.ca.us</a>  Flood Control – <a href="mailto:rschenke@co.tulare.ca.us">rschenke@co.tulare.ca.us</a> <a href="mailto:rmiller@co.tulare.ca.us">rmiller@co.tulare.ca.us</a>				X	X		11/2/20	11/2/20				

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	NOC	NOP	Electronic Submittal Form	Notice	Notice	NOP						
Public Works – <a href="mailto:hbeltran@co.tulare.ca.us">hbeltran@co.tulare.ca.us</a> <a href="mailto:jwong@co.tulare.ca.us">jwong@co.tulare.ca.us</a>												
Tulare County Resources Conservation District 3530 W. Orchard Ct Visalia, CA 93277					X					10/30/20		
Tulare County Sheriff’s Office – Headquarters 2404 W. Burrel Avenue Visalia, CA 93291					X		11/2/20					
Tulare County U.C. Cooperative Extension UC Cooperative Extension 4437 S. Laspina Street Tulare, CA 93274					X					10/30/20		
Three Rivers Community Services District P.O. Box 423 Three Rivers, CA 93271 <a href="mailto:info@3riverscsd.com">info@3riverscsd.com</a> <a href="mailto:info3riverscsd@gmail.com">info3riverscsd@gmail.com</a>				X	X			11/2/20		10/30/20		12/2/20, email received from Cindy Howell, General Manager, notifying County of current email address.
Three Rivers Union School District P.O. Box 99 Three Rivers, CA 93271					X					10/30/20		
Woodlake Union School District 300. W. Whitney Ave Woodlake, CA 93286					X					10/30/20		
Sequoia Riverlands Trust  Cam Tredennick, Executive Director <a href="mailto:cam@sequoiariverlands.org">cam@sequoiariverlands.org</a>  Ann Huber <a href="mailto:ann@sequoiariverlands.org">ann@sequoiariverlands.org</a>				X				11/2/20				
Three Rivers Historical Society P. O. Box 1253 Three Rivers, CA 93271 <a href="mailto:history@3rmuseum.org">history@3rmuseum.org</a>				X				11/2/20				
Three Rivers Village Foundation <a href="mailto:info@threerivers.com">info@threerivers.com</a>				X				11/2/20				11/2/20, email undelivered “Connection timed out...”  11/7/20, email undelivered “..addresses had permanent fatal errors..”

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	NOC	NOP	Electronic Submittal Form	Notice	Notice	NOP						
Tulare County Citizens for Responsible Growth <a href="mailto:tcrg.info@gmail.com">tcrg.info@gmail.com</a>				X				11/2/20				
TRIBES												
Kern Valley Indian Tribe Robert Robinson, Co-Chairperson P.O. Box 1010 Lake Isabella, CA 93240 <a href="mailto:bbutterbredt@gmail.com">bbutterbredt@gmail.com</a>				X	X			11/2/20		10/30/20		
Kern Valley Indian Tribe Julie Turner, Secretary P. Box 1010 Lake Isabella, CA 93240 <a href="mailto:meindiangirl@sbcglobal.net">meindiangirl@sbcglobal.net</a>				X	X			11/2/20		10/30/20		
Kern Valley Indian Tribe Brandi Kendricks 30741 Foxridge Court Tehachapi, CA 93561 <a href="mailto:krazykendricks@hotmail.com">krazykendricks@hotmail.com</a>				X	X			11/2/20		10/30/20		
Santa Rosa Rancheria Tachi Yokut Tribe Leo Sisco, Chairperson P. O. Box 8 Lemoore, CA 93245 <a href="mailto:LSisco@tachi-yokut-nsn.gov">LSisco@tachi-yokut-nsn.gov</a>				X	X			11/2/20		10/30/20		
Santa Rosa Rancheria Tachi Yokut Tribe Robert Jeff, Vice-Chair P. O. Box 8 Lemoore, CA 93245 <a href="mailto:RGJeff@tachi-yokut-nsn.gov">RGJeff@tachi-yokut-nsn.gov</a>				X	X			11/2/20		10/30/20		
Santa Rosa Rancheria Tachi Yokut Tribe Bianca Arias, Admin. Assistant. P. O. Box 8 Lemoore, CA 93245 <a href="mailto:BArias@tachi-yokut-nsn.gov">BArias@tachi-yokut-nsn.gov</a>				X	X			11/2/20		10/30/20		
Santa Rosa Rancheria Tachi Yokut Tribe Cultural Department Shana Powers, Director P. O. Box 8 Lemoore, CA 93245 <a href="mailto:SPowers@tachi-yokut-nsn.gov">SPowers@tachi-yokut-nsn.gov</a>				X	X			11/2/20		10/30/20		

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Santa Rosa Rancheria Tachi Yokut Tribe Cultural Department Greg Cuara, Cultural Specialist P. O. Box 8 Lemoore, CA 93245 <a href="mailto:GCuara@tachi-yokut-nsn.gov">GCuara@tachi-yokut-nsn.gov</a>				X	X			11/2/20		10/30/20		
Santa Rosa Rancheria Tachi Yokut Tribe Cultural Department Samantha McCarty, Cultural Specialist P. O. Box 8 Lemoore, CA 93245 <a href="mailto:SMcCarty@tachi-yokut-nsn.gov">SMcCarty@tachi-yokut-nsn.gov</a>				X	X			11/2/20		10/30/20		
Tubatulabals of Kern Valley Robert L. Gomez, Jr., Chairperson P.O. Box 226 Lake Isabella, CA 93240 <a href="mailto:rgomez@tubatulabal.org">rgomez@tubatulabal.org</a>				X	X			11/2/20		10/30/20		
Tule River Indian Tribe Neil Peyron, Chairperson P. O. Box 589 Porterville, CA 93258 <a href="mailto:neil.peyron@tulerivertribe-nsn.gov">neil.peyron@tulerivertribe-nsn.gov</a>				X	X			11/2/20		10/30/20		
Tule River Indian Tribe Dept. of Environmental Protection Kerri Vera, Director P. O. Box 589 Porterville, CA 93258 <a href="mailto:tuleriverenv@yahoo.com">tuleriverenv@yahoo.com</a>				X	X			11/2/20		10/30/20		
Tule River Indian Tribe Dept. of Environmental Protection Felix Christman, Archaeological Monitor P. O. Box 589 Porterville, CA 93258 <a href="mailto:Tuleriverarchmon1@gmail.com">Tuleriverarchmon1@gmail.com</a>				X	X			11/2/20		10/30/20		
Wuksache Indian Tribe/ Eshom Valley Band Kenneth Woodrow, Chairperson 1179 Rock Haven Ct. Salinas, CA 93906 <a href="mailto:Kwood8934@aol.com">Kwood8934@aol.com</a>				X	X			11/2/20		10/30/20		

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	NOC	NOP	Electronic Submittal Form	Notice	Notice	NOP						
NEIGHBORING PROPERTIES (300’ from project boundary)												
E & S Investments, LLC P.O. Box 190 Three Rivers, CA 93271					X					10/30/20		
BSK Investments, LLC 40820 Sierra Drive Three Rivers, CA 93271-9535					X					10/30/20		
Satwant & Malkit Sanghera 6425 E. Hatch Rd. Hughson, CA 95326-9239					X					10/30/20		
David A & Jane E Learned (TRS) P.O. Box 596 Three Rivers, CA 93271-0596					X					10/30/20		
Suburban Propane, LP 240 Route 10 West Whippany, NJ 07981-0206					X					10/30/20		
William W. Oliver (TR) P.O. Box 964 Three Rivers, CA 93271-0964					X					10/30/20		
Sukhjinder Singh & Kulvinder Sanghera 1516 Tristan Court Hughson, CA 95326-9154					X					10/30/20		
Gautam & Tina Patel 7662 Cottonwood Lane Pleasanton, CA 94588-4322					X					10/30/20		
Linda McKee Amaral (TR)(FAM TR) 3839 W. Crowley Ct. Visalia, CA 93291-5511					X					10/30/20		
Gregory & Nataliya Dixon (TRS) P.O. Box 343 Three Rivers, CA 93271					X					10/30/20		
Farshad A. Tafti P.O. Box 550 Goshen, CA 93227-0550					X					10/30/20		
OTHER INTERESTED PARTIES												
Ineffable Hospitality, Inc. 6473 E. Hatch Road Hughson, CA 95326 <a href="mailto:haren@ineffablehotels.com">haren@ineffablehotels.com</a>				X				11/6/20				

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Sukhjinder & Kulvinder Sanghera 6473 E. Hatch Road Hughson, CA 95326 <a href="mailto:harensanghera@gmail.com">harensanghera@gmail.com</a>				X				11/6/20				
Joel Hiser HTL Hospitality Advisors 11050 Northgate Drive, Suite 440 San Rafael, CA 94903 <a href="mailto:jhiser@htlha.com">jhiser@htlha.com</a>				X				11/6/20				
Chris Ott HTL Hospitality Advisors San Francisco, CA <a href="mailto:cott@htlha.com">cott@htlha.com</a>				X				11/6/20				
Michael Lozeau Lozeau Drury LLP 1939 Harrison St, Ste 150 Oakland, CA 94612 <a href="mailto:michael@lozeaudrury.com">michael@lozeaudrury.com</a>				X	X			11/2/20		10/30/20		
Hannah Hughes Lozeau Drury LLP 1939 Harrison St, Ste 150 Oakland, CA 94612 <a href="mailto:hannah@lozeaudrury.com">hannah@lozeaudrury.com</a>				X	X			11/2/20		10/30/20		
Komalpreet Toor Lozeau Drury LLP 1939 Harrison St, Ste 150 Oakland, CA 94612 <a href="mailto:komal@lozeaudrury.com">komal@lozeaudrury.com</a>				X	X			11/2/20		10/30/20		
John Elliott <a href="mailto:3rnews@tkcplanner@gmail.com">3rnews@tkcplanner@gmail.com</a>				X				11/2/20				
Rob Balsom <a href="mailto:rbalsom@me.com">rbalsom@me.com</a>				X				11/2/20				
Bettina Birch <a href="mailto:bettina.birch@att.net">bettina.birch@att.net</a>				X				11/2/20				
Dave Bodine <a href="mailto:bodinehouse1@att.net">bodinehouse1@att.net</a>				X				11/2/20				
Karen Bodner <a href="mailto:kebodner@wildblue.net">kebodner@wildblue.net</a>				X				11/2/20				
R. Bodner <a href="mailto:rebodner@wildblue.net">rebodner@wildblue.net</a>				X				11/2/20				

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Chris Brewer <a href="mailto:cdbrewer@gmx.com">cdbrewer@gmx.com</a>				X				11/2/20				
Warren Campbell <a href="mailto:prorege@cwo.com">prorege@cwo.com</a>				X				11/2/20				
Sarah Campe <a href="mailto:sarahcampe@gmail.com">sarahcampe@gmail.com</a>				X				11/2/20				
Christel Change <a href="mailto:2ntimame@gmail.com">2ntimame@gmail.com</a>				X				11/2/20				
Antonette Cloutier <a href="mailto:cloutierd@sbcglobal.net">cloutierd@sbcglobal.net</a>				X				11/2/20				
Trent Coleman <a href="mailto:trentmoorecoleman@gmail.com">trentmoorecoleman@gmail.com</a>				X				11/2/20				
Carole Combs <a href="mailto:ccombs@thegrid.net">ccombs@thegrid.net</a>				X				11/2/20				
Rusty Crain <a href="mailto:jbarc@thegrid.net">jbarc@thegrid.net</a>				X				11/2/20				
Megan Doyle <a href="mailto:Musical_Megan@live.com">Musical_Megan@live.com</a>				X				11/2/20				
Jackie & Richard Fletcher <a href="mailto:Jacki_Fletcher@att.net">Jacki_Fletcher@att.net</a>				X				11/2/20				
Nicky French <a href="mailto:nicky@olbuckaroo.com">nicky@olbuckaroo.com</a>				X				11/2/20				
Lee Goldstein <a href="mailto:drleeagoldstein@hotmail.com">drleeagoldstein@hotmail.com</a>				X				11/2/20				
Marcia Goldstein <a href="mailto:marciagold.st@gmail.com">marciagold.st@gmail.com</a>				X				11/2/20				
Ken Greenspan <a href="mailto:kengreenspan@sbcglobal.net">kengreenspan@sbcglobal.net</a>				X				11/2/20				
Charlie & Esther <a href="mailto:charliehuecker@gmail.com">charliehuecker@gmail.com</a>				X				11/2/20				
Michelle Jeffries <a href="mailto:michellejeffries@gmail.com">michellejeffries@gmail.com</a>				X				11/2/20				
Bobby Kamansky <a href="mailto:bobinator1@hotmail.com">bobinator1@hotmail.com</a>				X				11/2/20				



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	NOC	NOP	Electronic Submittal Form	Notice	Notice	NOP						
Delores Lucero <a href="mailto:delores.lucero@ucr.edu">delores.lucero@ucr.edu</a>				X				11/2/20				11/1/20, Ms. Lucero submitted public records request  11/17/20, email received from Ms. Lucero following up on 11/1/20 email  11/18/20, Interoffice memorandum regarding Ms. Lucero’s public records request.  11/19/20, RMA response to Ms. Lucero’s email; Ms. Lucero replied to the response  11/23/20, email received from Ms. Lucero; RMA email response sent; Ms. Lucero responded per directions to forward questions  11/30/20, email received from Ms. Lucero and RMA email response sent.
Natalie Marini <a href="mailto:info@sequoiasnackshack.com">info@sequoiasnackshack.com</a>				X				11/2/20				11/2/20, email undelivered “Connection timed out...”  11/7/20, email undelivered “..addresses had permanent fatal errors..”
Earl McKee <a href="mailto:tubacowboy@aol.com">tubacowboy@aol.com</a>				X				11/2/20				
Daryl McKown <a href="mailto:darylmckown@yahoo.com">darylmckown@yahoo.com</a>				X				11/2/20				
John McWilliam <a href="mailto:erinrvincent@gmail.com">erinrvincent@gmail.com</a>				X				11/2/20				
Mignon Gregg <a href="mailto:gmgregg@sbcglobal.net">gmgregg@sbcglobal.net</a>				X				11/2/20				
Gary Mills <a href="mailto:GMILLS@omnimeans.com">GMILLS@omnimeans.com</a>				X				11/2/20				

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Soapy Mulholland <a href="mailto:soapy@sequoiariverlands.org">soapy@sequoiariverlands.org</a> <a href="mailto:sopacmcc@gmail.com">sopacmcc@gmail.com</a>				X				11/2/20				11/2/20, email received notifying County of current email address. and providing a new contact for the Executive Director at the Riverlands; the notice was forwarded to both.
Linda Mutch <a href="mailto:meadowlrk@gmail.com">meadowlrk@gmail.com</a>				X				11/2/20				
Brian Newton <a href="mailto:Bandj1407@yahoo.com">Bandj1407@yahoo.com</a>				X				11/2/20				
Charlie Norman <a href="mailto:natekirbyjake@yahoo.com">natekirbyjake@yahoo.com</a>				X				11/2/20				
Donald Peter <a href="mailto:peterdalan@att.net">peterdalan@att.net</a>				X				11/2/20				
Fred Reimer <a href="mailto:fred3rivers@gmail.com">fred3rivers@gmail.com</a>				X				11/2/20				
Mayra Ricci <a href="mailto:mayaricci3@sbcglobal.net">mayaricci3@sbcglobal.net</a>				X				11/2/20				
Sue Rothhammer <a href="mailto:srothhammer@gmail.com">srothhammer@gmail.com</a>				X				11/2/20				
Daniel Rourke <a href="mailto:LuckyDr@yahoo.com">LuckyDr@yahoo.com</a>				X				11/2/20				
Greg Schwaller <a href="mailto:gschwaller1@wildblue.net">gschwaller1@wildblue.net</a>				X				11/2/20				
Laurie Schwaller <a href="mailto:lschwaller1@wildblue.net">lschwaller1@wildblue.net</a>				X				11/2/20				12/1/20, letter received via email
James Seligman <a href="mailto:jseligman@gmail.com">jseligman@gmail.com</a>				X				11/2/20				
Kathleen Seligman <a href="mailto:kseligman@sbcglobal.net">kseligman@sbcglobal.net</a>				X				11/2/20				
Richard Sherlock <a href="mailto:RICHSHERLOCK1@yahoo.com">RICHSHERLOCK1@yahoo.com</a>				X				11/2/20				
Laile Di Silvestro <a href="mailto:laile@mindspring.com">laile@mindspring.com</a>				X				11/2/20				
Rod Simonian <a href="mailto:sim559@gmail.com">sim559@gmail.com</a>				X				11/2/20				
Woody Smeck <a href="mailto:woody_smeck@nps.gov">woody_smeck@nps.gov</a>				X				11/2/20				
Tom Sparks <a href="mailto:tom.sparks@live.com">tom.sparks@live.com</a>				X				11/2/20				

NOTICE OF PREPARATION – Three Rivers Hampton Inn												
AGENCY / ENTITY	DOCUMENTS SENT						DELIVERY METHOD					COMMENTS RECEIVED
	Electronic				Hard Copy							
	NOC	NOP	Electronic Submittal Form	Notice	Notice	NOP	Hand Delivered/ Interoffice	E-mail	FedEx	US Mail	Return Receipt	
Richard Stanton <a href="mailto:rhstanton@gmail.com">rhstanton@gmail.com</a>				X				11/2/20				
Nadine Steel <a href="mailto:mnchsteel@aol.com">mnchsteel@aol.com</a>				X				11/2/20				11/2/20, email bounced back undelivered as a permanent error
Dean Stryd <a href="mailto:dean.stryd@yahoo.com">dean.stryd@yahoo.com</a>				X				11/2/20				
Danielle Temple <a href="mailto:daniellestemple@gmail.com">daniellestemple@gmail.com</a>				X				11/2/20				
Michael Tharp <a href="mailto:MTHARP@RLSMAP.com">MTHARP@RLSMAP.com</a>				X				11/2/20				
John Uhlir <a href="mailto:Johnuhlr1@gmail.com">Johnuhlr1@gmail.com</a>				X				11/2/20				
Charlene Vartanian <a href="mailto:charlenevartanian@gmail.com">charlenevartanian@gmail.com</a>				X				11/2/20				
I.F. Warner <a href="mailto:ifwarner@gmail.com">ifwarner@gmail.com</a>				X				11/2/20				
Marilyn <a href="mailto:marilyn@sequoiariverlands.org">marilyn@sequoiariverlands.org</a>				X				11/2/20				
Kaweah Commonwealth <a href="mailto:3rnews@kaweahcommonwealth.com">3rnews@kaweahcommonwealth.com</a>				X				11/2/20				11/2/20, email undelivered “Connection timed out...”  11/7/20, email undelivered “..addresses had permanent fatal errors..”
Shivon Lavelly <a href="mailto:mike.shivon@sbcglobal.net">mike.shivon@sbcglobal.net</a>												11/30/20, letter received via email.  12/1/20, RMA response to email.
Jenny Matsumoto <a href="mailto:oaknhill@wildblue.net">oaknhill@wildblue.net</a>												12/1/20, email received.  12/2/20, RMA email response
The Kaweah Coalition Attn: Julianna Seligman, Director email address needed												12/2/20, letter received via email.

**NOTICE OF PREPARATION  
INITIAL STUDY FOR A  
DRAFT ENVIRONMENTAL IMPACT REPORT  
AND NOTICE OF SCOPING MEETING**

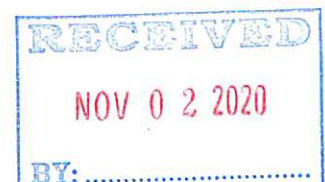
**NOTICE IS HEREBY GIVEN** of Tulare County's intent to prepare a Draft Environmental Impact Report for the proposed Three Rivers-Hampton Inn & Suites project. A scoping meeting will be held on Thursday, November 5, 2020, at 1:30 P.M., to receive oral comments concerning the scope of this EIR in the Main Conference Room of the Resource Management Agency at 5961 South Mooney Blvd., Visalia, California 93277-9394.

1. **PROPOSED PROJECT:** Three Rivers-Hampton Inn & Suites
2. **APPLICANT/AGENT:** Ineffable Hospitality, Inc. / Joel Hiser
3. **PROPOSED PROJECT LOCATION:** The proposed project is located east of State Route 198/Sierra Drive (approximately 1,300' north of Old Three Rivers Road), in Three Rivers, Tulare County, California. The site is located within the Three Rivers Urban Development Boundary with a land use designation of Community Commercial and a zoning classification of C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone). The site is currently vacant, an existing hotel (Comfort Inn & Suites) to the north and a former (now unused) restaurant adjacent to and northwest, a vacant lot to the east, a rural residential/commercial development (two large propane aboveground storage tanks) to the south, and a vacant lot to the west. The approximately 2.80-acre proposed project site is located on Tulare County APN 068-080-010 in Section 26, Township 17 South, Range 28 East, MDB&M, and the Kaweah USGS 7.5 minute quadrangle.
4. **PROJECT DESCRIPTION:** The proposed project is consistent with the Tulare County General Plan, the Three Rivers Community Plan, and with the current Zoning classification. A 3-story hotel (approximately 30'-4" in height) and associated site improvements are being proposed on the existing parcel with access from SR 198/Sierra Drive. A driveway road is proposed from State Route 198/Sierra Drive through the vacant lot to the west and to the proposed Project's location. This driveway will be situated within an existing 30-foot wide access easement. The 3-story hotel will consist of 105 guest rooms with an elevator, manager's office and storage room. Consistent with Tulare County parking requirements, the project includes 108 standard parking stalls (6 of which will be handicap accessible stalls). Utilities include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration).
5. **ENVIRONMENTAL DOCUMENT:** The NOP will be available on November 2, 2020 on the County website at:  
<https://tularecounty.ca.gov/rma/index.cfm/planning-building/environmental-planning/environmental-impact-reports/hampton-inn-suites-three-rivers/>
6. **NOTICE OF PREPARATION COMMENT PERIOD:** November 2, 2020 – December 2, 2020, at 5:00 p.m.
7. **SCOPING MEETING:** All interested parties are invited to attend and be heard in person or via online participation. Due to COVID-19, seating will be limited to 10 total persons and COVID compliance measures will be strictly observed; **in person participants will be required to check in with the lobby desk prior to entering.** The meeting can also be attended online via Zoom at  
<https://us02web.zoom.us/j/83529910456?pwd=bjRLWXdsQ3RjSGN2ZExhQUhLR09tUT09>  
Meeting ID: 835 2991 0456; Passcode: 335039.

If you have any questions regarding this environmental document please call Hector Guerra, Chief Environmental Planner, at (559) 624-7121 (**para Español llame Jose Saenz (559) 624-7102**). If you challenge the decision on any of the foregoing matters in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Tulare County Resource Management Agency, Economic Development and Planning Branch within the review period described herein.

In compliance with the American Disabilities Act, if you need special assistance to participate in meetings call (559) 624-7000 48-hours in advance of the meeting.

Reed Schenke,  
Director, Resource Management Agency





**NOTICE OF PREPARATION  
INITIAL STUDY FOR A  
DRAFT ENVIRONMENTAL IMPACT REPORT  
AND NOTICE OF SCOPING MEETING**

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Reed Schenke,  
Director, Resource Management Agency

# COUNTY OF TULARE RESOURCE MANAGEMENT AGENCY



5961 South Mooney Boulevard  
Visalia, CA 93277

## Initial Study for Draft Environmental Impact Report

Hampton Inn  
(CEQ 20-004)

October 2020

Prepared by  
County of Tulare Resource Management Agency  
Economic Development and Planning Branch  
Environmental Planning Division

## INITIAL STUDY CHECKLIST

1. **Project Title:** Hampton Inn and Suites Three Rivers Project (CEQ 20-004)
2. **Lead Agency:** County of Tulare  
Resource Management Agency  
5961 S. Mooney Blvd.  
Visalia, CA 93277
3. **Contact Persons:** Aaron Bock, Assistant Director - Economic Development and Planning Branch  
– 559-624-7000  
Hector Guerra, Chief, Environmental Planning Division – 559-624-7121
4. **Project Location:** The Project site is located in the USGS 7.5 Minute Kaweah Quadrangle within the community of Three Rivers, California, east of State Route (SR) 198/Sierra Drive, approximately 1,300' north of the Old Three Rivers Road/SR 198 intersection and south of the Comfort Inn and Suites. The site lies within Section 26, Township 17 South, Range 28 East, MDB&M entirely within APN 068-080-010.
5. **Applicant:** Ineffable Hospitality, Inc.  
6473 E. Hatch Road  
Hughson, CA 95326
6. **Owner(s)** Sukhjinder and Kulvinder Sanghera  
6743 E. Hatch Road  
Hughson, Ca 95326
7. **General Plan Designation:** Community Commercial
8. **Zoning:** C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone)
9. **Description of Project (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)** The proposed Project is consistent with the Tulare County General Plan, the Three Rivers Community Plan, and with the current Zoning classification. A 3-story hotel and associated site improvements are being proposed on the existing parcel with access from SR 198. A driveway road is proposed from State Route (SR) 198/Sierra Drive through the vacant lot to the west and to the subject property. This driveway will be situated within an existing 30-foot wide access easement. The hotel will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.) and outdoor swimming pool/cabana building. Consistent with Tulare County parking requirements, the proposed Project includes 108 standard parking stalls (6 of which will be handicap accessible stalls). Utilities include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration). The proposed Project is anticipated to have 12 employees, 70 customers, 1 delivery, and 1 shipment per day, for an average total of 825 daily vehicle trips. Figures 4 and 5 show the Project Layout Overview and Site Plan, respectively.
10. **Surrounding land uses and setting (Brief description):**

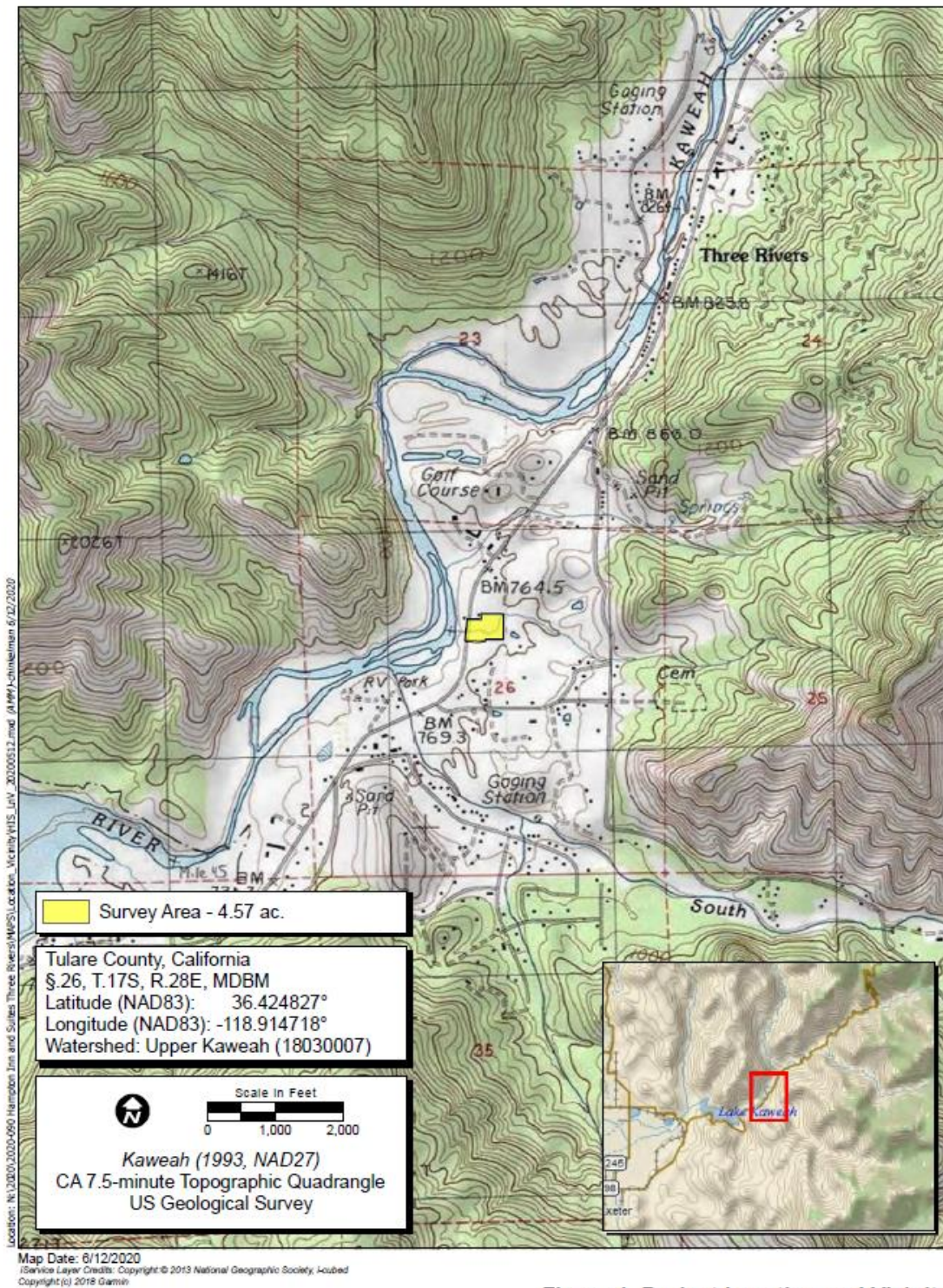
North: commercial (Comfort Inn & Suites Hotel);  
South: scattered residential and above ground propane storage tanks;  
East: undeveloped/vacant land; and  
West: undeveloped/vacant land.

11. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):** Regional Water Quality Control Board, San Joaquin Valley Unified Air Pollution Control District, Tulare County Fire Department, Tulare County Environmental Health, Caltrans, other TBD.
12. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that include, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?** Pursuant to AB 52, a Sacred Land File search reply was received from the Native American Heritage Commission on May 13, 2020, indicating the search results were negative. On October 1, 2020, tribal consultation notices were sent to 13 tribal contacts representing five (5) Native American tribes. As of the date of release of this environmental document, the County has not received any responses from the tribes within the 30-day response time. Mitigation measures have been included in the project to reduce potential impacts on tribal cultural resources in the event that any are unearthed during construction-related activities.

It is noted that the following analyses/determinations are preliminary and subject to revision during and through the environmental review process. Additional and/or clarifying information may be provided to the lead agency by responsible and trustee agencies, and other interested parties (e.g., Southern California Edison, Native American Tribes, the general public, etc.) which may be incorporated into the Draft Environmental Impact Report prior to its release and initiation of the review period. An environmental impact report also contains additional topic chapters/sections not included in the Initial Study such as Alternatives, Mandatory Findings (a preliminary mandatory finding is summarized is included based upon the information currently available as is subject to revision), Cumulative Impacts (preliminary cumulative impacts finding are summarized for each resource is included based upon the information currently available as is subject to revision), Economic & Social Effects & Growth Inducing, Immitigable Impacts, and a Mitigation Monitoring and Reporting Program (however; preliminary mitigation measures are included in this Initial Study).



**Figure 1 - Vicinity Map**



**Figure 1. Project Location and Vicinity**

2020-090 Hampton Inn and Suites in Three Rivers



**Figure 2 - Aerial View of Site**



Figure 3 - Zoning

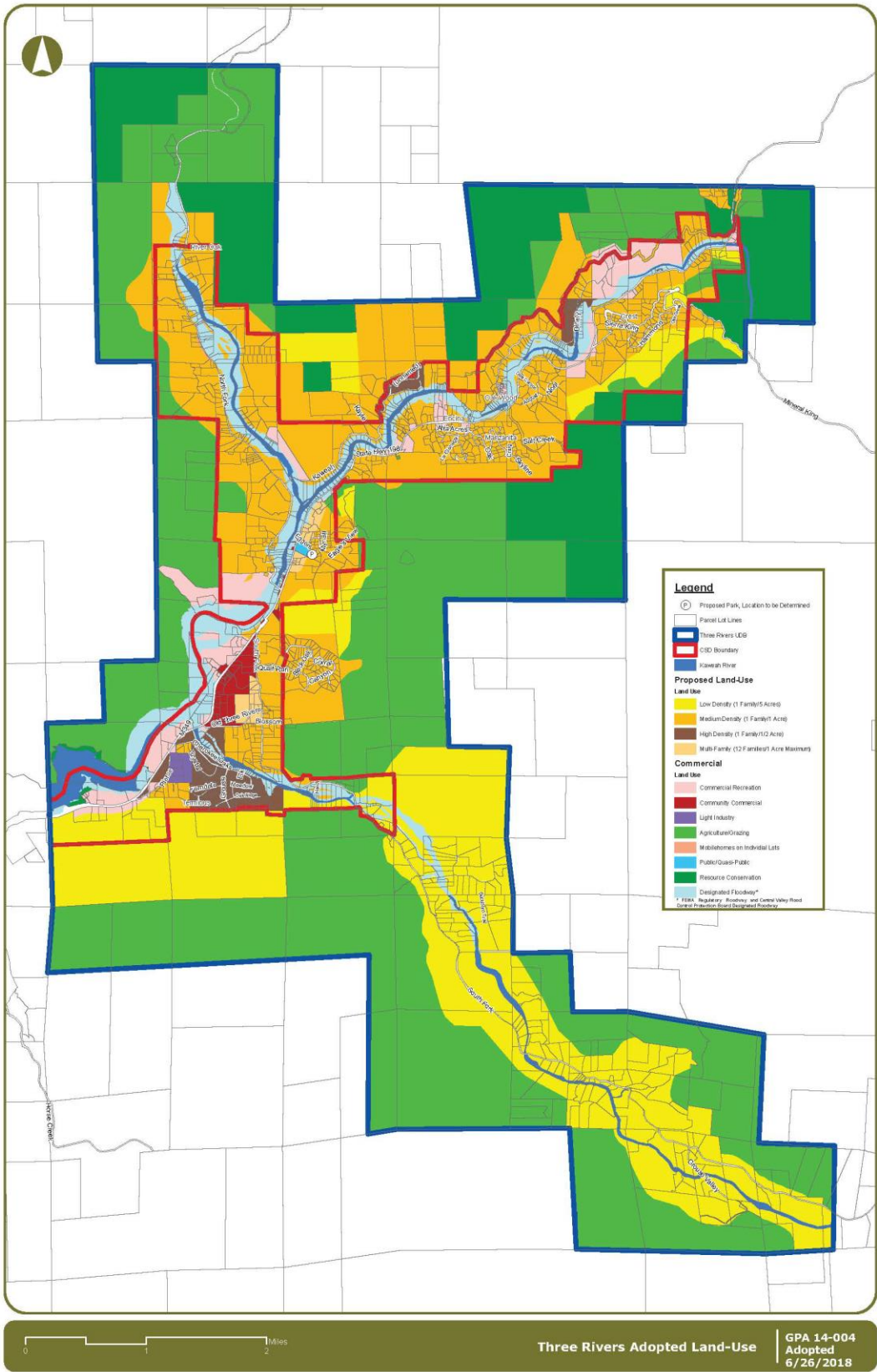
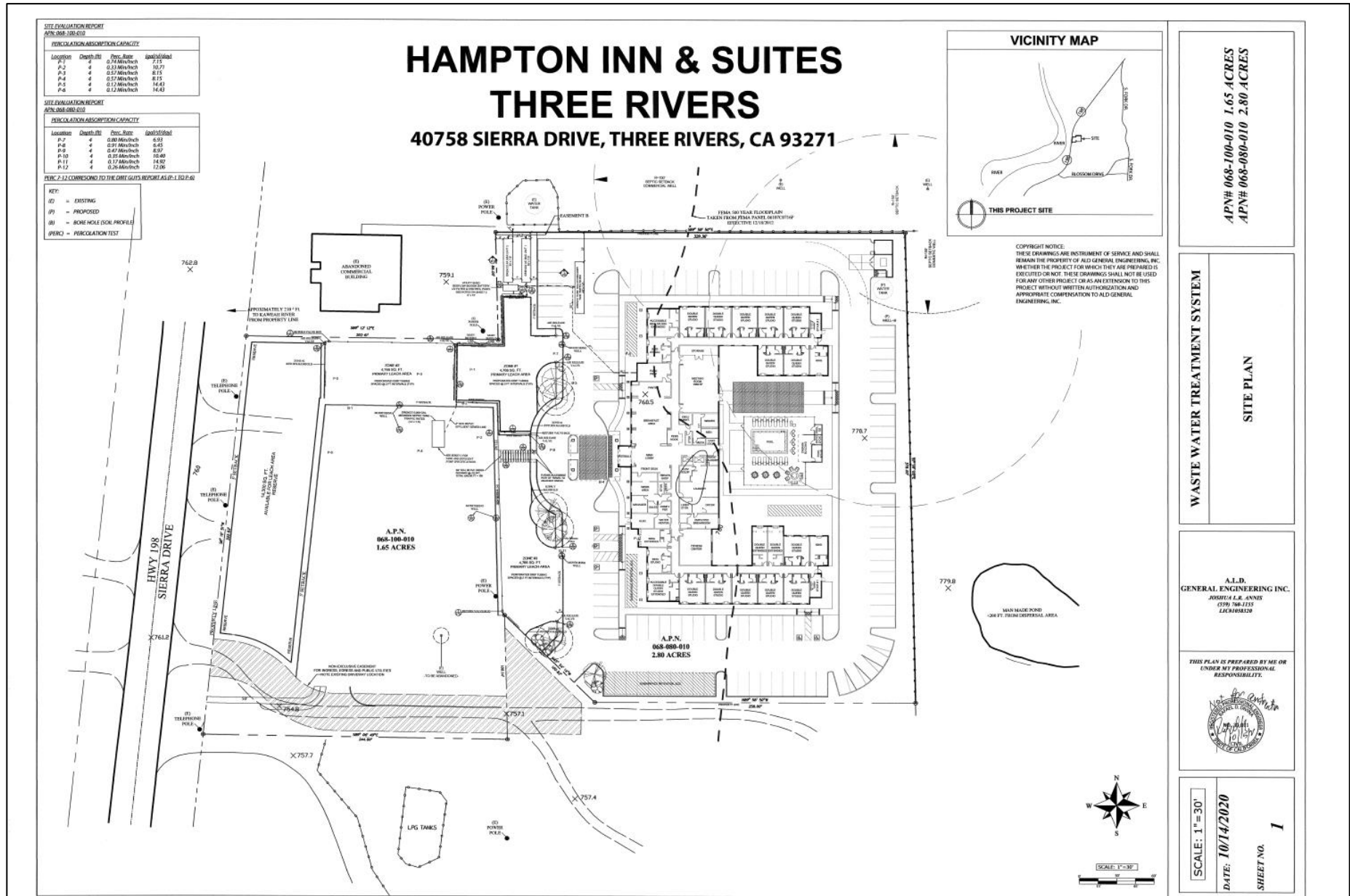
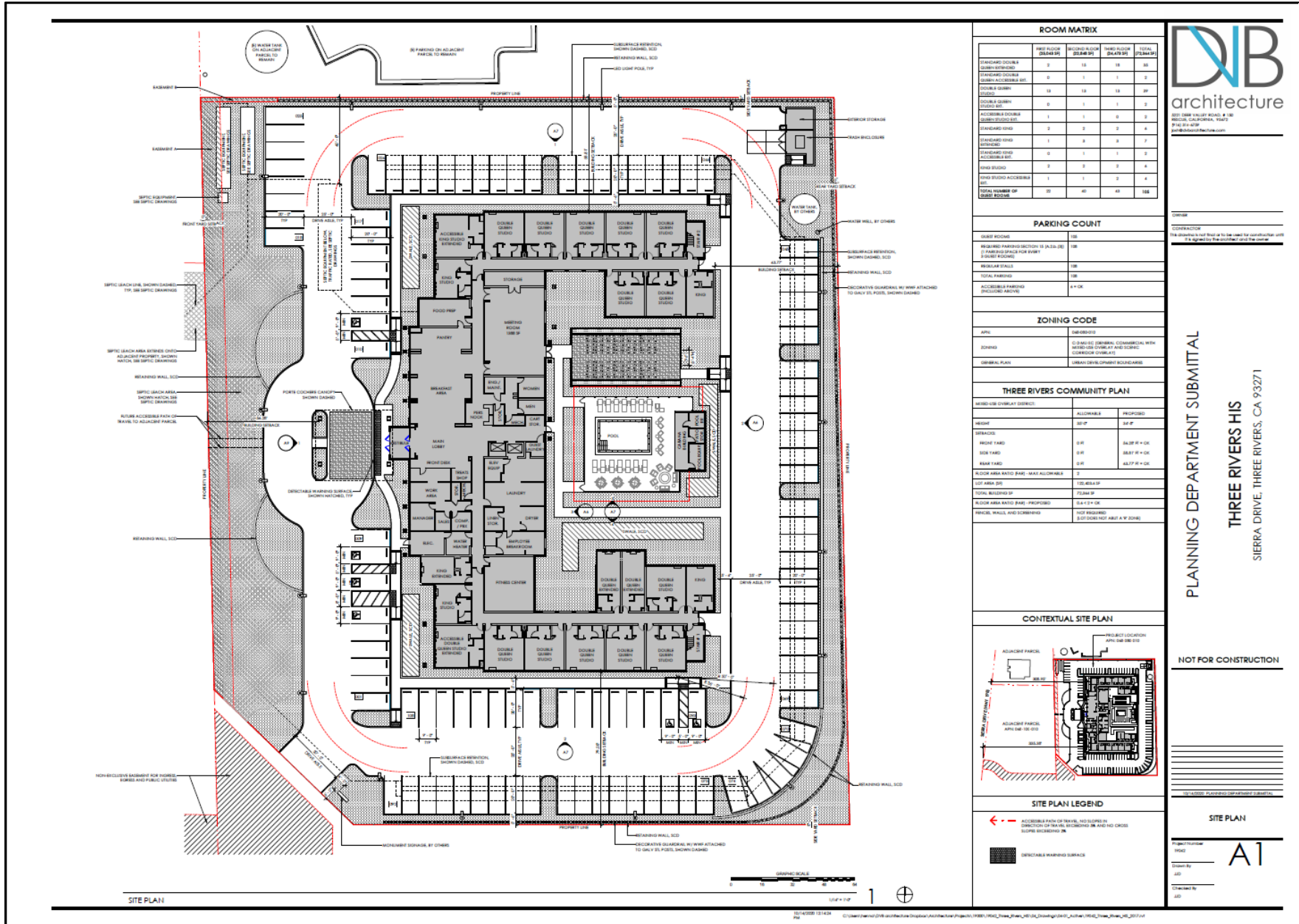


Figure 4 - Overall Site Plan





### Figure 5 - Floor Plan (1 of 3)



**Figure 5 - Floor Plan (2 of 3)**

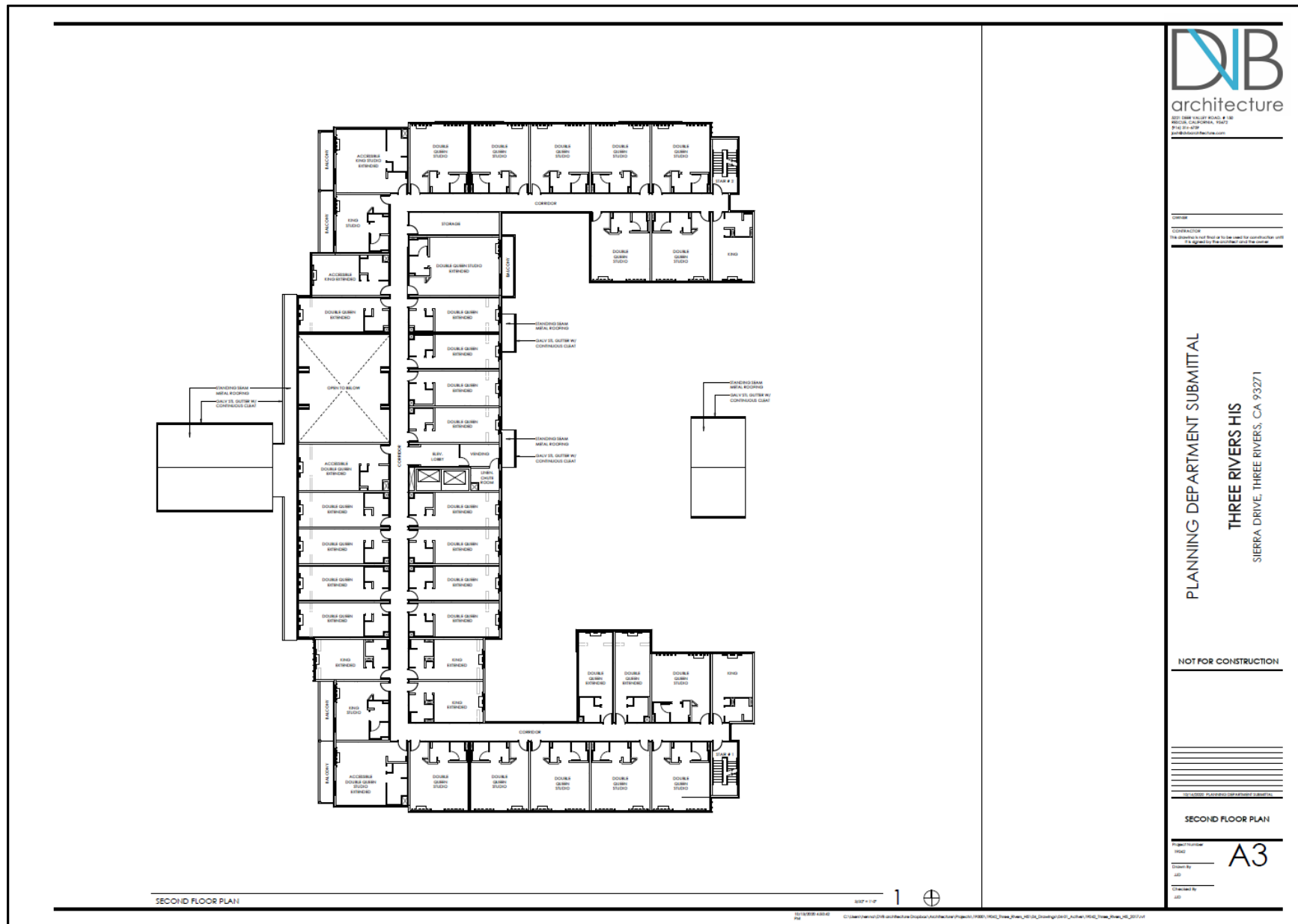
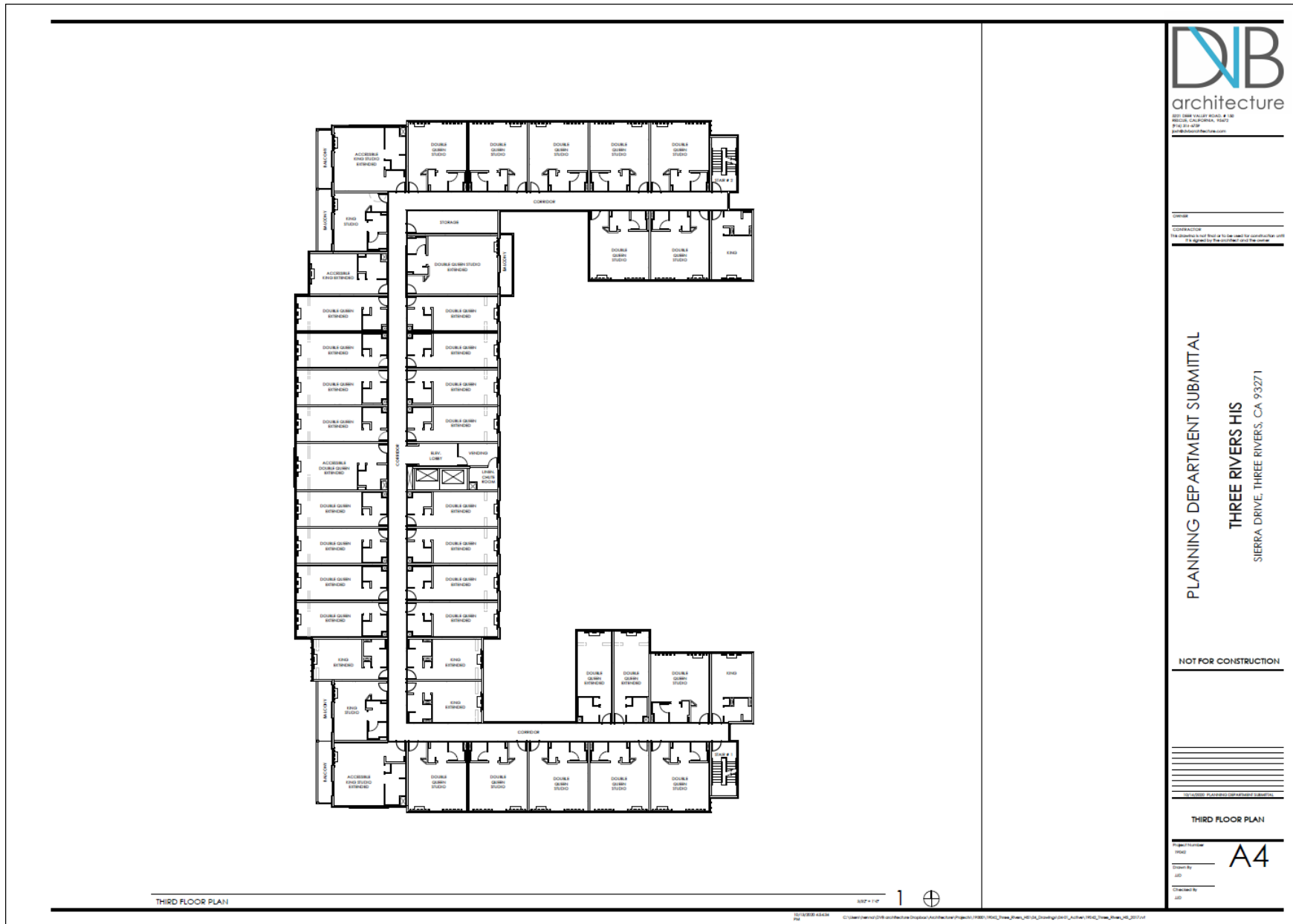


Figure 5 - Floor Plan (3 of 3)



## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

A. The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |                                                             |                                                        |                                                               |
|-------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agriculture Resources         | <input checked="" type="checkbox"/> Air Quality               |
| <input checked="" type="checkbox"/> Biological Resources    | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy                               |
| <input type="checkbox"/> Geology/Soils                      | <input type="checkbox"/> Greenhouse Gas Emissions      | <input type="checkbox"/> Hazards/Hazardous Materials          |
| <input checked="" type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning             | <input type="checkbox"/> Mineral Resources                    |
| <input type="checkbox"/> Noise                              | <input type="checkbox"/> Population/Housing            | <input type="checkbox"/> Public Services                      |
| <input type="checkbox"/> Population/Housing                 | <input type="checkbox"/> Public Services               | <input type="checkbox"/> Recreation                           |
| <input type="checkbox"/> Recreation                         | <input type="checkbox"/> Transportation                | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems          | <input type="checkbox"/> Wildfire                      | <input type="checkbox"/> Mandatory Findings of Significance   |

## B. DETERMINATION:

On the basis of this initial evaluation:

- ☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because revisions in the project have been made or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☒ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- ☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: \_\_\_\_\_

Hector Guerra  
Printed Name

Date: 10/2/20

Chief Environmental Planner  
Title

Signature: \_\_\_\_\_

Reed Schenke, P.E.  
Printed Name

Date: 11/2/2020

Environmental Assessment Officer  
Title



## C. EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify: the significance criteria or threshold, if any, used to evaluate each question; and the mitigation measure identified, if any, to reduce the impact to less than significance.

<https://www.fresno.gov/darm/wp-content/uploads/sites/10/2020/03/Initial-Study.pdf> (Parc West Development Project)

1.	AESTHETICS					
	Would the project:					
Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT	NO IMPACT
	a)	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Analysis:**

**Environmental Setting**

The proposed Project area is located in the Sierran foothills on the western slope of the Sierra Nevada range at elevations between 700 and 3,000 feet. Geophysical factors including elevation, slope, hydrogeology and climate allow the area a high degree of biodiversity that supports a wealth of flora and fauna. This area is typified by undulating terrain that varies from relatively flat riparian valleys immediately adjacent to the Kaweah River to very rugged, mountainous terrain particularly at the southern end of South Fork Drive. The North Fork area elevations range from approximately 980 to over 2,400 feet in the vicinity of Comb Rocks. Elevations along the State Highway 198 corridor range from approximately 772 feet at Lake Kaweah to a high elevation of 2,400 feet east of the entrance to the Sequoia National Park.

The proposed Project site is located in a rural residential and commercial center in the unincorporated community of Three Rivers along SR 198/Sierra Drive. This area is in the foothills of the Sierra Nevada at the edge of the San Joaquin Valley. Three Rivers geographically located in the Kaweah River canyon, the gateway to the entrance to Sequoia and Kings Canyon National Parks. The Project Area is along the southern bank of the Kaweah River, which is 200 feet west, and is approximately five miles northeast of Kaweah Lake. SR 198 separates the Project Area land from the Kaweah River. Elevations range from 755 to 765 feet above mean sea level.

**Regulatory Setting**

***Federal***

Aesthetic resources are protected by several federal regulations, none of which are relevant to this proposed Project because it will not be located on lands administered by a federal agency nor is the proposed Project applicant requesting federal funding or any federal permits.

***State***

Nighttime Sky – Title 24 Outdoor Lighting Standards

Title 24 Outdoor Lighting Standards were adopted by the State of California Energy Commission (CEC) (Title 24, Parts 1 and 6, Building Energy Efficiency Standards) on November 5, 2003, approved by the California Building Standards Commission (BSC) on July 21, 2004 and went into effect on October 1, 2005.<sup>1</sup> Recent updates to Title 24 requirements became effective on January 1, 2017.<sup>2</sup> The updates include definitions for outdoor lighting, which vary according to which “Lighting Zone” the equipment is in. The CEC defines rural areas in accordance with guidelines established by the United States Census Bureau. Rural areas are categorized as CEC Lighting Zone 2 (LZ2) and described as areas being exposed to “moderate” levels of ambient illumination.<sup>3</sup>

### California Scenic Highway Program

The Scenic Highway Program allows county and city governments to apply to the California Department of Transportation (Caltrans) to establish a scenic corridor protection program which was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 284<sup>4</sup>. Two Eligible State Scenic Highways occur in Tulare County, SRs 198 and 190; however, they are not Designated State Scenic Highways.<sup>5</sup>

### **Local**

### Tulare County General Plan 2030 Update

The Tulare County General Plan 2030 Update: Chapter 7 – Scenic Landscapes, contains the following goals and policies that relate to aesthetics, preservation of scenic vistas and daytime lighting/nighttime glare and which have potential relevance to the Project’s CEQA review: *LU-7.14 Contextual and Compatible Design* wherein the County shall ensure that new development respects Tulare County’s heritage by requiring that development respond to its context, be compatible with the traditions and character of each community, and develop in an orderly fashion which is compatible with the scale of surrounding structures; *LU-7.19 Minimize Lighting Impacts* wherein the County shall ensure that lighting in residential areas and along County roadways shall be designed to prevent artificial lighting from reflecting into adjacent natural or open space areas unless required for public safety; *SL-1.1 Natural Landscapes* which requires new development to not significantly impact or block views of Tulare County’s natural landscapes; *SL-1.2 Working Landscapes* which requires that new non-agricultural structures and infrastructure located in or adjacent to croplands, orchards, vineyards, and open rangelands be sited so as to not obstruct important viewsheds and to be designed to reflect unique relationships with the landscape; and *SL-2.1 Designated Scenic Routes and Highways* which is intended to protect views of natural and working landscapes along the County’s highways and roads by maintaining a designated system of County scenic routes and State scenic highways.

Tulare County’s General Plan 2030 Update discusses State and County-designated and eligible scenic highways and encourages citizen and private sector initiatives to promote and protect such areas.<sup>6</sup> State Route 198 from Visalia to Three Rivers has been designated as an eligible State Scenic Highway by the State of California.<sup>7</sup> State Route 198 parallels Lake Kaweah and the Kaweah River. This highway travels through the agricultural areas of the valley floor to the foothills and the Sierra Nevada range. Figure 7-1 of the General Plan 2030 Update identifies State-designated scenic highways as well as County-designated scenic roads within Tulare County.<sup>8</sup>

### Three Rivers Community Plan

Following is a summary list of some additional goals/objective/policies that may apply to the proposed Project contained in the Three Rivers Community Plan<sup>9</sup>, including, but are limited to: *Goal 1: Compatible Development* to maintain the Rural Gateway

<sup>1</sup> California Energy Commission, 2017. Past Building Energy Efficiency Standards. [http://www.energy.ca.gov/title24/standards\\_archive/](http://www.energy.ca.gov/title24/standards_archive/).

<sup>2</sup> California Energy Commission, 2017. Building Energy Efficiency Program. <http://www.energy.ca.gov/title24/>.

<sup>3</sup> California Energy Commission, 2016, page 41. <http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf>

<sup>4</sup> California Legislative Information., 2017. Article 2.5. State Scenic Highways [260 – 284]. [https://leginfo.ca.gov/faces/codes\\_displayText.xhtml?lawCode=SHC&division=1.&title=&part=&chapter=2.&article=2.5](https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=SHC&division=1.&title=&part=&chapter=2.&article=2.5).

<sup>5</sup> CADOT, 2017. Tulare County. [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm).

<sup>6</sup> Ibid. Page 7-4, 7.2 Scenic Corridors and Places.

<sup>7</sup> CADOT, 2017. Tulare County. [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm).

<sup>8</sup> Tulare County, 2012. Tulare County General Plan 2030 Update. Goals and Policies Report. Figure 7-1 Designated Candidate Scenic State Highways and County Scenic Routes. Page 7-5. Accessed at: <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>.

<sup>9</sup> Tulare County. Three Rivers Community Plan 2018 Update. Pages 235-242.

Character of Three Rivers through land uses and new development that are compatible and consistent with the existing development in Three Rivers, preserve the unique visual and community character and natural environment and create a distinct sense of place.

*Objective 1.1 Development Compatibility* Ensure compliance with the Community Plan to ensure compatibility between and within new and existing development. *Policies: 1.1.2 Mixed Uses* to ensure that development to accommodate growth includes a balanced mix of residential, commercial and public uses that enhance the community's economic vitality while maintaining its rural character and quality of life; *1.1.3 Commercial Uses- Limiting Negative Impacts* to limit commercial or recreational uses that generate negative impacts, such as noise, lighting, traffic, odors and emissions in residential and rural residential neighborhoods which includes subset (a) The height, size, mass, scale, and design of new development shall be consistent in size, and compatible with the character of the surrounding natural or built environment. Structures shall be designed to follow natural contours of the landscape and clustered in the most accessible, least visually prominent and most geologically stable portion or portions of a site. Structures will be sited so as not to obstruct significant views and subset (b) Implement a development height standard, based on the existing building code, with maximum building height not to exceed 35' (as identified in the FGMP page 41). The following general provisions are recommended: (a) Distance: to be determined based on the following factors: (b) Stabilization of edge condition, (c). Types of operation, (d) Types of land uses (i.e. schools, etc.), (e). Building orientation, (f) Planting of trees for screening, (g) Location of existing and future rights-of-way, (h) Types of uses allowed inside the project area, (i). Unique site conditions, (j) Responsibility for maintenance, and (k). Scale of development; *1.1.4 Compatible Commercial Establishments* Encourage compatible commercial establishments necessary to serve residents and tourists that are commensurate with the scale and intensity of the community, preserve the environment, and which do not have to the extent feasible, significant traffic, light, noise or visual impacts to the community; *1.1.5 Cluster Commercial Uses* Cluster commercial uses in compact areas and development patterns to discourage strip development and encourage the development of a Town Center or Centers; *1.1.6 Land Use Protections* Protect land uses adjacent to SR 198 from noise impacts by requiring adequate landscape screening and buffering; *1.1.10 LU-3.8 Rural Residential Interface* wherein the County shall minimize potential land use conflicts at the interface between commercial, industrial, or medium to high density residential development and existing developed rural-residential areas; *1.1.12 LU-4.5 Commercial Building Design* wherein the County shall encourage that new commercial development is consistent with the existing design of the surrounding community or neighborhood by encouraging similar façades, proportionate scale, parking, landscaping, and lighting that provides for night sky conservation and protection; *1.1.15 LU-7.14 Contextual and Compatible Design* wherein the County shall ensure that new development respects Three Rivers' long heritage by requiring that development respond to its context, be compatible with the traditions and character of the community, and develop in an orderly fashion which is compatible with the scale of surrounding structures; *Objective 1.2 Rural Gateway Character* to maintain and balance the existing natural environment with the rural gateway character of Three Rivers. *Policies: 1.2.1 New Development Compatibility* to ensure that the size, type, and scale of new development in Three Rivers is compatible with the rural character of the community; *1.2.6 LU-7.9 Visual Access* wherein the County shall require new development to maintain visual access to views of hillsides, creeks, and other distinctive natural areas by regulating building orientation, height, and bulk; *1.2.7 LU-7.6 Screening* wherein the County shall require landscaping to adequately screen new industrial uses to minimize visual impacts; *1.2.13 SL-3.3 Highway Commercial* wherein the County shall require highway commercial uses to be located and designed to reduce their visual impact on the travel experience along State scenic highways and County scenic routes by: *a.* Encouraging commercial development to locate in existing communities and hamlets, *b.* Designing highway commercial areas as an extension of community street patterns and vernacular design traditions, allowing the individual personalities of each community to extend to the highway edge, and *c.* Discouraging development of frontage roads consistent with commercial strips except when consistent with regional growth corridor and community plans; *1.2.19 FGMP-6.4 Development Within Scenic Corridors* wherein the County shall require that projects located within a scenic corridor be designed in a manner, which does not detract from the visual amenities of that thoroughfare. The County shall support through the use of its authority and police powers, the design of infrastructure that minimizes visual impacts to surrounding areas by locating roadways in areas that minimize the visual impact on rural and natural places whenever feasible; *1.3.4 Setbacks* that require adequate setbacks for residential, commercial and industrial uses, including, side and rear yards, landscaping and screening, as determined by the County Project Review Committee; *1.3.5 Signage Standards* that require standards for signage in Three Rivers, including regulations for: size, height, scale, color, lighting, and material. Incorporate Caltrans signage standards with community standards, as they apply to SR 198; *1.3.6 Lighting Standards* to establish lighting standards and guidelines as feasible and appropriate to minimize light pollution, glare, and light trespass and to protect the dark skies in Three Rivers; *1.3.7 Vegetation Standards* to establish vegetation standards for residential and commercial development, and encourage the use of native vegetation in landscaping, when visible to common roadways.

- a) Less Than Significant Impact:** For the purposes of this proposed Project, a scenic vista is defined as an area that is designated, signed, and accessible to the public for the purpose of viewing and sightseeing. The proposed Project site is located in the unincorporated community of Three Rivers and is adjacent to an existing hotel along and east of SR 198/Sierra Drive. The County requires development within existing eligible State Scenic Highway corridors to adhere to land use and design standards and guidelines required by the State Scenic Highway Program. The immediate area surrounding the Project site is generally level; there are two nearby hills northeast and east of the site and numerous hills west of the site (west of the Kaweah River).

The Comfort Inn and Suites is located to the north, the Kaweah River is west of site (west of SR 198) with scattered development (i.e., two rural residences), undeveloped land to the east and, a rural residence and two large compressed natural gas tanks to the southwest. The proposed Project would be three stories (approximately 30'-4" in height) and thus would not exceed the 75 feet maximum as specified in the Zoning Ordinance. No parts of the proposed Project would obstruct local scenic views. The primary structure (the hotel building) will be setback greater than 300 feet from the edge of SR 198/Sierra Drive thereby minimizing visual intrusion on scenic views as applicable to CEQA. To be clear, there are no *designated scenic vistas* (emphasis added) within or within visible distance of the proposed Project site (County of Tulare, 2010). Therefore, as the proposed Project would result in a less than substantial adverse affect on a scenic vista, the proposed Project would result in a less than significant impact to this resource.

- b) No Impact and Less Than Significant Impact:** There are no rock outcroppings, historic buildings<sup>10</sup>, or other designated scenic resources within or near the proposed Project site. The California Scenic Highway Program allows counties to nominate an eligible scenic highway to be approved by the California Department of Transportation and placed under the scenic corridor protection program. In Tulare County, there is currently one officially designated scenic highway, and two highways that are eligible for designation. Approximately two miles of the officially designated Scenic Highway (State Route) 180 passes through Tulare County, but this segment of SR 180 is greater approximately 20 miles north of the proposed Project site. In addition to SR 198 (a segment of it passes through Three Rivers), SR 190 (approximately 21 miles south), are Eligible State Scenic Highways. As such, the proposed Project is located within the viewshed of an eligible highway segment of SR 198 but, it is not located within the viewshed of any *designated scenic highway* (emphasis added).

As noted in the Three Rivers Community Plan (Community Plan), the Three Rivers community is located within a segment of SR 198 appropriately labeled as the "Three Rivers Community segment."<sup>11</sup> The Community Plan contains policies for visual resources such as design quality, minimize viewshed impacts, skyline preservation, etc., that will apply to the proposed Project. As noted earlier, the proposed Project is located in a relatively flat area and does not contain scenic resources such as significant trees, rock outcroppings, or historic buildings.

Therefore, there would be no impact to a designated state scenic highway and a less than significant impact to an eligible state scenic highway. There would be no impact and a less than significant impact to other scenic resources as a result of the proposed Project.

- c) No Impact:** The proposed Project site is located in a mixed sparse, low density, scattered, non-intensive developed area. The proposed Project will be located greater than 200 feet from SR 198 (with the main structure (the hotel) greater than 300 feet from SR 198), will be limited to three-stories (30'-4" in height), and will be designed to be minimally intrusive to surrounding uses. As such, even though the proposed Project location is in a generally urbanized area, it would not substantially degrade the existing visual character or quality of the site and its surroundings. As noted earlier, implementation of Tulare County General Plan and Three Rivers Community Plan policies and development standards would minimize or avoid substantial impacts to the visual character or quality of the site and its surroundings. Therefore, the proposed Project would not conflict with applicable zoning and other regulations governing scenic quality resulting in no impact to this resource.
- d) Less Than Significant Impact:** The proposed Project will likely include lighting at the entry/exit point, and include evening lighting in the parking areas, pedestrian walkways, and security lighting, it will be required to comply with Tulare County General Plan and Three Rivers Community Plan policies and development standards. The Community Plan contains specific standards for night sky conservation and protection at *Policy 1.1.12 LU-4.5 Commercial Building Design (237)*, *4.5.2. Proposals Subject to County Project Review Committee* and, A-1 - Policy Matrix (6) Establishing Lighting Standards for Night Sky Conservation and Protection.<sup>12</sup> As such, the proposed Project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area resulting in a less than significant impact to this resource.

**Cumulative Impact:** As noted earlier, the proposed Project will be setback greater than 200 feet (with the main structure (the hotel), greater than 300 feet from SR 198), will be limited to three-stories (30'-4" in height), will be designed to minimize intrusion to surrounding uses, and as there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers that would impact aesthetics, the proposed Project will not significantly contribute to the overall aesthetics of the area.

<sup>10</sup> "Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers". Page 21. June 2020. Prepared by ECORP Consulting, Inc.

<sup>11</sup> Three Rivers Community Plan Update. Page 80. Accessed at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>. Adopted by the Tulare County Board of Supervisors on June 26, 2018 via Resolution Nos. 2018-0481, 2018-0482, 2018-0483, and 2018-0484.

<sup>12</sup> Ibid. Pages 237, 264, and 351; respectively.

<b>2.</b>		<b>AGRICULTURAL AND FOREST RESOURCES</b>			
		In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the Rural Valley Lands Plan point evaluation system prepared by the County of Tulare as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.			
Would the project:		<b>SIGNIFICANT IMPACT</b>	<b>LESS THAN SIGNIFICANT IMPACT WITH MITIGATION</b>	<b>LESS THAN SIGNIFICANT</b>	<b>NO IMPACT</b>
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Conflict with existing zoning for agriculture use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources code 12220(g), timberland (as defined in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Analysis:</b>  <b>Environmental Setting</b>  <p>Tulare County exhibits a diverse ecosystems landscape created through the extensive amount of topographic relief (elevations range from approximately 200 to 14,000 feet above sea level). The County is essentially divided into three eco-regions. The majority of the western portion of the County comprises the Great Valley Section, the majority of the eastern portion of the County is in the Sierra Nevada Section, and a small section between these two sections comprises the Sierra Nevada Foothill Area.”<sup>13</sup></p> <p>Three Rivers lies in this foothill area generally at elevations between 700 and 3,000 feet. Geophysical factors including elevation, slope, hydrogeology, and climate allow the area a high degree of biodiversity that supports a wealth of flora and fauna. The area is typified by undulating terrain that varies from relatively flat riparian valleys immediately adjacent to the North, South, and Middle forks of the</p>					

<sup>13</sup> Tulare County, 2010. General Plan 2030 Update RDEIR, page 3.11-5. Accessed at: <http://generalplan.co.tulare.ca.us/documents/generalplan2010/RecirculatedDraftEIR.pdf>

Kaweah River to very rugged, mountainous terrain.

According to the General Soils Map of Tulare County, Three Rivers contains three soil classes: Class VI, Class VII and Class VIII. These soils are not suitable for cultivation however they lend themselves to pasture, rangelands, grazing and wildlife purposes. Three Rivers' soils are conducive to cattle and grazing operations and to this end extensive grazing occurs along north and south forks (Case Mountain) of the Kaweah River on private ranches and lands leased from the BLM. The proposed Project site itself consists of Blasingame sandy loam and Tujunda sand soils; both are not hydric and are not rated as prime farmland.<sup>14</sup>

#### Forest Lands

"Timberlands that are available for harvesting are located in the eastern portion of Tulare County in the Sequoia National Forest. Hardwoods found in the Sequoia National Forest are occasionally harvested for fuel wood, in addition to use for timber production. Since most of the timberlands are located in Sequoia National Forest, the U.S. Forest Service has principal jurisdiction, which encompasses over 3 million acres. The U.S. Forest Service leases these federal lands for timber harvests."<sup>15</sup>

The proposed Project is not located on timberland or a forest. As noted earlier, the proposed Project site is located on vacant, undeveloped land and does not contain trees either intended for or suitable for use as timber.

#### Regulatory Setting

##### ***Federal***

Federal regulations for agriculture and forest resources are not relevant to this proposed Project because it is not a federal undertaking (the proposed Project site is not located on lands administered by a federal agency, and the proposed Project applicant is not requesting federal funding or any federal permits).

##### ***State***

#### California Environmental Quality Act (CEQA) Definition of Agricultural Lands

Public Resources Code Section 21060.1 defines "agricultural land" for the purposes of assessing environmental impacts using the FMMP. The FMMP was established in 1982 to assess the location, quality, and quantity of agricultural lands and the conversion of these lands. The FMMP serves as a tool to analyze agricultural land use and land use changes throughout California. As such, the proposed Project is being evaluated using the FMMP pursuant to CEQA.

#### California Department of Conservation, Division of Land Resource Protection

The California Department of Conservation (DOC) applies the Natural Resources Conservation Service (NRCS) soil classifications to identify agricultural lands. These agricultural designations are used in planning for the present and future of California's agricultural land resources. Pursuant to the DOC's FMMP, these designated agricultural lands are included in the Important Farmland Maps (IFM). As noted earlier the FMMP was established in 1982 to assess the location, quality and quantity of agricultural lands, and the conversion of these lands. The FMMP serves as tool to analyze agricultural land use and land use changes throughout California. The DOC has a minimum mapping unit of 10 acres, with parcels that are smaller than 10 acres being absorbed into the surrounding classifications.

The following list provides a comprehensive description of all the categories mapped by the DOC. Collectively, lands classified as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are referred to as Farmland.<sup>16</sup>

- Prime Farmland. Farmland that has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained

<sup>14</sup> Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Accessed September 2020 at: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.

<sup>15</sup> Ibid. 4-20.

<sup>16</sup> California Department of Conservation. FMMP – Important Farmland Map Categories. <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/>; then select tul16\_no. pdf Accessed May 2019.



high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- Farmland of Statewide Importance. Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- Unique Farmland. Farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated groves or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- Farmland of Local Importance. Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- Grazing Land. Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.
- Urban and Builtup Land. Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- Other Land. Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

#### California Land Conservation Act (Williamson Act)

The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. The Department of Conservation assists all levels of government, and landowners in the interpretation of the Williamson Act related government code. The Department also researches, publishes and disseminates information regarding the policies, purposes, procedures, and administration of the Williamson Act according to government code. Participating counties and cities are required to establish their own rules and regulations regarding implementation of the Act within their jurisdiction. These rules include but are not limited to: enrollment guidelines, acreage minimums, enforcement procedures, allowable uses, and compatible uses.<sup>17</sup>

Williamson Act Contracts are formed between a county or city and a landowner for the purpose of restricting specific parcels of land to agricultural or related open space use. Private land within locally-designated agricultural preserve areas are eligible for enrollment under a contract. The minimum term for contracts is ten years. However, since the contract term automatically renews on each anniversary date of the contract, the actual term is essentially indefinite. Landowners receive substantially reduced property tax assessments in return for enrollment under a Williamson Act contract. Property tax assessments of Williamson Act contracted land are based upon generated income as opposed to potential market value of the property.<sup>18</sup>

#### Forestry Resources

State regulations regarding forestry resources are not relevant to the proposed Project because no forestry resources exist at the proposed Project site.

#### **Local**

##### County of Tulare

On February 26, 2013, per Resolution No. 2013-0104, Tulare County adopted a two-level review process for evaluating the siting of public and private utility structures on agricultural zoned land to analyze potential agricultural conversion impacts. However, as the proposed Project does not entail nor impact any agricultural land, this Resolution does not apply to the proposed Project.

<sup>17</sup> California Department of Conservation. Williamson Act Program. <https://www.conservation.ca.gov/dlrp/wa>. Site accessed May 2019.

<sup>18</sup> <https://www.conservation.ca.gov/dlrp/wa/Pages/contracts.aspx> Site accessed May 2019.



- a) No Impact:** As noted earlier, the Tulare County Board of Supervisors (Board) approved Resolution No. 2013-0104 on February 26, 2013, whereby Tulare County adopted a two-level review process for evaluating the siting of public and private utility structures on agricultural zoned land to analyze potential agricultural conversion impacts. However, as noted earlier, this Resolution does not apply to the proposed Project. The proposed Project would not result in the Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. Therefore, the proposed Project would result in a less than significant impact to this resource.
- b) No Impact:** The proposed Project site is zoned C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone); as such, the proposed Project is an allowed use. The proposed Project site is not under a Williamson Act Contract. Therefore, the proposed Project would not conflict with existing zoning or a Williamson Act Contract and no impact would occur.
- c and d) No Impact:** The proposed Project will not occur on land zoned as forest land or timberland, or result in a loss of forest land. As such, the proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources code 12220(g), timberland (as defined in Public Resource Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).
- e) No Impact:** The proposed Project site is not located near land zoned as forest land or timberland and therefore would not result in any changes in the environment that might convert forest land to non-forest land. Also, the proposed Project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use. Therefore, the proposed Project would not result in other changes to the environment that could result in the conversion of forest land to no-forest land nor farmland to non-farmland. There would be no impact on this Item.
- Cumulative Impact:** As the proposed Project will not replace agricultural or timberland, it would not contribute to any cumulative impact to this resource.

3.	<b>AIR QUALITY</b>				
	Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.				
Would the project:		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d)	Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Analysis</b>  The proposed Project will result in Less Than Significant Impacts With Mitigation to Air Quality. The “Air Quality & Greenhouse Gas Assessment Three Rivers Hampton Inn and Suites Project” (AQ Assessment) was prepared by ECORP Consulting, Inc. (Consultant) in July 2020 (updated October 2020) which is included in Attachment “A” of this Initial Study. The AQ Assessment is used as the basis for determining that, based on the evidence/documentation (including incorporation of recommendations contained in the AQ Assessment) and the expertise of qualified Consultant, the proposed Project will result in a less than significant impact.					

## **Environmental Setting**

The proposed Project is located in the San Joaquin Valley Air Basin (SJVAB), a continuous inter-mountain air basin. The Sierra Nevada Range forms the eastern boundary; the Coast Range forms the western boundary; and the Tehachapi Mountains form the southern boundary. These topographic features restrict air movement through and beyond the SJVAB. The SJVAB is comprised of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, and Tulare Counties and the valley portion of Kern County; it is approximately 25,000 square miles in area. Tulare County lies within the southern portion of the SJVAB. Air resources in the SJVAB is managed by the San Joaquin Valley Air Pollution Control District (Air District or SJVAPCD).

## **Regulatory Setting**

Both the federal government (through the United State Environmental Protection Agency (EPA)) and the State of California (through the California Air Resources Board (CARB or ARB)) have established health-based ambient air quality standards (AAQS) for six air pollutants, commonly referred to as “criteria pollutants.” Criteria pollutants are air pollutants for which acceptable levels of exposure can be determined and for which AAQS has been set. The six criteria pollutants are: carbon monoxide (CO), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), respirable or coarse particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), and lead (Pb).

National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been established for each criteria pollutant to protect the public health and welfare. The federal and state standards were developed independently with differing purposes and methods, although both processes are intended to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent.

### ***Federal***

The Federal Clean Air Act requires EPA to set NAAQS for the six criteria pollutants, noted above, that occur throughout the United States. Of the six pollutants, particle pollution and ground-level ozone are the most widespread health threats. EPA regulates the criteria pollutants by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health is called primary standards. Another set of limits intended to prevent environmental and property damage is called secondary standards.

EPA is required to designate areas as meeting (attainment) or not meeting (nonattainment) the air pollutant standards. The Federal Clean Air Act (CAA) further classifies nonattainment areas based on the severity of the nonattainment problem, with marginal, moderate, serious, severe, and extreme nonattainment classifications for ozone. Nonattainment classifications for PM range from marginal to serious. The Federal CAA requires areas with air quality violating the NAAQS to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The SIP contains the strategies and control measures that states will use to attain the NAAQS. The Federal CAA amendments of 1990 require states containing areas that violate the NAAQS to revise their SIP to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, rules, and regulations of Air Basins as reported by the agencies with jurisdiction over them. The EPA reviews SIPs to determine if they conform to the mandates of the Federal CAA amendments and will achieve air quality goals when implemented. If the EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and impose additional control measures.

The SJVAB is considered to be in attainment for federal and state air quality standards for carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>); attainment for federal and non-attainment for state air quality standards for respirable particulate matter (PM<sub>10</sub>); and non-attainment of state and federal air quality standards for ozone (O<sub>3</sub>) and fine particulate matter (PM<sub>2.5</sub>). To meet federal CAA requirements, the Air District has adopted the following attainment plans: the 2004 Extreme Ozone Attainment Demonstration Plan (for the 1979 1-hour standard); the 2007 Ozone Plan (for the 1997 8-hour standard); the 2009 RACT SIP; the 2013 Plan for the Revoked 1-Hour Ozone Standard; the 2014 RACT SIP; the 2016 Plan for the 2008 8-Hour Ozone Standard; 2020 RACT Demonstration (for the 2015 8-hour standard); the 2007 PM<sub>10</sub> Maintenance Plan; the 2008 PM<sub>2.5</sub> Plan (for the 1997 annual standard); the 2012 PM<sub>2.5</sub> Plan (for the 2006 24-hour standard); the 2015 Plan for the 1997 PM<sub>2.5</sub> Standard (for annual and 24-hour standards); the 2016 Moderate Area Plan for the 2012 PM 2.5 Standard (for the annual standard); the 2018 Plan for the 1997, 2006, and 2012 PM 2.5 Standards (annual and 24-hour standards); and the 2004 Revision to the California State Implementation Plan for Carbon Monoxide. The State does not have an attainment deadline for the ozone standards; however, it does require implementation of all feasible measures to achieve attainment at the earliest date possible. State PM<sub>10</sub> and PM<sub>2.5</sub> standards have no attainment planning requirements, but must demonstrate that all measures feasible for the area have been adopted.

## State

The California Air Resources Board (ARB) divides the state into air basins that share similar meteorological and topographical features and is the state agency responsible for implementing the federal and state Clean Air Acts. ARB has established California Ambient Air Quality Standards (CAAQS), which include all criteria pollutants established by the NAAQS, but with additional regulations for Visibility Reducing Particles, sulfates, hydrogen Sulfide (H<sub>2</sub>S), and vinyl chloride.

Air basins are designated as attainment or nonattainment. Attainment is achieved when monitored ambient air quality data is in compliance with the standards for a specified pollutant. Non-compliance with an established standard will result in a nonattainment designation and an unclassified designation indicates insufficient data is available to determine compliance for that pollutant. The proposed Project is located within the San Joaquin Valley Air Basin, which includes San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and parts of Kern counties and is managed by the San Joaquin Valley Unified Air Pollution Control District (Air District).

Standards and attainment status for listed pollutants in the Air District can be found in **Table AQ-1**. Note that both state and federal standards are presented.

<b>Table AQ-1 SJVAB Attainment Status</b>		
	<b>Designation/Classification</b>	
<b>Pollutant</b>	<b>Federal Standards<sup>a</sup></b>	<b>State Standards<sup>b</sup></b>
Ozone – one hour	No Federal Standard <sup>f</sup>	Nonattainment/Severe
Ozone – eight hour	Nonattainment/Extreme <sup>e</sup>	Nonattainment
PM <sub>10</sub>	Attainment <sup>c</sup>	Nonattainment
PM <sub>2.5</sub>	Nonattainment <sup>d</sup>	Nonattainment
CO	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment
<p><sup>a</sup> See 40 CFR Part 81</p> <p><sup>b</sup> See CCR Title 17 Sections 60200-60210</p> <p><sup>c</sup> On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM<sub>10</sub> National Ambient Air Quality Standard (NAAQS) and approved the PM<sub>10</sub> Maintenance Plan.</p> <p><sup>d</sup> The Valley is designated nonattainment for the 1997 PM<sub>2.5</sub> NAAQS. EPA designated the Valley as nonattainment for the 2006 PM<sub>2.5</sub> NAAQS on November 13, 2009 (effective December 14, 2009).</p> <p><sup>e</sup> Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010)</p> <p><sup>f</sup> Effective June 15, 2005, the U.S. EPA revoked the federal 1-hour ozone standard, including associated designations and classifications. However, EPA had previously classified the SJVAB as extreme nonattainment for this standard. Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.</p> <p>Source: San Joaquin Valley Unified Air Pollution Control District. <i>Ambient Air Quality Standards &amp; Valley Attainment Status</i>. <a href="http://www.valleyair.org/aqinfo/attainment.htm">http://www.valleyair.org/aqinfo/attainment.htm</a>. Accessed October 2020.</p>		

The ARB is responsible for the statewide comprehensive air toxics program. This program was created to reduce exposure to air toxics and established a formal procedure for ARB to designate substances as toxic air contaminants (TACs). Once a TAC is identified, ARB adopts an airborne toxics control measure (ATCM) for sources that emit the designated TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology (BACT) to minimize emissions.

The ARB also administers the state's mobile source emissions control program and oversees air quality programs established by state statute. Assembly Bill (AB) 2588 (Air Toxics "Hot Spots" Information and Assessment Act of 1987) requires quantification

and prioritization of TAC emissions from individual facilities by the responsible air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA) and, if specific thresholds are exceeded, required to communicate the results to the public. The “Hot Spots” Act was amended by Senate Bill (SB) 1731, which requires facilities posing a significant health risk to the community to reduce their risk through a risk management plan.

### ***Local***

#### **San Joaquin Valley Unified Air Pollution Control District (Air District)**

The Air District is the local agency charged with preparing, adopting, and implementing mobile, stationary, and area air emission control measures and standards to ensure that federal and state AAQS are not exceeded and air quality conditions are maintained within the SJVAB. The proposed Project is subject to various Air District rules/regulations, thresholds, and/or permitting requirements, as applicable. As indicated below, the mere size of the proposed Project (i.e., 105 guest room hotel) would not result in the exceedance of any Air District thresholds and, depending upon a final determination by the Air District, does not appear to meet permit applicability requirements. The Air District has several rules and regulations that may apply to the proposed Project, following is an example of those rules/regulations which likely apply to the proposed Project:

- Rule 3135 (Dust Control Plan Fees) – This rule requires the project applicant to submit a fee in addition to a Dust Control Plan. The purpose of this rule is to recover the Air District’s cost for reviewing these plans and conducting compliance inspections.
- Rule 3180 (Administrative Fees for Indirect Source Review (ISR)) – This rule requires the project applicant to submit a fee when submitting an Air Impact Assessment application in accordance with ISR regulations.
- Rules 4101 (Visible Emissions) and 4102 (Nuisance) – This rule applies to any source of air contaminants and prohibits the visible emissions of air contaminants or any activity which creates a public nuisance.
- 4102 (Nuisance) – This rule applies to any source operation that emits or may emit air contaminants or other materials and prohibits any activity which creates a public nuisance.
- Rule 4601 (Architectural Coatings) – This rule limits volatile organic compound (VOC) emissions from architectural coatings and specifies practices for proper storage, cleanup, and labeling requirements. The rule contains VOC content limits for colorants and coatings with different VOC limits for prior to and after January 1st, 2022.
- Rule 4641 (Cutback, Slow Curve and Emulsified Asphalt, Paving and Maintenance Operations) – This rule limits VOC emissions by restricting the application and manufacturing of certain types of asphalt and maintenance operations and applies to the use of these materials.
- Regulation VIII (Fugitive PM10 Prohibitions) – This regulation is a series of eight rules designed to reduce PM10 emissions by reducing fugitive dust emissions. Regulation VIII requires implementation of control measures to ensure that visible dust emissions are substantially reduced.
- Rule 9510 (Indirect Source Review) - requires developers to mitigate project emissions through 1) on-site design features that reduce trips and vehicle miles traveled, 2) controls on other emission sources, and 3) with reductions obtained through the payment of a mitigation fee used to fund off-site air quality mitigation projects. Rule 9510 requires construction related NOx emission reductions of 20 percent and PM10 reductions of 45 percent. Rule 9510 requires a 33 percent reduction in operational NOx emissions and a 50 percent reduction in PM10. The reductions are calculated by comparing the unmitigated baseline emissions and mitigated emissions from the first year of project operation. The Air District recommends using the [CaleEMOD] model to quantify project emissions and emission reductions. Rule 9510 was adopted to reduce the impacts of development on Air District’s attainment plans.

CEQA Guidelines define a significant effect on the environment as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project. To determine if a project would have a significant impact on air quality, the type, level, and impact of criteria pollutant emissions generated by the project must be evaluated. The Air District has prepared its guidance document, “Guidance for Assessing and Mitigating Air Quality Impacts” (GAMAQI), to assist Lead Agencies

in assessing project specific impact on air quality.<sup>19</sup> The Air District's significance thresholds and guidance for evaluation are provided below.

#### *Air Quality Plans*

The Air District has established thresholds of significance for criteria pollutant emissions. These thresholds are based on District New Source Review (NSR) offset requirements for stationary sources. "Stationary sources in the District are subject to some of the toughest regulatory requirements in the nation. Emission reductions achieved through implementation of District offset requirements are a major component of the District's air quality plans. Thus, projects with emissions below the thresholds of significance for criteria pollutants would be determined to "Not conflict or obstruct implementation of the District's air quality plan".<sup>20</sup>

The Air District has three sets of significance thresholds based on the source of the emissions. According to the GAMAQI, "The District identifies thresholds that separate a project's short-term emissions from its long-term emissions. The short-term emissions are mainly related to the construction phase of a project and are recognized to be short in duration. The long-term emissions are mainly related to the activities that will occur indefinitely as a result of project operations."<sup>21</sup>

Long-term (operational) emissions are further separated into permitted and non-permitted equipment and activities. Stationary (permitted) sources that comply or will comply with Air District rules and regulations are generally not considered to have a significant air quality impact. Specifically, the GAMAQI states, "District Regulation II ensures that stationary source emissions will be reduced or mitigated to below the District's significance thresholds... District implementation of New Source Review (NSR) ensures that there is no net increase in emissions above specified thresholds from New and Modified Stationary Sources for all nonattainment pollutants and their precursors. Furthermore, in general, permitted sources emitting more than the NSR Offset Thresholds for any criteria pollutant must offset all emission increases in excess of the thresholds..."<sup>22</sup>

The Air District's significance thresholds are provided in **Table AQ-2**.

<b>Table AQ-2. Air District Criteria Pollutant Significance Thresholds</b>			
<b>Pollutant/ Precursor</b>	<b>Construction Emissions</b>	<b>Operational Emissions</b>	
		<b>Permitted Equipment and Activities</b>	<b>Non- Permitted Equipment and Activities</b>
	<b>Emissions (tpy)</b>	<b>Emissions (tpy)</b>	<b>Emissions (tpy)</b>
<b>CO</b>	100	100	100
<b>NO<sub>x</sub></b>	10	10	10
<b>ROG</b>	10	10	10
<b>SO<sub>x</sub></b>	27	27	27
<b>PM<sub>10</sub></b>	15	15	15
<b>PM<sub>2.5</sub></b>	15	15	15

Source: Air District, GAMAQI, Table 2, page 80; and <http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf>, accessed October 2020.

#### *Cumulative Impacts*

"By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development. Future attainment of State and Federal ambient air quality standards is a function of successful implementation of the District's attainment plans. Consequently, the District's application of thresholds of significance for criteria pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

A Lead Agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program, including, but not limited to an

<sup>19</sup> Air District. GAMAQI. March 2015. Website: [http://www.valleyair.org/transportation/GAMAQI\\_12-26-19.pdf](http://www.valleyair.org/transportation/GAMAQI_12-26-19.pdf).

<sup>20</sup> Ibid. Section 7.12. 65.

<sup>21</sup> Op. Cit. Section 8.1 75.

<sup>22</sup> Op. Cit. Section 8.2.1. 76.

air quality attainment or maintenance plan that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located [CCR §15064(h)(3)].

Thus, if project specific emissions exceed the thresholds of significance for criteria pollutants the project would be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the District is in non-attainment under applicable Federal or State ambient air quality standards. This does not imply that if the project is below all such significance thresholds, it cannot be cumulatively significant.”<sup>23</sup>

#### *Exposure to Sensitive Receptors*

“Determination of whether project emissions would expose sensitive receptors to substantial pollutant concentrations is a function of assessing potential health risks.

Sensitive receptors are facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors. When evaluating whether a development proposal has the potential to result in localized impacts, Lead Agency staff need to consider the nature of the air pollutant emissions, the proximity between the emitting facility and sensitive receptors, the direction of prevailing winds, and local topography.

Lead Agencies are encouraged to use the screening tools for Toxic Air Contaminant presented in section 6.5 (Potential Land Use Conflicts and Exposure of Sensitive Receptors) [pages 44-45 of the GAMAQI] to identify potential conflicts between land use and sensitive receptors and include the result of their analysis in the referral document.”<sup>24</sup>

“Another useful tool is the CAPCOA Guidance Document: Health Risk Assessments for Proposed Land Use Projects. CAPCOA prepared the guidance to assist Lead Agencies in complying with CEQA requirements. The guidance document describes when and how a health risk assessment should be prepared and what to do with the results.”<sup>25, 26</sup>

#### *Nuisance Odors*

“Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or formulaic methodologies to determine the presence of a significant odor impact. Rather, the District recommends that odor analyses strive to fully disclose all pertinent information.

The intensity of an odor source’s operations and its proximity to sensitive receptors influences the potential significance of odor emissions. The District has identified some common types of facilities that have been known to produce odors in the San Joaquin Valley. These are presented in Chapter 8 [of the GAMAQI] along with a reasonable distance from the source within which, the degree of odors could possibly be significant.”<sup>27</sup>

“The intensity of an odor source’s operations and its proximity to sensitive receptors influences the potential significance of odor emissions. The District has identified some common types of facilities that have been known to produce odors in the San Joaquin Valley Air Basin. These are presented in Table 6 (Screening Levels For Potential Odor Sources) [of the GAMAQI] along with a reasonable distance from the source within which, the degree of odors could possibly be significant. Table 6 (Screening Levels for Potential Odor Sources) [of the GAMAQI], can be used as a screening tool to qualitatively assess a project’s potential to adversely affect area receptors. This list of facilities is not all-inclusive. The Lead Agency should evaluate facilities not included in the table or projects separated by greater distances if warranted by local conditions or special circumstances. If the proposed project would result in sensitive receptors being located closer than the screening level distances, a more detailed analysis should be provided.”<sup>28</sup>

<sup>23</sup> Op. Cit. Section 7.14. 65-66.

<sup>24</sup> Op. Cit. Section 7.15. 66.

<sup>25</sup> Op. Cit. Section 6.5. 45.

<sup>26</sup> The CAPCOA Guidance document can be found at [http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA\\_HRA\\_LU\\_Guidelines\\_8-6-09.pdf](http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf)

<sup>27</sup> Air District. GAMAQI. March 2015 Section 7.15. 66-67.

<sup>28</sup> Ibid. Section 8.6. 102-103.

### Tulare County General Plan 2030 Update

The following Tulare County General Plan 2030 Update policies for this resource apply to the proposed Project: *AQ-1.1 Cooperation with Other Agencies* requiring the County to cooperate with other local, regional, Federal, and State agencies (e.g., Valley Air District) in developing and implementing air quality plans to achieve State and federal Ambient Air Quality Standards to achieve better air quality conditions locally and regionally; *AQ-1.5 California Environmental Quality Act (CEQA) Compliance* where the County will ensure that air quality impacts identified during the CEQA review process are consistently and reasonably mitigated when feasible; *AQ-2.2 Indirect Source Review* regarding mitigating air quality impacts associated with the Project to Valley Air District's Rule 9510; *AQ-3.4 Landscape* regarding the use of ecologically based landscape design principles that can improve local air quality by absorbing CO<sub>2</sub>, producing oxygen, providing shade that reduces energy required for cooling, and filtering particulates; and *AQ-4.2 Dust Suppression Measures* regarding implementation of dust suppression measures during excavation, grading, and site preparation activities consistent with SJVAPCD Regulation VIII – Fugitive Dust Prohibitions.

### Three Rivers Community Plan Update

The following Three Rivers Community Plan Update policies for this resource apply to the proposed Project: *Policy 1.1.3 Commercial Uses – Limiting Negative Impacts* requires new development to be consistent with the character of the surrounding natural and built environment while minimizing negative impacts; *Policy 1.1.4 Compatible Commercial Establishments* encourages compatible commercial establishments necessary to serve residents and which do not have significant traffic, light, noise or visual impacts to the community; *Policy 1.1.9 LU-1.3 Prevent Incompatible Uses* discourages new incompatible land uses that produce significant noise, odors, or fumes; and *Policy 1.4.7 AQ-1.4 Air Quality Land Use Compatibility* requires evaluation of compatibility of developments with regard to proximity of sensitive receptors.

- a) **Less Than Significant Impact:** As discussed in Item b) below, the Air District has determined that projects with emissions below the thresholds of significance for criteria pollutants would not conflict or obstruct implementation of the Air District's air quality plan. As presented in **Tables AQ-3** and **AQ-4**, emissions during construction- and operation-related activities would not exceed the Air District significance thresholds. The proposed Project would be required to comply with applicable Air District rules and regulations, such as Regulation VIII (Fugitive PM<sub>10</sub> Prohibitions) and Rule 9510 (Indirect Source Review), further reducing proposed Project-related emissions.

“As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the NAAQS and CAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The SJVAPCD prepared the 2004 Extreme Ozone Attainment Demonstration Plan, 2013 Plan for the Revoked 1-Hour Ozone Standard, 2007 Ozone Plan, 2009 Reasonably Available Control Technology Demonstration for Ozone State Implementation Plan, 2016 Plan for the 2008 8-Hour Ozone Standard, 2016 Moderate Area Plan for the 2012 PM<sub>2.5</sub> Standard, 2013 Plan for the Revoked 1-Hour Ozone Standard, 2018 Plan for the 1997, 2006, and 2012 PM<sub>2.5</sub> Standards, 2020 RACT Demonstration, and 2007 PM<sub>10</sub> Maintenance Plan and Request for Re-designation. These plans collectively address the air basin's nonattainment status with the national and state O<sub>3</sub> standards as well as particulate matter by establishing a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. Pollutant control strategies are based on the latest scientific and technical information and planning assumptions, updated emission inventory methodologies for various source categories, and the latest population growth projections and associated vehicle miles traveled projections for the region. SJVAPCD's latest population growth forecasts were defined in consultation with local governments and with reference to local general plans.

The Project site is designated Urban Development by the General Plan. The General Plan identifies the Urban Development designation as meant for development generally characterized by low to high density residential development, commercial development, industrial development, and typically supported by public services such as central water and sewer systems. The Project is consistent with this General Plan designation and would not exceed the population or job growth projections used by the SJVAPCD to develop its air quality attainment plans. Additionally, as shown in [Table AQ-3] and [Table AQ-4] [below], both Project construction and Project operations would not generate emissions that would exceed SJVAPCD significance thresholds. Furthermore, the implementation of AQ-1 would reduce construction-generated emissions below what is required in Rule 9510 and AQ-2 would reduce operational-generated emissions or offset the emissions with payment of a fee, which is

then used to fund clean-air projects within the air basin. Note that reductions in construction-generated emissions due to AQ-1 will vary per the fleet used. Regardless, AQ-1 would reduce construction-generated emissions below what is required in Rule 9510. The Project would be consistent with the emission-reduction goals of the SJVAPCD Attainment Plans.”<sup>29</sup>

As the proposed Project is consistent with the General Plan, including the Three Rivers Community Plan Update, and proposed Project-related emissions do not exceed Air District significance thresholds, the proposed Project will not conflict with or obstruct implementation of the air quality plan. Therefore, the proposed Project will have a less than significant impact to this resource.

- b) Less Than Significant Impact with Mitigation:** As previously discussed, the Air Basin is currently designated as non-attainment for the 1-hour state ozone standard as well as for the federal and state 8-hour standards. Additionally, the Air Basin is designated as non-attainment for the state 24-hour and annual arithmetic mean PM<sub>10</sub> standards, as well as the state annual arithmetic mean and the national 24-hour PM<sub>2.5</sub> standards. See **Table AQ-1** for designations and classifications of all criteria pollutants.

The contribution of a project's individual air emissions to regional air quality impacts is, by its nature, a cumulative effect. Emissions from past, present, and future projects in the region also have or will contribute to adverse regional air quality impacts on a cumulative basis. No single project by itself would be sufficient in size to result in non-attainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulative air quality conditions. The project-level thresholds for criteria air pollutants are based on levels by which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants.

According to the Air District's GAMAQI, a project would be considered to contribute considerably to a significant cumulative impact if it would result in an increase in ROG, NO<sub>x</sub>, SO<sub>x</sub>, CO, PM<sub>10</sub>, or PM<sub>2.5</sub> of more than its respective significance thresholds. As such, air quality impacts were assessed in accordance with methodologies recommended by the ARB and the Air District. Emissions were modeled using CalEEMod, version 2016.3.2. Project construction-generated criteria air pollutant emissions were calculated using CalEEMod model defaults for Tulare County. Operational air pollutant emissions were based on the Project site plans and the estimated weekend traffic trip generation rates calculated by VRPA Technologies, Inc. (see Attachment “E” of this document), and the CalEEMod defaults for Tulare County for weekday trip generation.

#### Construction Emissions

“Construction associated with the Proposed Project would generate short-term emissions of criteria air pollutants, including ROG, CO, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The largest amount of ROG, CO, SO<sub>x</sub>, and NO<sub>x</sub> emissions would occur during the earthwork phase. PM<sub>10</sub> and PM<sub>2.5</sub> emissions would occur from fugitive dust (due to earthwork and excavation) and from construction equipment exhaust. Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the Project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to and from the site. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact.”<sup>30</sup>

“During construction activities, the Project would be required to comply with SJVAPCD Regulation VIII (Fugitive PM<sub>10</sub> Prohibitions). The purpose of this regulation is to limit airborne particulate emissions associated with construction, demolition, excavation, extraction, and other earthmoving activities, as well as with open disturbed land and emissions associated with paved and unpaved roads. Accordingly, these rules include specific measures to be employed to prevent and reduce fugitive dust emissions from anthropogenic sources. For instance, the Project applicant would be required to prepare a dust control plan. Construction activities anywhere within the regulatory jurisdiction of the SJVAPCD, including the Proposed Project site, may not commence until the SJVAPCD has approved or conditionally approved the dust control plan, which must describe all fugitive dust control measures that are to be implemented before, during, and after any dust-generating activity. Regulation VIII specifies ... measures that may be included in the dust control plan to minimize fugitive dust emissions:”<sup>31</sup>

“As shown in Table 2-4 [in the AQ Assessment, **Table AQ-3** in this Initial Study], construction-generated emissions would not

<sup>29</sup> “Air Quality & Greenhouse Gas Assessment Three Rivers Hampton Inn and Suites Project” (AQ Assessment). July 2020 (updated October 2020). Page 24. Prepared by ECORP Consulting, Inc. and included in Attachment “A” of this Initial Study.

<sup>30</sup> Ibid. 15.

<sup>31</sup> Op. Cit.



exceed SJVAPCD significance thresholds.”<sup>32</sup>

TABLE AQ-3 CONSTRUCTION-RELATED EMISSIONS – FUGITIVE PM <sub>10</sub> PROHIBITIONS INCLUDED						
Construction Year	Maximum Annual Emissions (tons per year)					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Total PM <sub>10</sub>	Total PM <sub>2.5</sub>
2021	0.71	2.65	2.62	0.00	0.21	0.14
2022	0.20	0.71	0.78	0.00	0.05	0.03
SJVAPCD Thresholds	10	10	100	27	15	15
Threshold Exceeded	No	No	No	No	No	No
<i>Source: Table 2-4 of Attachment “A” of this Initial Study.</i>						

“In addition to the SJVAPCD criteria air pollutant thresholds, SJVAPCD Rule 9510, Indirect Source Review, Section 2.2, aims to fulfill the District’s emission reduction commitments in the PM<sub>10</sub> and Ozone Attainment Plans. ... The project developers are required to reduce concentrations of NO<sub>x</sub> by 20 percent and PM<sub>10</sub> by 45 percent during construction activities.”<sup>33</sup>

“The Project is proposing the construction of more than 10,000 square feet of commercial space, permitted by-right. Thus, adherence to Rule 9510 is required of the Proposed Project. In accordance with Rule 9510, the Project applicant is required to prepare a detailed air impact assessment (AIA) for submittal to the SJVAPCD, which demonstrates reduction of NO<sub>x</sub> emissions from the Project’s baseline by 20 percent and a reduction of PM<sub>10</sub> by 45 percent. Therefore, the following mitigation is required.

#### Mitigation Measures

**AQ-1** In accordance with SJVAPCD Rule 9510, a detailed air impact assessment (AIA) shall be prepared detailing the specific construction requirement (i.e., equipment required, hours of use, etc.). In accordance with this rule, emissions of NO<sub>x</sub> from construction equipment greater than 50 horsepower used or associated with the development Project shall be reduced by 20 percent from baseline (unmitigated) emissions and PM<sub>10</sub> shall be reduced by 45 percent. The Project shall demonstrate compliance with Rule 9510, including payment of all applicable fees, before issuance of the first building permit.

While the specific emission reduction measures will be developed to the satisfaction of the SJVAPCD, the following measures would reduce short-term air quality impacts attributable to the proposed Project consistent with Rule 9510:

- During all construction activities, all diesel-fueled construction equipment including, but not limited to, rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, and tractors shall be of a certified clean fleet.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturers’ specifications. Equipment maintenance records shall be kept on-site and made available upon request by the SJVAPCD or the County.
- The Project applicant shall comply with all applicable SJVAPCD rules and regulations. Copies of any applicable air quality permits and/or monitoring plans shall be provided to the County.

*Timing/Implementation:*                      *During the construction period*

*Monitoring/Enforcement:*                      *Tulare County*

As demonstrated in Table 2-5 [of the AQ Assessment, **Table AQ-3** in this Initial Study], implementation of Mitigation Measure **AQ-1** would reduce annual NO<sub>x</sub> emissions by as much as 75 percent during each phase of construction and would reduce annual PM<sub>10</sub> emissions by more than 60 percent, which is far beyond the reduction needed to achieve the SJVAPCD Rule 9510 target. The actual emissions reduction would depend on the construction fleet utilized for construction, as clean fleet vehicles vary in emissions.”<sup>34</sup>

“As previously stated, construction-generated emissions would not exceed SJVAPCD significance thresholds. ...Mitigation measure AQ-1 would result in a greater than required reduction in NO<sub>x</sub> and PM<sub>10</sub> emissions from baseline for all construction activities. ...Since the project’s emissions would not exceed SJVAPCD thresholds, no exceedance of the ambient air quality

<sup>32</sup> Op. Cit. 17.

<sup>33</sup> Op. Cit.

<sup>34</sup> Op. Cit. 18.

standards would occur, and no health effects from project criteria pollutants would occur.”<sup>35</sup>

#### Operational Emissions

“Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and SO<sub>2</sub> as well as ozone precursors such as ROG and NO<sub>x</sub>. Project-generated increases in emissions would be predominantly associated with motor vehicle use. Table 2-6 [of the AQ Assessment, **Table AQ-4** in this Initial Study] summarizes operational emissions from the Proposed Project.”<sup>36</sup>

“As indicated in Table 2-6 [of the AQ Assessment, **Table AQ-4** in this Initial Study], operational-generated emissions would not exceed SJVAPCD significance thresholds.”<sup>37</sup>

<b>TABLE AQ-4</b>						
<b>OPERATION EMISSIONS</b>						
Emission Source	Maximum Annual Emissions (tons per year) – Commencing 2022					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	Total PM <sub>10</sub>	Total PM <sub>2.5</sub>
Area	0.33	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.08	0.07	0.00	0.00	0.00
Mobile	0.24	2.05	2.24	0.00	0.60	0.16
<b>Total</b>	<b>0.58</b>	<b>2.14</b>	<b>2.32</b>	<b>0.00</b>	<b>0.60</b>	<b>0.17</b>
SJVAPCD Thresholds	10	10	100	27	15	15
Threshold Exceeded	No	No	No	No	No	No
Source: Table 2.6 of Attachment “A” of this Initial Study.						

“As previously mentioned, SJVAPCD Rule 9510 is intended to fulfill the region’s emission reduction commitments in the SJVAPCD PM<sub>10</sub> and Ozone Attainment Plans. The Proposed Project is subject to Rule 9510 and would be required to consult with the SJVAPCD regarding the specific applicability of Rule 9510 in relation to Project operations. In accordance with Rule 9510, the Project applicant would be required to prepare a detailed air impact assessment for submittal to the SJVAPCD demonstrating the reduction from the Project’s baseline of NO<sub>x</sub> emissions. The following mitigation is required.

#### **Mitigation Measures:**

**AQ-2** In accordance with SJVAPCD Rule 9510, a detailed air impact assessment shall be prepared detailing the operational characteristics associated with the Proposed Project. In accordance with this rule, operational emissions of NO<sub>x</sub> shall be reduced by a minimum of 33.3 percent and operational emissions of PM<sub>10</sub> must be reduced by a minimum of 50 percent over a period of ten years. (Emissions reductions are in comparison to the Project’s operational baseline emissions presented in Table 2-6.) The Project would demonstrate compliance with Rule 9510, including payment of all applicable fees, before issuance of the first building permit.

Based on the findings of the air impact assessment, the applicant shall pay the SJVAPCD a monetary sum necessary to offset the required operational emissions that are not reduced by the emission reduction measures contained in the air impact assessment. The quantity of operational emissions that need to be offset will be calculated in accordance with the methodologies identified in Rule 9510, Indirect Source Review, and approved by the SJVAPCD. Operational emissions reduction methods will be selected under the direction of the SJVAPCD according to the air impact assessment process detailed in, and required by Rule 9510, Indirect Source Review (see Rule 9510, subsection 5).

Timing/Implementation: Prior to the issuance of building permits

Monitoring/Enforcement: County of Tulare Planning and Building Department”<sup>38</sup>

As presented in **Tables AQ-3** and **AQ-4**, proposed Project construction- and operational-related activities emissions would not exceed the Air District’s thresholds of significance for ROG, NO<sub>x</sub>, SO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. Therefore, this Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the SJVAB is in nonattainment. The Project will result in a less than significant impact with mitigation.

<sup>35</sup> Op. Cit. 19.

<sup>36</sup> Op. Cit.

<sup>37</sup> Op. Cit. 20.

<sup>38</sup> Op. Cit. 20-21.

- c) **Less Than Significant Impact:** “[S]ensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. ...The nearest sensitive receptors to the Project site are the Comfort Inn and Suites located approximately 98 feet north of the Project site boundary, the vacant commercial building located approximately zero feet west of the Project site boundary, and a residence located across State Highway 198 from the site, approximately 270 feet to the west. [T]he distance to the Comfort Inn and Suites was measured from the property line of the Proposed Project to the portion of the Comfort Inn and Suites property line which is located adjacent to the nearest hotel building on the property (see Figure 1 [of the AQ Assessment]). The parking lot located in the southeast section of the Comfort Inn and Suites site is not considered to be the nearest point to the sensitive receptor, as visitors to the hotel would spend the majority of their stay in their hotel room, at the nearby community center, and/or in Sequoia and Kings Canyon National Parks, thus remaining in the parking lot for a relatively short duration. In addition, hotel staff would spend relatively little time in the hotel parking lot.”<sup>39</sup>

#### Construction-Generated Air Contaminants

“Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of diesel particulate matter (DPM), ROG, NO<sub>x</sub>, CO, and PM<sub>10</sub> from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. However, as shown in Table [AQ-3], the Project would not exceed the SJVAPCD construction emission thresholds. The portion of the SJVAB which encompasses the Project area is classified nonattainment area for the federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub> (CARB 2018). Thus, existing O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> levels in the SJVAB are at unhealthy levels during certain periods.

The health effects associated with O<sub>3</sub> are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in O<sub>3</sub> precursor emissions (ROG or NO<sub>x</sub>) in excess of the SJVAPCD thresholds, the Project is not anticipated to substantially contribute to regional O<sub>3</sub> concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood’s ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the SJVAPCD thresholds. Thus, the Project’s CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary toxic air contaminant (TAC) of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by the CARB in 1998. The potential cancer risk from the inhalation of DPM outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Based on the emission modeling conducted, the maximum onsite construction-related daily emissions (mitigated) of exhaust PM<sub>2.5</sub>, considered a surrogate for DPM, would be 0.07 pounds/day (see Attachment A). (PM<sub>2.5</sub> exhaust is considered a surrogate for DPM because more than 90 percent of DPM is less than 1 microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter (i.e., PM<sub>2.5</sub>). Most PM<sub>2.5</sub> derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.) As with O<sub>3</sub> and NO<sub>x</sub>, the Project would not generate emissions of PM<sub>10</sub> or PM<sub>2.5</sub> that would exceed the SJVAPCD’s thresholds. Additionally, the Project would be required to comply with Regulation VIII, Rules 8021–8071- Fugitive PM<sub>10</sub> Prohibitions and Rule 9510- Indirect Source Review, as described above, which limit the amount of fugitive dust generated during construction. Accordingly, the Project’s PM<sub>10</sub> and PM<sub>2.5</sub> emissions are not expected to cause any increase in related regional health effects for these pollutants. Although health risk due to TACs cannot be accurately quantified, based on quantitative and qualitative analysis of anticipated Project emissions, a significant health risk would not result.

In summary, the Project would not result in a potentially significant contribution to regional or localized concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those

<sup>39</sup> Op. Cit. 24-25.

pollutants.”<sup>40</sup>

#### *Naturally Occurring Asbestos*

“Another potential air quality issue associated with construction-related activities is the airborne entrainment of asbestos due to the disturbance of naturally-occurring asbestos-containing soils. The Proposed Project is not located within an area designated by the State of California as likely to contain naturally-occurring asbestos (DOC 2011). As a result, construction-related activities would not be anticipated to result in increased exposure of sensitive land uses to asbestos.”<sup>41</sup>

#### *Valley Fever*

“*Coccidioidomycosis* (CM), often referred to as San Joaquin Valley Fever or Valley Fever, is one of the most studied and oldest known fungal infections. Valley Fever most commonly affects people who live in hot dry areas with alkaline soil and varies with the season. This disease, which affects both humans and animals, is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). CI spores are found in the top few inches of soil and the existence of the fungus in most soil areas is temporary. The cocci fungus (an organism that grows and feeds on dead or decaying organic matter) lives as a saprophyte in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus “blooms” and forms many tiny spores that lie dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-moving activities and become airborne. Agricultural workers, construction workers, and other people who work outdoors and who are exposed to wind and dust are more likely to contract Valley Fever. Children and adults whose hobbies or sports activities expose them to wind and dust are also more likely to contract Valley Fever. After the fungal spores have settled in the lungs, they change into a multicellular structure called a spherule. Fungal growth in the lungs occurs as the spherule grows and bursts, releasing endospores, which then develop into more spherules.

Valley fever (*Coccidioidomycosis*) is found in California, including Tulare County. In about 50 to 75 percent of people, valley fever causes either no symptoms or mild symptoms and those infected never seek medical care; when symptoms are more pronounced, they usually present as lung problems (cough, shortness of breath, sputum production, fever, and chest pains). The disease can progress to chronic or progressive lung disease and may even become disseminated to the skin, lining tissue of the brain (meninges), skeleton, and other body areas.

Tulare County is considered a highly endemic area for valley fever. When soil containing this fungus is disturbed by ground-disturbing activities such as digging or grading, by vehicles raising dust, or by the wind, the fungal spores get into the air. When people breathe the spores into their lungs, they may get valley fever. Fungal spores are small particles that can grow and reproduce in the body. The highest infection period for valley fever occurs during the driest months in California, between June and November. Infection from valley fever during ground-disturbing activities can be partially mitigated through the control of Project-generated dust. As noted, Project-generated dust would be controlled by adhering to SJVAPCD dust-reducing measures (Regulation VIII), which includes the preparation of a SJVAPCD-approved dust control plan describing all fugitive dust control measures that are to be implemented before, during, and after any dust-generating activity.

With minimal site grading and conformance with SJVAPCD Regulation VIII, dust from the construction of the Project would not add significantly to the existing exposure level of people to this fungus, including construction workers.”<sup>42</sup>

#### Operational Air Contaminants

“Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract additional heavy-duty trucks that spend long periods queuing and idling at the site. Onsite Project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. The maximum operation-related emissions of exhaust PM<sub>2.5</sub>, considered a surrogate for DPM, would be 0.09 pounds per day, produced by the estimated 860 additional one-way vehicle trips per day on Saturdays, 625 additional one-way vehicle trips per day on Sundays, and 858 additional one-way vehicle trips per day on weekdays. Therefore, the Project would not be a source of TACs and there would be no impact as a result of the Project during operations. The Project would not have a high carcinogenic or non-carcinogenic risk during operation.”<sup>43</sup>

<sup>40</sup> Op. Cit. 25-26.

<sup>41</sup> Op. Cit. 26.

<sup>42</sup> Op. Cit. 26-27.

<sup>43</sup> Op. Cit. 27.

### *Carbon Monoxide Hot Spots*

A CO “hot spot” would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. Studies have been conducted by the South Coast Air Quality Management District (SCAQMD) and the Bay Area Air Quality Management District (BAAQMD) to determine what level of traffic is needed to result in a CO hot spot. The SCAQMD determined that an intersection with a volume of 100,000 vehicles per day would not exceed the CO standards, while the BAAQMD concluded a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.<sup>44</sup>

“Furthermore, the SJVAPCD Guidance for Assessing and Mitigating Impacts (2015b) includes the following CO hot spot criteria:

If neither of the following criteria are met at all intersections affected by the developmental project, the project will result in no potential to create a violation of the CO standard:

- A traffic study for the project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F; or
- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at more or more intersections in the project vicinity.

According to the Traffic Study prepared for the Project, LOS at the SR 198 (Sierra Drive) and Project Driveway and SR 198 (Sierra Drive) and Old 3 Rivers Road intersections would not exceed target LOS ‘D’ for all the study scenarios. In addition, the Project is expected to generate 860 trips generated per day on Saturdays and the estimated 625 trips generated per day on Sundays (VRPA Technologies, Inc. 2020). Using CalEEMod trip generation defaults for Tulare County, 858 trips are anticipated to be generated on weekdays. Thus, based on Project traffic generation and resultant LOS on affected roadways, it can be determined that the Project would not result in CO hotspots.

It is acknowledged that the Project site is located relatively close to the entrance of the Sequoia National Park entrance. Historically, there have been instances when a substantial amount of automobiles are queued for entrance into the park and idling along the road as far out as Three Rivers. However, such instances are uncommon and very unlikely to result in traffic volumes of over 100,000 vehicles per day. Thus, neither the Proposed Project nor the cumulative park plus Project traffic would not generate traffic volumes of more than 100,000 vehicles per day, there is no likelihood of the Project traffic exceeding CO values.”<sup>45</sup>

Project-related emissions fall below the Air District’s thresholds of significance and does not result in a CO Hot Spot. The Project, with implementation of fugitive dust measures in accordance with Air District regulation, would not expose the public to naturally occurring asbestos or Valley fever. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations. The Project would have a less than significant impact to this resource

**d) Less Than Significant Impact:** Operation of the proposed Project would not create odorous emissions. However, proposed Project construction-related activities would include fuels and other odor sources (such as diesel-fueled equipment), could result in the creation of objectionable odors. Since construction-related activities would be short-term, temporary, and spatially dispersed (i.e., intermittent), and occur in a predominantly rural area, these activities would not affect a substantial number of people. Therefore, odors generated by construction-related activities of the Project would result in a less than significant impact.

“In addition, per the SJVAPCD’s Guidance to Conduct Detailed Analysis for Assessing Odor Impacts to Sensitive Receptors, this analysis of potential odor impacts contains a review of odor complaints for “similar facilities”. Specifically, a records request for odor complaints submitted within the last three years involving the adjacent Comfort Inn and Suites was submitted on October 12, 2020. The SJVAPCD confirmed no odor complaints were found to be on file for the Three Rivers Comfort Inn and Suites within the last three years (SJVAPCD 2020b). As such, it is also expected that substantial odors would not be generated by the proposed hotel Project.”<sup>46</sup>

<sup>44</sup> Op. Cit. 28.

<sup>45</sup> Op. Cit. 28-29.

<sup>46</sup> Op. Cit. 30.

**Cumulative Impact:** As noted earlier, the Air Assessment concluded that the proposed Project would not exceed any air quality thresholds and will not expose sensitive receptors to substantial pollutant concentration site. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource. Furthermore, the Project would have a net benefit on air quality as it would reduce the overall vehicle miles traveled within the SJVAB.

4. BIOLOGICAL RESOURCES						
Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Analysis:**

The proposed Project will result in Less Than Significant Impacts to Biological Resources Assessment with mitigation. The "Biological Resources Assessment Hampton Inn and Suites Three Rivers" (BRA or Assessment) was prepared by ECORP Consulting, Inc. (Consultant) in June 2020 which is included as Attachment "C" of this Initial Study. As noted in the BRA, "The purpose of this BRA is to assess the potential for occurrence of special-status plant and animal species and their habitats, and sensitive habitats such as wetlands and riparian communities within the Project Study Area. This assessment includes information generated from the reconnaissance-level site assessment and does not include a wetland delineation performed according to U.S. Army Corps of Engineers' (USACE's) standards, nor does it include determinate field surveys for special-status plant and animal

species.”<sup>47</sup> This Report is used as the basis for determining that, based on the evidence/documentation (including incorporation of recommendations contained in the Report) and the expertise of qualified consultant ECORP Consulting, Inc. (Consultant), the proposed Project will result in a less than significant impact.

## Environmental Setting

As noted in the Biological Resources Assessment (BRA), “The proposed Project is located in the community of Three Rivers, California east of State Highway 198 (Sierra Drive), approximately 1,000 feet north of the Old Three Rivers Road intersection, and immediately south of the Comfort Inn and Suites (Figure 1. Project Location and Vicinity). The site corresponds to a portion of Section 26, Township 17 south, Range 28 (Mount Diablo Base and Meridian) east of the “Kaweah, California” 7.5-minute quadrangles (North American Datum [NAD]27) (U.S. Geological Survey [USGS] 1993). The approximate center of the site is located at latitude 36.424827° (NAD83) and longitude 118.914718° (NAD83) within the Upper Kaweah Watershed (Hydrologic Unit Code #180300007) Watershed (Natural Resources Conservation Service [NRCS] et al. 2019). The proposed Project entails the development of a 105-room hotel to be located off State Route 198 (Sierra Drive), approximately 1,100 feet north of Old Three Rivers Road.”<sup>48</sup>

“The Study Area is currently undeveloped and is situated at an elevation range of approximately 750 to 775 feet above mean sea level (MSL) in the southern Sierra Nevada foothills subregion of the Sierra Nevada region of the California floristic province (Baldwin et. al. 2012). The Study Area appears to have been historically disturbed as remnant vehicles tracks are found throughout the site. According to Google Earth aerial photographs, an area of oak woodland was present in the eastern portion of the site through 2005 but had been cut down and removed by 2009. Remnants of the root balls can be found onsite in the form of shallow basins. Representative photographs of the Study Area are provided in Attachment B [of the BRA]. The surrounding lands include undeveloped lands, the Comfort Inn and Suites, and rural residences.”<sup>49</sup>

## Methods

It is noted, for CEQA purposes, the CEQA Guidelines (at Appendix G) are clear that a proposed project is evaluated on **substantial adverse effect** (emphasis added) on habitat; on any species identified as a candidate, sensitive, or special status specie; on riparian habitat or other sensitive community, state or federally protected wetlands; on the movement, migration, wildlife corridor, or wildlife nursery site; conflict with any local policies or ordinances protecting biological resources; or conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan. As a result of its location, commonly occurring species (such as bears, deer, raccoons, snakes, bobcats, rabbits, fox, etc.) do not qualify nor are they evaluated as special status species.

As noted in the BRA, “For the purposes of this assessment, special-status species are defined as plants or animals that:

- are listed, proposed for listing, or candidates for future listing as threatened or endangered under the ESA;
- are listed or candidates for future listing as threatened or endangered under the California ESA;
- meet the definitions of endangered or rare under Section 15380 of the CEQA Guidelines;
- are identified as an SSC by CDFW;
- are plants considered by the California CNPS to be "rare, threatened, or endangered in California" (CRPR 1 and 2);
- are plants listed by CNPS as species about which more information is needed to determine their status (CRPR 3), and plants of limited distribution (CRPR 4);
- are plants listed as rare under the California NPPA, California Fish and Game Code, § 1900 et seq.); or
- are fully protected in California in accordance with the California Fish and Game Code, §§ 3511 (birds), 4700 (mammals), 5050 (amphibians and reptiles), and 5515 (fishes).

Only species that fall into one of the above-listed groups were considered for this assessment. Other species tracked by the CNDDB but having no other special status were not considered to be special status and were not included within this analysis.”<sup>50</sup>

<sup>47</sup> “Biological Resources Assessment Hampton Inn and Suites Three Rivers” (BRA). Page 1. Prepared by ECORP Consulting, Inc. and is included as Attachment “C” of this Initial Study

<sup>48</sup> Ibid.

<sup>49</sup> Op. Cit. 13.

<sup>50</sup> Op. Cit. 11.

## ***Literature Review***

As contained in the BRA, “The following resources were reviewed to determine the special-status species that have been documented within or in the vicinity of the Study Area. Results of the species searches are included as Attachment A.

- CDFW CNDDDB data for the “Kaweah, California” 7.5-minute quadrangle as well as the eight surrounding USGS quadrangles (CDFW 2020a);
- USFWS Information, Planning, and Consultation System Resource Report List for the Project site (USFWS 2020a);
- CNPS’ electronic Inventory of Rare and Endangered Plants of California was queried for the “Kaweah, California” 7.5-minute quadrangles and the eight surrounding quadrangles (CNPS 2020);
- CDFW Biogeographic Information and Observation System (BIOS) query of range maps for potentially occurring special-status species (CDFW 2020b); and
- USFWS Threatened & Endangered Species Active Critical Habitat Report (USFWS 2020b).

Additional background information was reviewed regarding the documented or potential occurrence of special-status species within or near the Project site from the following sources:

- The Status of Rare, Threatened, and Endangered Plants and Animals of California 2000-2004 (California Department of Fish and Game [CDFG] 2005);
- California Bird SSC (Shuford and Gardali 2008);
- Amphibian and Reptile SSC in California (Thompson et al. 2016);
- Mammalian SSC in California (Williams 1986);
- California’s Wildlife, Volumes I-III (Zeiner, et al. 1988, 1990a, 1990b); and
- A Guide to Wildlife Habitats of California (Mayer and Laudenslayer Jr., eds. 1988).<sup>51</sup>

### **Site Reconnaissance**

As contained in the BRA, a site reconnaissance was conducted by qualified ECORP biologist (Ms. Hannah Stone) on May 15, 2020. Ms. Stone utilized meandering transects while walking the Study Area during her search for aquatic resources, potential Waters of the U.S./State, special-status species or their habitat and included the findings of the site assessment in the BRA.<sup>52</sup> As indicated in the BRA, “During the field survey, biological communities occurring onsite were characterized and the following biological resource information was collected:

- Vegetation communities within the Project site;
- Plant and animal species directly observed;
- Animal evidence (e.g., scat, tracks);
- Existing active raptor nest locations;
- Burrows and any other special habitat features;

In addition, soil types were identified using the NRCS Web Soil Survey (NRCS 2020a).<sup>53</sup>

### **Special Status Species Considered for the Project**

As noted earlier, for CEQA purposes, the CEQA Guidelines (at Appendix G) are clear that a proposed project is evaluated on substantial adverse effect (emphasis added) on habitat; on any species identified as a candidate, sensitive, or special status specie; on riparian habitat or other sensitive community, state or federally protected wetlands; on the movement, migration, wildlife corridor, or wildlife nursery site; conflict with any local policies or ordinances protecting biological resources; or conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan. As such, the BRA notes, “Special-status plant and animal species that resulted from database searches were evaluated for their potential to occur onsite. Species that are tracked in the CNDDDB but do not have any other special status, as defined above, were not included in this assessment. Species’ potential to occur within the Project site was assessed based on the following criteria:

- Present - Species was observed during the site visit or is known to occur within the Project site based on documented occurrences within the CNDDDB or other literature.

<sup>51</sup> Op. Cit. 11-12.

<sup>52</sup> Op. Cit. 12.

<sup>53</sup> Op. Cit.



- Potential to Occur - Habitat (including soils and elevation requirements) for the species occurs within the Project site.
- Low Potential to Occur - Marginal or limited amounts of habitat occur, and/or the species is not known to occur within the vicinity of the Project site based on CNDDDB records and other available documentation.
- Absent - No suitable habitat (including soils and elevation requirements) and/or the species is not known to occur within the vicinity of the Project site based on CNDDDB records and other documentation.”<sup>54</sup>

## Results

In summary, the BRA includes discussions of Site Characteristics and Land Use; Vegetation Communities and Land Cover Types (annual grassland, oak woodland, ruderal/roadside (see Figure 2. Vegetation Community and Land Cover Types/Preliminary Wetland Assessment, in the BRA); Soils (see Figure 3. Natural Resources Conservation Service Soil Types, in the BRA); Potential Aquatic Resources (see Figure 4. California Aquatic Resources Inventory, in the BRA); Wildlife, Evaluation of Special-Status Species Identified in the Literature Search (see Table 1 in the BRA which lists all special status plant and wildlife species identified in the literature search as potentially occurring within the Project site); Plants (Kaweah Brodiaea, Springville Clarkia, Streambank Spring Beauty, Recurved Larkspur, Calico Monkeyflower, Mouse Buckwheat, Spiny-Sepaled Button-Celery, Sierra Nevada Monkeyflower, American Manna Grass, Munz’s Iris, Madera Leptosiphon, San Joaquin Adobe Sunburst); Reptiles (Northern California Legless Lizard and Blainville’s Horned Lizard); Birds (Nuttall’s Woodpecker, Oak Titmouse, and Lawrence’s Goldfinch); Migratory Bird Treaty Act Protected Birds and Mammals (Townsend’s Big-eared Bat and Pallid Bat); Sensitive Natural Communities (which were absent), Wildlife Movement/Corridors; and Critical Habitat (which was absent).<sup>55</sup> These discussions can be found in their entirety in the BRA which is included in Attachment “B” of this Initial Study.

## Recommendations

The BRA provides recommendations to ensure the Project will have a less than significant impact on biological resources/species within the proposed Project site. The recommendations are enumerated and summarized in **Table BIO-1**, below. As consultant provided a list of recommendations, RMA staff enumerated and summarized the recommendations in a different format than Consultant as shown in **Table BIO-1**. The full text of the recommendations can be found in the BRA beginning on Page 37 and ending on Page 41.

## Federal

### Endangered Species Act

The Federal Endangered Species Act (FESA) protects plants and wildlife that are listed as endangered or threatened by the USFWS and National Oceanic and Atmospheric Administration (NOAA) Fisheries. Section 9 of the FESA prohibits the taking of listed wildlife, where taking is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant on federal land and removing, cutting, digging-up, damaging, or destroying any listed plant on non-federal land in knowing violation of state law (16USC1538). Pursuant to Section 7 of the FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed plant or wildlife species or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to another authorized activity, provided the action will not jeopardize the continued existence of the species. Section 10 of the FESA provides for issuance of incidental take permits to private parties, provided a Habitat Conservation Plan (HCP) is developed.

### Section 7 Consultation

“Section 7 of the ESA mandates that all federal agencies consult with USFWS and/or NMFS to ensure that federal agencies’ actions do not jeopardize the continued existence of a listed species or adversely modify critical habitat for listed species. If direct and/or indirect effects will occur to critical habitat that appreciably diminish the value of critical habitat for both the survival and recovery of a species, the adverse modifications will require formal consultation with USFWS or NMFS. If adverse effects are likely, the federal lead agency must prepare a biological assessment (BA) for the purpose of analyzing the potential effects of the proposed Project on listed species and critical habitat to establish and justify an “effect determination.” Often a third-party, non-federal applicant drafts the BA for the lead federal agencies. The USFWS/NMFS reviews the BA; if it concludes that the Project may

<sup>54</sup> Op. Cit. 13.

<sup>55</sup> Op. Cit. 13-37.

adversely affect a listed species or its habitat, it prepares a BO. The BO may recommend "reasonable and prudent alternatives" to the project to avoid jeopardizing or adversely modifying habitat."<sup>56</sup>

#### Critical Habitat

"Critical Habitat is defined in Section 3 of the ESA as:

1. the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the ESA, on which are found those physical or biological features essential to the conservation of the species and that may require special management considerations or protection; and
2. specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

For inclusion in a Critical Habitat designation, habitat within the geographical area occupied by the species at the time it was listed must first have features essential to the conservation of the species (16 USC 1533). Critical Habitat designations identify, to the extent known and using the best scientific data available, habitat areas that provide essential life cycle needs of the species (areas on which are found the primary constituent elements). Primary constituent elements are the physical and biological features that are essential to the conservation of the species and that may require special management considerations or protection. These include but are not limited to the following:

1. Space for individual and population growth and for normal behavior.
2. Food, water, air, light, minerals, or other nutritional or physiological requirements.
3. Cover or shelter.
4. Sites for breeding, reproduction, or rearing (or development) of offspring.
5. Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species."<sup>57</sup>

#### Migratory Bird Treaty Act (MTBA)

The MBTA implements international treaties devised to protect migratory birds and any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits are in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the CDFG Code.

#### Federal Clean Water Act

The Federal Clean Water Act's (CWA's) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into waters of the United States without a permit from the U.S. Army Corps of Engineers (ACOE). The definition of waters of the United States includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR 328.3 7b)." The USEPA also has authority over wetlands and may override an ACOE permit. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or Waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the RWQCB.

#### *State*

#### California Endangered Species Act

<sup>56</sup> BRA page 4.

<sup>57</sup> Ibid. 4-5.

The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA, but unlike its federal counterpart, the CESA applies the take prohibitions to species proposed for listing (called candidates by the state). Section 2080 of the CDFG Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the CDFG Code as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The CESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with the CDFG to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered, threatened, or candidate species or result in destruction or adverse modification of essential habitat. The CDFG administers the act and authorizes take through Section 2081 agreements (except for designated fully protected species).

#### Fully Protected Species

The State of California first began to designate species as fully protected prior to the creation of the CESA and FESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians, reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered pursuant to the CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (CDFG Code Section 4700 for mammals; Section 3511 for birds; Section 2020 for reptiles and amphibians; and Section 5515 for fish) provide that fully protected species may not be taken or possessed at any time. Furthermore, the CDFG prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

#### Native Plant Protection Act

Regarding listed rare and endangered plant species, the CESA defers to the California Native Plant Protection Act (NPPA) of 1977 (CDFG Code Sections 1900 to 1913), which prohibits importing of rare and endangered plants into California, and the taking and selling of rare and endangered plants. The CESA includes an additional listing category for threatened plants that are not protected pursuant to NPPA. In this case, plants listed as rare or endangered pursuant to the NPPA are not protected pursuant to CESA, but can be protected pursuant to the CEQA. In addition, plants that are not state listed, but that meet the standards for listing, are also protected pursuant to CEQA (Guidelines, Section 15380). In practice, this is generally interpreted to mean that all species on lists 1B and 2 of the CNPS Inventory potentially qualify for protection pursuant to CEQA, and some species on lists 3 and 4 of the CNPS Inventory may qualify for protection pursuant to CEQA. List 3 includes plants for which more information is needed on taxonomy or distribution. Some of these are rare and endangered enough to qualify for protection pursuant to CEQA. List 4 includes plants of limited distribution that may qualify for protection if their abundance and distribution characteristics are found to meet the standards for listing.

#### California Fish and Game Code Special Protections for Birds

“In addition to protections contained within the California ESA and California Fish and Game Code § 3511 described above, the California Fish and Game Code includes a number of sections that specifically protect certain birds. Section 3800 states that it is unlawful to take nongame birds, such as those occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds, except when in accordance with regulations of the California Fish and Game Commission or a mitigation plan approved by CDFW for mining operations. Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird. Section 3503.5 protects birds of prey (which includes eagles, hawks, falcons, kites, ospreys, and owls) and prohibits the take, possession, or destruction of any birds and their nests. Section 3505 makes it unlawful to take, sell, or purchase egrets, ospreys, and several exotic non-native species, or any part of these birds. Section 3513 specifically prohibits the take or possession of any migratory nongame bird as designated in the MBTA.”<sup>58</sup>

#### Lake or Streambed Alteration Agreements

“Section 1602 of the California Fish and Game Code requires individuals or agencies to provide a Notification of Lake or Streambed Alteration to CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.” CDFW reviews the proposed actions and, if necessary, proposed measures to protect affected fish and wildlife resources. The final proposal mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement.”<sup>59</sup>

<sup>58</sup> Op. Cit. 6-7.

<sup>59</sup> Op. Cit. 7

### Porter-Cologne Water Quality Act

“The RWQCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of stormwater runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Storm Water Pollution Prevention Plan. Under the Porter-Cologne Water Quality Act, the RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, with any region that could affect the water of the state” [Water Code 13260(a)]. Waters of the State are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” [Water Code 13050 (e)]. The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State, that are not regulated by USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of a Waste Discharge Requirements for these activities.”<sup>60</sup>

### California Environmental Quality Act

“In accordance with CEQA Guidelines § 15380, a species or subspecies not specifically protected under the federal or California ESAs or NPPA may be considered endangered, rare, or threatened for CEQA review purposes if the species meets certain criteria specified in the Guidelines. These criteria include definitions similar to definitions used in the ESA, the California ESA, and the NPPA. Section 15380 was included in the CEQA Guidelines primarily to address situations in which a project under review may have a significant effect on a species that has not been listed under the ESA, the California ESA, or the NPPA, but that may meet the definition of endangered, rare, or threatened. Animal species identified as SSC by CDFW and plants identified by the CNPS as rare, threatened, or endangered may meet the CEQA definition of rare or endangered.”<sup>61</sup>

### Species of Special Concern

“SSC are defined by the CDFW as a species, subspecies, or distinct population of an animal native to California that are not legally protected under ESA, the California ESA, or the California Fish and Game Code, but currently satisfies one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role.
- The species is listed as federally (but not State) threatened or endangered, or meets the State definition of threatened or endangered but has not formally been listed.
- The species has or is experiencing serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status.
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for State threatened or endangered status.
- SSC are typically associated with habitats that are threatened.

Depending on the policy of the lead agency, projects that result in substantial impacts to SSC may be considered significant under CEQA.”<sup>62</sup>

### U.S. Fish and Wildlife Service Birds of Conservation Concern

“The 1988 amendment to the Fish and Wildlife Conservation Act mandates USFWS “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under ESA.” To meet this requirement, USFWS published a list of BCC for the U.S. (USFWS 2008) The list identifies the migratory and nonmigratory bird species (beyond those already designated as federally threatened or endangered) that represent USFWS’ highest conservation priorities. Depending on the policy of the lead agency, projects that result in substantial impacts to BCC may be considered significant under CEQA.”<sup>63</sup>

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<sup>60</sup> Op. Cit.

<sup>61</sup> Op. Cit.

<sup>62</sup> Op. Cit. 8.

<sup>63</sup> Op. Cit.

### **California Rare Plant Ranks**

“The CNPS maintains the Inventory of Rare and Endangered Plants of California (CNPS 2020), which provides a list of plant species native to California that are threatened with extinction, have limited distributions, and/or low populations. Plant species meeting one of these criteria are assigned to one of six CRPRs. The rank system was developed in collaboration with government, academia, non-governmental organizations, and private sector botanists, and is jointly managed by CDFW and the CNPS. The CRPRs are currently recognized in the California Natural Diversity Database (CNDDDB). The following are definitions of the CNPS CRPRs:

- Rare Plant Rank 1A – presumed extirpated in California and either rare or extinct elsewhere.
- Rare Plant Rank 1B – rare, threatened, or endangered in California and elsewhere.
- Rare Plant Rank 2A – presumed extirpated in California, but more common elsewhere.
- Rare Plant Rank 2B – rare, threatened, or endangered in California but more common elsewhere.
- Rare Plant Rank 3 – a review list of plants about which more information is needed.
- Rare Plant Rank 4 – a watch list of plants of limited distribution.

Additionally, CNPS has defined Threat Ranks that are added to the CRPR as an extension. Threat Ranks designate the level of threat on a scale of 1 through 3, with 1 being the most threatened and 3 being the least threatened. Threat Ranks are generally present for all plants ranked 1B, 2B, or 4, and for the majority of plants ranked 3. Plant species ranked 1A and 2A (presumed extirpated in California), and some species ranked 3, which lack threat information, do not typically have a Threat Rank extension. The following are definitions of the CNPS Threat Ranks:

- Threat Rank 0.1 – Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat).
- Threat Rank 0.2 – Moderately threatened in California (20-80 percent of occurrences threatened/moderate degree and immediacy of threat).
- Threat Rank 0.3 – Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known).

Factors such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Rank; and differences in Threat Ranks do not constitute additional or different protection (CNPS 2018).

Depending on the policy of the lead agency, substantial impacts to plants ranked 1A, 1B, or 2, and 3 are typically considered significant under CEQA Guidelines § 15380. Significance under CEQA is typically evaluated on a case-by-case basis for plants ranked 4 and at the discretion of the CEQA lead agency.”<sup>64</sup>

### **California Environmental Quality Act Significance Criteria**

“Sections 15063-15065 of the CEQA Guidelines address how an impact is identified as significant. Generally, impacts to listed (rare, threatened, or endangered) species are considered significant. Assessment of “impact significance” to populations of non-listed species (e.g., SSC) usually considers the proportion of the species’ range that will be affected by a project, impacts to habitat, and the regional and population level effects.

Specifically, § 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant under CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.”<sup>65</sup>

<sup>64</sup> Op. Cit. 8-9.

<sup>65</sup> Op. Cit. 9-10.

## **Local**

### Tulare County General Plan 2030 Update

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project such as: *ERM-1.1 Protection of Rare and Endangered Species* which protects environmentally sensitive wildlife and plant life, including those species designated as rare, threatened, and/or endangered by State and/or Federal government, through compatible land use development; *ERM-1.4 Protect Riparian Areas* where the County shall protect riparian areas through habitat preservation, designation as open space or recreational land uses, bank stabilization, and development controls; *ERM-1.6 Management of Wetlands* where the County shall support the preservation and management of wetland and riparian plant communities for passive recreation, groundwater recharge, and wildlife habitats; *ERM-1.7 Planting of Native Vegetation* where the County shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation and wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained; and *ERM-1.16 Cooperate with Wildlife Agencies* which states that the County shall cooperate with State and federal wildlife agencies to address linkages between habitat areas.

### Three Rivers Community Plan

In addition to Tulare County General Plan policies (summarized below), the Three Rivers Community Plan contains Three Rivers-specific policies applicable to biological resources such as: Vision Statement 7 to “protect and preserve oak, sycamore and cottonwood woodlands.” Goal 4 (Protection and Conservation of the Environment) of the Community Plan includes objectives that are pertinent to biological resources, including: 4.1.1 Preserving the Natural Environment; and 4.1.2 CEQA Compliance <sup>66</sup>

Also, as noted in the BRA, “As part of the Community Plan, a Voluntary Oak Woodlands Management Plan (Tulare County 2018b) has been adopted. If the County determines that a project will result in a significant effect to oak woodlands, the County shall require one or more oak woodland mitigation alternatives to mitigate for the significant effect associated with the conservation of oak woodlands.”

- a) **Less Than Significant Impact With Mitigation:** As noted earlier, the proposed Project entails the development of a 105-room hotel to be located off State Route 198 in Three Rivers. Also as noted earlier, the BRA indicates that the Study Area is currently undeveloped and is situated at an elevation range of approximately 750 to 775 feet above mean sea level (MSL) in the southern Sierra Nevada foothills subregion of the Sierra Nevada region of the California floristic province. The BRA further notes that the Study Area appears to have been historically disturbed as remnant vehicle tracks are found throughout the site. Consultant utilized Google Earth aerial photographs which previously showed an area of oak woodland was present in the eastern portion of the site through 2005 but had been cut down and removed by 2009. Surrounding lands include undeveloped lands, the Comfort Inn and Suites, and rural residences

The BRA concludes that there is potential suitable habitat for special-status plants, as such **Mitigation Measures BIO-1** through **BIO-3**, are included in this Initial Study. The BRA also concludes that there is potential suitable habitat for special-status reptiles (lizards), as such **Mitigation Measures BIO-4** through **BIO-5**, are included in this Initial Study. **Mitigation Measures BIO-6** through **BIO-9** have been included to mitigate potential impacts to nesting raptors and migratory birds as recommended in the BRA. The proposed Project will not require removal of any native valley oaks or other trees. However, there is a possibility that migratory birds and raptors may be present within the vicinity of the proposed Project site, or due to the transient nature of some species.

As such, **Mitigation Measures BIO-1** through **BIO 9** would be implemented to reduce potential impacts on special status species to less than significant, as applicable. **Table BIO-1 Summary of Mitigation Measures** lists **Mitigation Measures BIO-1** through **BIO-9** which can be found in their entirety in BRA report in Attachment “B” of this Initial Study.

Based on the analysis contained in the BRA, qualified expert consultant ECORP determined that the proposed Project would result in a less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. Therefore, the proposed Project will not significantly impact any biological plant or animal species. The proposed Project will not have a significant direct or cumulative impact, or create an unusual circumstance that will cause the proposed Project to have a significant effect on the biological resources of the area and environment.

<sup>66</sup> Op. Cit. 10.

- b) **No Impact:** As contained in the BRA, “There are no sensitive natural communities onsite. No measures are recommended.”<sup>67</sup> As such, the proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. Based on the analysis contained in the BRA, qualified expert consultant ECORP determined that the proposed Project would result in no impact. Tulare County RMA agrees with and supports the assessment and conclusion.
- c) **Less Than Significant Impact with Mitigation:** Based on the analysis contained in the BRA, qualified expert consultant ECORP determined that the proposed Project would result in less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. As noted in the BRA, “Approximately 0.011 acre of aquatic resources is located within the Study Area (Figure 2 [in the BRA]). The following mitigation measures [included in this Initial Study as **BIO-10** through **BIO-13**] are recommended to minimize potential impacts to Waters of the U.S./State if the Project proposes to place fill in these features...”<sup>68</sup> Therefore, the proposed Project would not result in a significant impact.
- d) **Less Than Significant Impact:** The proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. As contained in the BRA, “Wildlife have potential to use the Project site for localized wildlife movement. However, Project development would not constitute a significant loss of the available wildlife habitat in the area. No measures are recommended.”<sup>69</sup> Based on the analysis contained in the BRA, qualified expert consultant ECORP determined that the proposed Project would result in less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion.

TABLE BIO-1 SUMMARY OF MITIGATION MEASURES <sup>70</sup>		
MITIGATION	TYPE OF MITIGATION	SUMMARIZED DESCRIPTION
<b>Measures for Special Status Plant Species</b>		
BIO-1	Pre-construction Survey	Perform focused plan surveys.
BIO-2	Plants absent	If no special-status plants are found within the Project Area, no further measures pertaining to special-status plants are necessary
BIO-3	Avoidance	If avoidance not possible, seed collection, transplantation, and/or other mitigation measures.
<b>Measures for Special Status Reptiles</b>		
BIO-4	Pre-construction Survey	Qualified biologist conducts pre-construction surveys for special status reptile species.
BIO-5	Presence	Qualified biologist relocates the individuals, with the concurrence of CDFW, to a site with suitable habitat.
<b>Measures for Nesting Raptors and Migratory Birds</b>		
BIO-6	Pre-construction Survey	If Project activities occur during the nesting season (February 1-August 31), a qualified biologist will conduct preconstruction surveys).
BIO-7	Buffers	Upon active nest discovery, the biologist determines appropriate construction setback distances and a behavioral baseline using applicable CDFW guidelines and/or the biology of the affected species.
<b>Measures for Special Status Mammals (Bats)</b>		
BIO-8	Pre-construction Survey: Absence	Qualified biologist will conduct pre-construction surveys; if roosting habitat or bats are not present, no further measures are necessary.
BIO-9	Pre-construction Survey: Presence	Qualified biologist will conduct a bat habitat assessment. If suitable roosting habitat present, a qualified biologist will conduct bat emergence survey to determine whether or not bats are present. If special-status bats are found, consult with CDFW.
<b>Measures for Waters of the United States and State</b>		
BIO-10	Perform Delineation	Perform an aquatic resources delineation according to USACE standards.
BIO-11	Avoidance	Potentially jurisdictional features should be avoided and fenced.
BIO-12	Section 404 Permit	If Waters of the U.S./State cannot be avoided obtain Section 404 Permit.
BIO-13	Section 401 Permit	Obtain Section 401 Permit from the RWQCB.
BIO-14	RWQCB permit	Obtain RWQCB permit for discharge of material as applicable.
<b>Measures for Oak Woodlands</b>		

<sup>67</sup> Op. Cit. 41.

<sup>68</sup> Op. Cit. 37-38.

<sup>69</sup> Op. Cit. 41.

<sup>70</sup> Ibid. 5.0 Recommendations. 37-40.

BIO-15	Avoidance/Conservation	If feasible, avoid/conserv oak woodlands.
BIO-16	Replacement	If oak woodlands are proposed for impact, plant an appropriate number of trees, including maintain planting and replacing dead or diseased trees .
BIO-17	Contribution	Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of the Section 1363 of the California Fish and Game Code.
BIO-18	Other	County determines mitigation; possible implementation of <i>Three Rivers Voluntary Oak Woodland Plan</i>

e) **Less Than Significant Impact with Mitigation:** There are no oak woodland within the proposed Project site; however, there are two oaks adjacent to the site. As described in the BRA, “There are two isolated small oak trees located within the annual grassland. The oaks that make up the oak woodland mapped in the Study Area are located on the adjacent property with only the dripline overlapping into the Study Area. Although direct impacts to the oak woodland is not anticipated, indirect impacts may occur. If impacts are considered significant, one or more of the following measures should be implemented to reduce the impact to oak woodlands (per the Three Rivers Voluntary Oak Woodland Plan).”<sup>71</sup> As such, Mitigation Measures **BIO-15** through **BIO-18** would reduce potential impact to less than significant: Based on the analysis contained in the BRA, qualified expert consultant ECORP determined that the proposed Project would result in less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion.

f) **No Impact:** The proposed Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances. Moreover, the proposed Project is not expected to conflict with the goals or policies of the Tulare County General Plan that protect biological resources. Also, as the proposed Project is not within or in the vicinity of any approved habitat conservation plans, natural community conservation plans, or regional or state habitat conservation plans in effect, the proposed Project would result in no impact to these resources within the vicinity of the proposed Project site. Based on the analysis contained in the BRA, qualified expert consultant ECORP determined that the proposed Project would result in less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion.

**Cumulative Impact:** As noted earlier, the BRA, and supported in this resource analysis, the proposed Project will not have a significant direct or cumulative impact, or create an unusual circumstance that will cause the proposed Project to have a significant effect on the biological resources of the area and environment. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

5. CULTURAL RESOURCES			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
		Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	Disturb any human remains, including those interred outside of formal cemeteries?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Analysis:**

The “Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers” (CRIR or Report) was prepared by ECORP Consulting, Inc. (Consultant) in June 2020 which is included as Attachment “C” of this Initial Study. This Report is used as the basis for determining that, based on the evidence/documentation (including incorporation of recommendations contained in the Report) and the expertise of qualified consultant ECORP Consulting, Inc. (Consultant), the proposed Project will result in a less than significant impact. Also, Item 18 Tribal Cultural Resources provides additional historical context more specific to Native American history/resources.

<sup>71</sup> Op. Cit.



## Environmental Setting

“Tulare County lies within a culturally rich province of the San Joaquin Valley. Studies of the prehistory of the area show inhabitants of the San Joaquin Valley maintained fairly dense populations situated along the banks of major waterways, wetlands, and streams. Tulare County was inhabited by aboriginal California Native American groups consisting of the Southern Valley Yokuts, Foothill Yokuts, Monache, and Tubatulabal. Of the main groups inhabiting the Tulare County area, the Southern Valley Yokuts occupied the largest territory.”<sup>72</sup>

“California’s coast was initially explored by Spanish (and a few Russian) military expeditions during the late 1500s. However, European settlement did not occur until the arrival into southern California of land-based expeditions originating from Spanish Mexico starting in the 1760s. Early settlement in the Tulare County area focused on ranching. In 1872, the Southern Pacific Railroad entered Tulare County, connecting the San Joaquin Valley with markets in the north and east. About the same time, valley settlers constructed a series of water conveyance systems (canals, dams, and ditches) across the valley. With ample water supplies and the assurance of rail transport for commodities such as grain, row crops, and fruit, a number of farming colonies soon appeared throughout the region.”<sup>73</sup>

“The colonies grew to become cities such as Tulare, Visalia, Porterville, and Hanford. Visalia, the County seat, became the service, processing, and distribution center for the growing number of farms, dairies, and cattle ranches. By 1900, Tulare County boasted a population of about 18,000. New transportation links such as SR 99 (completed during the 1950s), affordable housing, light industry, and agricultural commerce brought steady growth to the valley. The California Department of Finance estimated the 2007 Tulare County population to be 430,167”<sup>74</sup>

As described in the Report, “The Project Area is located in a rural residential and commercial center in the unincorporated community of Three Rivers along Sierra Drive/Highway 198. This area is in the foothills of the Sierra Nevada at the edge of the San Joaquin Valley. Three Rivers is in the Kaweah River canyon, the gateway to the entrance to Sequoia and Kings Canyon National Parks. The Project Area is along the southern bank of the Kaweah River, which is 200 feet west, and is approximately five miles northeast of Kaweah Lake. Highway [SR] 198 separates the Project Area land from the Kaweah River. Elevations range from 755 to 765 feet above mean sea level”<sup>75</sup>

### Project Description and Area of Potential Effects

“The proposed Project entails the construction of a commercial hotel, Hampton Inn and Suites. The Area of Potential Effects (APE) consists of the horizontal and vertical limits of a project and includes the area within which significant impacts or adverse effects to Historical Resources or Historic Properties could occur as a result of the project. The APE is defined for projects subject to regulations implementing Section 106 (federal law and regulations). For projects subject to the California Environmental Quality Act (CEQA), the term Project Area is used rather than APE. For the purpose of this document, the terms Project Area and APE are interchangeable.

The horizontal APE consists of all areas where activities associated with a project are proposed and in the case of the current Project, equals the Project Area subject to environmental review under the National Environmental Policy Act (NEPA) and CEQA. This includes areas proposed for construction, vegetation removal, grading, trenching, stockpiling, staging, paving, and other elements described in the official project description. The horizontal APE is illustrated on Figure 1 [of the CRIR] and also represents the survey coverage area. It measures approximately 550 feet in length by 400 feet in width.

The vertical APE is described as the maximum depth below the surface to which excavations for project foundations and facilities will extend. Therefore, the vertical APE includes all subsurface areas where archaeological deposits could be affected. The subsurface vertical APE varies across the Project, depending on construction activities. This study assumes the depth of ground disturbance will not exceed six feet, and therefore, review of geologic and soils maps was necessary to determine the potential for buried archaeological sites that cannot be seen on the surface.

<sup>72</sup> Tulare County 2012, Goals and Policies Report. Tulare County General Plan Update 2030. Page 8-5.

<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>

<sup>73</sup> Ibid. 8-5.

<sup>74</sup> Op. Cit. 8-6.

<sup>75</sup> “Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers” (CRIR or Report). Page 4. June 2020. Prepared by ECORP Consulting, Inc. and included in Attachment “C” of this Initial Study.

The vertical APE is also described as the maximum height of structures that could impact the physical integrity and the integrity of the setting of cultural resources, including districts and traditional cultural properties. The current study assumes the above-surface vertical APE will not exceed 60 feet above the surface, which is assumed to be the height of the hotel.”<sup>76</sup> It is noted that in the zone where the proposed Project is located the maximum height allowed is 75 feet

#### Environmental Setting as described in the Report

As described in the Report, “The Project Area is located in a rural residential and commercial center in the unincorporated community of Three Rivers along Sierra Drive/Highway [SR] 198. This area is in the foothills of the Sierra Nevada at the edge of the San Joaquin Valley. Three Rivers is in the Kaweah River canyon, the gateway to the entrance to Sequoia and Kings Canyon National Parks. The Project Area is along the southern bank of the Kaweah River, which is 200 feet west, and is approximately five miles northeast of Kaweah Lake. Highway [SR] 198 separates the Project Area land from the Kaweah River. Elevations range from 755 to 765 feet above mean sea level”<sup>77</sup>

The CRIR also describes the geology; soils; vegetation and wildlife; regional pre-contact history (approximately 10,000 before the present); local pre-contact history and ethnology, generally the Native American history of the area; regional history (generally European exploration and settlement, Mexican and, American history) and; proposed Project area history.<sup>78</sup> Additional historical context is provided in Item 18 Tribal Cultural Resources of this Initial Study.

#### Records Search Results

Consultant undertook a records search with the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS) at California State University, Bakersfield on May 18, 2020 (SSJVIC, included in the Report). As indicated in the Report, “The purpose of the records search was to determine the extent of previous surveys within a 0.5-mile (800-meter) radius of the proposed Project location, and whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area.”<sup>79</sup>

“In addition to the official records and maps for archaeological sites and surveys in Tulare County, the following historic references were also reviewed: Historic Property Data File for Tulare County (OHP 2012); The National Register Information System (NPS 2020b); Office of Historic Preservation, California Historical Landmarks (OHP 2020); California Historical Landmarks (OHP 1996 and updates); California Points of Historical Interest (OHP 1992 and updates); Directory of Properties in the Historical Resources Inventory (1999); Caltrans Local Bridge Survey (Caltrans 2019); Caltrans State Bridge Survey (Caltrans 2018); and Historic Spots in California (Kyle 2002). Other references examined include a RealQuest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM] 2020).”<sup>80</sup> Historic maps reviewed include: 1870 BLM GLO Plat map for Township 17 South Range 28 East; 1885 BLM GLO Plat map for Township 17 South Range 28 East; 1892 Tulare County, California Map (published by Thos. H. Thompson, page 046, Sequoia National Park 3, Kaweah); 1957 USGS Kaweah, California topographic quadrangle map (15-minute scale); 1986 USGS Kaweah, California topographic quadrangle map (1:62,500 scale); and 1986 photo revised 1994 USGS Kaweah, California topographic quadrangle map (1:24,000 scale).<sup>81</sup> Historic aerial photos taken in 1955, 1989, 2005, 2009, 2010, and 2012 were also reviewed for any indications of property usage and built environment.<sup>82</sup>

#### Native American Consultation (See Item 17 Tribal Cultural Resources of this Initial Study)

Lastly, it is noted that due to the sensitive nature of confidential information contained in the Report, it will not be readily available to the public; however, Tulare County will allow access to the Report within legal limitations.

### **Regulatory Setting**

#### ***Federal***

<sup>76</sup> Ibid. 1. June 2020.

<sup>77</sup> Op. Cit. 4.

<sup>78</sup> Op. Cit. 4-12.

<sup>79</sup> Op. Cit. 12-13.

<sup>80</sup> Op. Cit. 13.

<sup>81</sup> Op. Cit.

<sup>82</sup> Op. Cit.

## The National Historic Preservation Act

“The Advisory Council on Historic Preservation (ACHP) is an independent federal agency with the primary mission to encourage historic preservation in the government and across the nation. The National Historic Preservation Act (NHPA), which established the ACHP in 1966, directs federal agencies to act as responsible stewards when their actions affect historic properties. The ACHP is given the legal responsibility to assist federal agencies in their efforts and to ensure they consider preservation during project planning. The ACHP serves as the federal policy advisor to the President and Congress; recommends administrative and legislative improvements for protecting the nation’s diverse heritage; and reviews federal programs and policies to promote effectiveness, coordination, and consistency with national preservation policies. A key ACHP function is overseeing the federal historic preservation review process established by Section 106 of the NHPA. Section 106 requires federal agencies to consider the effects of projects, carried out by them or subject to their assistance or approval, on historic properties and provide the ACHP an opportunity to comment on these projects prior to a final decision on them.”<sup>83</sup>

Although cultural resources are protected by several federal regulations, the project applicant is not requesting federal funding and does not require any permits from any federal agencies.

## *State*

### California State Office of Historic Preservation (OHP)

“The California State Office of Historic Preservation (OHP) is responsible for administering federally and state mandated historic preservation programs to further the identification, evaluation, registration and protection of California's irreplaceable archaeological and historical resources under the direction of the State Historic Preservation Officer (SHPO), a gubernatorial appointee, and the State Historical Resources Commission.”<sup>84</sup>

“OHP's responsibilities include: Identifying, evaluating, and registering historic properties; Ensuring compliance with federal and state regulatory obligations; Encouraging the adoption of economic incentives programs designed to benefit property owners; Encouraging economic revitalization by promoting a historic preservation ethic through preservation education and public awareness and, most significantly, by demonstrating leadership and stewardship for historic preservation in California.”<sup>85</sup>

A historical resource may be eligible for inclusion in the California Register of Historical Resources (CRHR) if it:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Is associated with the lives of persons important to our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.<sup>86</sup>

As mentioned in the CRIR, the use of both federal and state regulatory requirements apply to the proposed Project. “To meet the regulatory requirements of this Project, this cultural resources investigation was conducted pursuant to the provisions for the treatment of cultural resources contained within Section 106 of the National Historic Preservation Act (NHPA) and in CEQA (Public Resources Code [PRC] § 21000 et seq.) The goal of NHPA and CEQA is to develop and maintain a high-quality environment that serves to identify the significant environmental effects of the actions of a proposed project and to either avoid or mitigate those significant effects where feasible. CEQA pertains to all proposed projects that require State or local government agency approval, including the enactment of zoning ordinances, the issuance of conditional use permits, and the approval of development project maps. The NHPA pertains to projects that entail some degree of federal funding or permit approval.

The NHPA and CEQA (Title 54 U.S. Code [USC] Section 100101 et seq. and Title 14, California Code of Regulations [CCR], Article 5, § 15064.5) apply to cultural resources of the historical and pre-contact periods. Any project with an effect that may cause a substantial adverse change in the significance of a cultural resource, either directly or indirectly, is a project that may have a significant effect on the environment. As a result, such a project would require avoidance or mitigation of impacts to those affected resources. Significant cultural resources must meet at least one of four criteria that define eligibility for listing on either the California

<sup>83</sup> Advisory Council on Historic Preservation. [https://www.achp.gov/sites/default/files/documents/2019-10/AboutTheACHPFactSheet2019\\_100319.pdf](https://www.achp.gov/sites/default/files/documents/2019-10/AboutTheACHPFactSheet2019_100319.pdf)

<sup>84</sup> State of California. Office of Historic Preservation. Mission and Responsibilities. [http://ohp.parks.ca.gov/?page\\_id=1066](http://ohp.parks.ca.gov/?page_id=1066)

<sup>85</sup> Ibid.

<sup>86</sup> Office of Historic Preservation. California Register of Historic Places. [http://www.ohp.parks.ca.gov/?page\\_id=21238](http://www.ohp.parks.ca.gov/?page_id=21238)

Register of Historical Resources (CRHR) (PRC § 5024.1, Title 14 CCR, § 4852) or the National Register of Historic Places (NRHP) (36 Code of Federal Regulations [CFR] 60.4). Cultural resources eligible for listing on the NRHP are considered Historic Properties under 36 CFR Part 800 and are automatically eligible for the CRHR. Resources listed on or eligible for inclusion in the CRHR are considered Historical Resources under CEQA.

Tribal Cultural Resources are defined in Section 21074 of the California PRC as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either included in or determined to be eligible for inclusion in the CRHR, or are included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or are a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. Section 1(b)(4) of Assembly Bill (AB) 52 established that only California Native American tribes, as defined in Section 21073 of the California PRC, are experts in the identification of Tribal Cultural Resources and impacts thereto. Because ECORP does not meet the definition of a California Native American tribe, this report only addresses information for which ECORP is qualified to identify and evaluate, and that which is needed to inform the cultural resources section of CEQA documents. This report, therefore, does not identify or evaluate Tribal Cultural Resources. Should California Native American tribes ascribe additional importance to or interpretation of archaeological resources described herein, or provide information about non-archeological Tribal Cultural Resources, that information is documented separately in the AB 52 tribal consultation record between the tribe(s) and lead agency, and summarized in the Tribal Cultural Resources section of the CEQA document, if applicable.”<sup>87</sup>

#### Native American Heritage Commission

“The Native American Heritage Commission (NAHC), created in statute in 1976, is a nine-member body, appointed by the Governor, to identify and catalog cultural resources (i.e., places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands) in California. The Commission is charged with the duty of preserving and ensuring accessibility of sacred sites and burials, the disposition of Native American human remains and burial items, maintain an inventory of Native American sacred sites located on public lands, and review current administrative and statutory protections related to these sacred sites.”<sup>88</sup>

#### Tribal Consultation Requirements: AB 52 (Gatto, 2014)

The Public Resources Code has established that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. (Pub. Resources Code, § 21080.3.1.) If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact.<sup>89</sup>

#### CEQA Guidelines: Archaeological Resources

Section 15064.5(c) of CEQA Guidelines provides specific guidance on the treatment of archaeological resources as noted below.<sup>90</sup>

- (1) When a Project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subdivision (a).
- (2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.
- (3) If an archaeological site does not meet the criteria defined in subdivision (a), but does meet the definition of a unique archeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c–f) do not

<sup>87</sup> “Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers” (CRIR or Report). Page 3. June 2020. Prepared by ECORP Consulting, Inc. and included in Attachment “C” of this Initial Study.

<sup>88</sup> Native American Heritage Commission. Welcome. <http://nahc.ca.gov/>

<sup>89</sup> Office of Planning and Research. Discussion Draft Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA (May 2015). Page 3.

[http://opr.ca.gov/docs/DRAFT\\_AB\\_52\\_Technical\\_Advisory.pdf](http://opr.ca.gov/docs/DRAFT_AB_52_Technical_Advisory.pdf)

<sup>90</sup> California Natural Resources Agency. 15064.5. Determining the Significance of Impacts to Archeological and Historical Resources, Section 15064.5(c).

<http://resources.ca.gov/ceqa/guidelines/art5.html>

apply to surveys and site evaluation activities intended to determine whether the Project location contains unique archaeological resources.

- (4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the Project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

#### CEQA Guidelines: Human Remains

Public Resources Code Sections 5097.94 and 5097.98 provide guidance on the disposition of Native American burials (human remains), and fall within the jurisdiction of the Native American Heritage Commission:<sup>91</sup>

- (d) When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the Project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any Items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:
- (1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
  - (2) The requirements of CEQA and the Coastal Act.
- (e) In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:
- (1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
    - (A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and
    - (B) If the coroner determines the remains to be Native American:
      1. The coroner shall contact the Native American Heritage Commission within 24 hours.
      2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
      3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or
  - (2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
    - (A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
    - (B) The descendant identified fails to make a recommendation; or
    - (C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.
- (f) As part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place

#### **Local**

##### Tulare County General Plan 2030 Update

The General Plan has a number of policies that apply to Projects within Tulare County. General Plan policies that relate to the proposed Project are listed as follows:

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<sup>91</sup> Ibid.

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: *ERM-6.1 Evaluation of Cultural and Archaeological Resources* wherein the County shall participate in and support efforts to identify its significant cultural and archaeological resources using appropriate State and Federal standards; *ERM-6.2 Protection of Resources with Potential State or Federal Designations* wherein the County shall protect cultural and archaeological sites with demonstrated potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources; *ERM-6.3 Alteration of Sites with Identified Cultural Resources* which states that when planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development can be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and Mitigation Measures proposed for any impacts the development may have on the resource; *ERM-6.4 Mitigation* which states that if preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records; *ERM-6.8 Solicit Input from Local Native Americans* wherein the County shall continue to solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance; *ERM-6.9 Confidentiality of Archaeological Sites* wherein the County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts; *ERM-6.10 Grading Cultural Resources Sites* wherein the County shall ensure all grading activities conform to the County's Grading Ordinance and California Code of Regulations, Title 20, § 2501 et. seq. and; *LU-7.12 Historic Buildings and Areas* wherein the County shall encourage preservation of buildings and areas with special and recognized historic, architectural, or aesthetic value. New development should respect architecturally and historically significant buildings and areas

### Three Rivers Community Plan

Other policies also include the Three Rivers Community Plan's objectives/policies at: *Objective 4.6 Historical, Cultural and Archaeological Resources*: To reserve historical, cultural, and archaeological resources including the Kaweah post office, historical bridges, and Native American cultural resources. *Policies: 4.6.2 Preserve Cultural & Historical Value* to limit to the extent feasible and appropriate development on sites with identified significant cultural or historical value; *4.6.4 ERM-6.3 Alteration of Sites with Identified Cultural Resources* wherein when planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development can be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and mitigation measures proposed for any impacts the development may have on the resource; *4.6.5 ERM-6.4 Mitigation* which states that if preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of record; *4.6.6 ERM-6.8 Solicit Input from Local Native Americans* wherein the County shall continue to solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance; *4.6.7 ERM-6.9 Confidentiality of Archaeological Sites* wherein the County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts and; *4.6.8 ERM-6.10 Grading Cultural Resources Sites* wherein the County shall ensure all grading activities conform to the County's Grading Ordinance and California Code of Regulations, Title 14, Chapter 3 § 15064.5 et. seq.

**a) - c) Less Than Significant Impact With Mitigation:** Consultant used a variety of accepted methodologies to research/investigate the proposed Project's location in determining presence of Tribal Cultural Resources. As noted in the CRIR, Consultant provided evidence of its personnel's qualifications; a search of records by the Southern San Joaquin Valley Information Center of the California Historical Resources Information System; RealQuest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM]; aerial photos taken in 1955, 1989, 2005, 2009, 2010, and 2012 were also reviewed for any indications of property usage and built environment; Sacred Lands File Search (SLF) by the California Native America Heritage commission (NAHC); contacted the Tulare County Historical society and; an intensive pedestrian survey under the guidance of the Secretary of the Interior's Standards for the Identification of Historic Properties (NPS 1983).

To summarize the findings contained in the CRIR, Consultant concluded, "No cultural resources were identified on the property as a result of the records search and field survey. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA will be affected by the proposed Project." However, the CRIR conclusions do not eliminate the possibility of subsurface cultural resources, to wit; "Due to the presence of alluvium along the Kaweah River, and given the likelihood of pre-contact archaeological sites located along perennial waterways, the potential exists for buried pre-contact archaeological sites in the Project Area. This potential is considered to be high, as the Kaweah River exhibits significant sinuosity that reflects a meandering

channel over time, which has the potential to bury archaeological sites that were once along the river's edge." To that end, consultant provides recommendation in the event of post-review discovery (see item 5 cultural Resources). The proposed Project is not anticipated to impact human remains, including those interred outside of formal cemeteries.

However, as an abundance of caution, in the unlikely event that subsurface resources or if any previously unknown human remains were encountered during ground disturbing activities, **Mitigation Measures CUL-1 subsets (a) – (c)**, as recommended in the CRIR (pages 22-23), would be implemented thereby reducing the potential level of impact to this resource as less than significant for resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or to a resource considered significant to a California Native American tribe. Therefore, the Project would result in a less than significant impact to this resource.

**Mitigation Measure CUL-1:** If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for pre-contact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

**(a):** If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.

**(b):** If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead federal agency, the lead CEQA agency, and applicable landowner. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.

**(c):** If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Tulare County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

Therefore, implementation of **Mitigation Measure CUL-1 subsets (a) through (c)** would result in a less than significant impact to this item.

**Cumulative Impact:** As noted earlier, the CRIR study concluded that there are no surface resources within the proposed Project site. **Mitigation Measure CUL -1 subsets (a) through (c)** is included in the event surface or subsurface cultural resources are encountered. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.



6.	ENERGY					
Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Analysis:

#### Environmental Setting

##### Electricity and Natural Gas Services

Natural gas service within Tulare County is provided by the Southern California Gas Company (SoCal Gas). However, the proposed Project is located in a rural foothill community and natural gas service is not available in the area.

Electrical power service in the project area is provided by Southern California Edison (SCE). SCE provides electric power throughout southern and eastern California, from Mono County south to Riverside County. Electricity for proposed Project demands is available from existing transmission and distribution lines. SCE updates demand projections and ensures that adequate power generation is brought on-line when needed. Similarly, transmission and distribution facilities and substations are continuously expanded or added as needed for power delivery. There are no existing or foreseeable supply constraints that would prevent SCE from meeting the proposed Project's average or peak daily or seasonal demands, and local system improvements would be installed as needed to serve the project based on estimated project loads.

In 2019, SCE provided 80,912.73 gigawatt-hours (GWh) of electricity to its customers (residential and non-residential) across its service area. In the same year, Southern California Gas Company (SoCal Gas) provided a total of 5,424.71 million therms of natural gas to customers (residential and non-residential) across its service area. Within the County, total demand for electrical services was 4,162.20 GWh, and total demand for natural gas services was 299.19 million therms in 2019.<sup>92</sup> Total state and countywide energy demands based on 2019 populations, are provided in **Table 6-1**.

Table 6-1 County, State and Project Energy Demands				
	Natural Gas Usage (therms)		Electricity Energy Demand (MWh)	
	Total Demand	Non-Residential Demand	Total Demand	Non-Residential Demand
State (2019) <sup>1</sup>	13,158,207,489	8,365,362,587	558,803,760	188,198,815
Tulare County (2019) <sup>1</sup>	299,193,336	unavailable	4,162,198	2,900,514
Proposed Project <sup>2</sup>	---	---	---	850
<sup>1</sup> California Energy Commission. Energy Consumption Database. <a href="http://ecdms.energy.ca.gov/">http://ecdms.energy.ca.gov/</a> . Accessed October 2020.				
<sup>2</sup> Project natural gas demand provided by CalEEMod estimates and electricity demand provided by applicant based on an existing facility of the same size.				

##### Petroleum-Based Fuels

Overall supplies of transportation fuel in Tulare County are plentiful and reliable. Supplies of imported crude and refined fuels are increasing steadily as in-state petroleum resources decline and refining capacity is maximized. There have been no fuel shortages or vehicles waiting in gas fueling lines in recent years. General tightness of supply (vis-à-vis demand) is reflected in prices at fuel dispensing pumps and there is no evidence at this time to suggest that such shortages will occur in the foreseeable future.

<sup>92</sup> California Energy Commission. Energy Consumption Database. <http://ecdms.energy.ca.gov/>. Accessed March 2018



## Regulatory Setting

### *Federal*

#### Energy Policy Act of 2005

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Act, consumers and businesses can obtain federal tax credits for purchasing fuel efficient appliances and products, including buying hybrid vehicles, building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

### *State*

#### California Global Warming Solutions Act of 2006 (Assembly Bill 32)

Assembly Bill 32 (Health and Safety Code Sections 38500–38599; AB 32), also known as the California Global Warming Solutions Act of 2006, commits the state to achieving year 2000 GHG emission levels by 2010 and year 1990 levels by 2020. To achieve these goals, AB 32 tasked the California Public Utilities Commission (PUC) and CEC with providing information, analysis, and recommendations to the California Air Resources Board (ARB) regarding ways to reduce GHG emissions in the electricity and natural gas utility sectors.

#### Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California’s GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State’s continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.<sup>93, 94</sup>

#### California Energy Commission

### *Local*

#### Tulare County General Plan 2030 Update

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: *ERM-4.1 Energy Conservation and Efficiency Measures* wherein the County encourages the use of solar energy, solar hot water panels, and other energy conservation and efficiency features; *ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation* wherein the County shall promote the planting and maintenance of shade trees along streets and within parking areas of new urban development to reduce radiation heating; *ERM-4.3 Local and State Programs* wherein the County shall participate, to the extent feasible, in local and State programs that strive to reduce the consumption of natural or man-made energy sources; *ERM-4.3 Local and State Programs* wherein the County shall participate, to the extent feasible, in local and State programs that strive to reduce the consumption of natural or man-made energy sources and; *AQ-3.5 Alternative Energy Design* wherein the County shall encourage all new development, including rehabilitation, renovation, and redevelopment, to incorporate energy conservation and green building practices to maximum extent feasible.

#### Three Rivers Community Plan Update<sup>95</sup>

The Three Rivers Community Plan Update contains policies that apply to projects within the community of Three Rivers that support the County’s GHG reduction efforts: *Policy 4.1.11 Climate Action Plan (CAP)* which requires a 6% reduction of GHG emissions

<sup>93</sup> California Legislative Information. [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160SB32](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32). Accessed October 2020.

<sup>94</sup> California Legislative Information. [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160AB197](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB197). Accessed October 2020.

<sup>95</sup> Three Rivers Community Plan 2018 Update.

<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/130Part%20III%20Community%20Plans%20%20of%207/007Three%20Rivers/COMMUNITY%20PLAN%20GPA%2014-004%20THREE%20RIVERS.pdf>.

for development projects consisting of 50 or more dwelling units or equivalent travel demand for non-residential uses; and *Policy 6.2.2 (Link Commercial Development to Transportation Corridors)* which requires commercial development to locate in areas with adequate access to major transportation corridors.

- a) **No Impact:** The proposed Project will not have a direct or cumulative impact, or create wasteful, inefficient, or unnecessary consumption of energy resources during project construction-related activities or operations.

During construction, the proposed Project would involve the use and consumption of non-renewable building materials such as concrete, metals, and plastics. Nonrenewable resources and energy would also be consumed in the manufacturing and transportation of building materials, as well as grading and construction for the project. Operation of the proposed Project will consume energy in the form of electricity and propane for multiple purposes including building heating and cooling, lighting, appliances, and electronics. Energy in the form of gasoline and diesel fuel will be used for private vehicles and delivery trucks that will travel to the proposed Project. Use of nonrenewable materials and energy sources represents an irretrievable commitment of resources. The proposed Project includes features that would reduce the commitment of nonrenewable resources, including: energy-efficiency and water conservation features and mitigation measures (see measures GHG-1 and GHG-2) in project design. Furthermore, the proposed Project will not result in new traffic as it is intended to provide additional services for visitors to the Project area, thereby capture existing vehicle trips. As visitors will have the opportunity to lodge within the community of Three Rivers, there will be fewer vehicle miles traveled to the nearest communities for lodging. As such, vehicle fuel consumption will be reduced. Therefore, the proposed Project will have a less than significant impact resulting from energy consumption.

- b) **No Impact:** The proposed Project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The proposed Project is consistent with the Tulare County General Plan, the Three Rivers Community Plan and the Tulare County Climate Action Plan. These three plans contain policies intended to assist the County in achieving its goals for energy consumption and conservation goals. Therefore, the proposed Project will have no impact regarding this resource.

**Cumulative Impact:** There are no other hotel (or motel) or other development proposals within the vicinity of the proposed Project or within the community of Three Rivers. The proposed Projects is consistent with the Tulare County General Plan, Three Rivers Community Plan, and the Tulare County CAP. The proposed Project would contribute to adverse impacts on energy resource demand and conservation when considering the cumulative impact of concurrently planned projects; however, like the proposed Project, new development projects are required to comply with local, regional, state, and federal policies designed to reduce wasteful energy consumption, and improve overall energy conservation and sustainability. For instance, all projects involving the development of new buildings must be designed to conform to CALGreen and the 2019 California Energy Code. Furthermore, the proposed Project would reduce the overall VMT thereby having a net positive benefit resulting from reduction in transportation fuel consumption within the County. Therefore, the proposed Project will have a less than significant impact on energy resources.

7.		GEOLOGY/SOILS				
Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication No. 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	ii)	Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	iii)	Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	iv)	Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	b)	Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Analysis:

#### Environmental Setting

##### Geology & Seismic Hazards

"Tulare County is divided into two major physiographic and geologic provinces: the Sierra Nevada Mountains and the Central Valley. The Sierra Nevada Physiographic Province, in the eastern portion of the county, is underlain by metamorphic and igneous rock. It consists mainly of homogeneous granitic rocks, with several islands of older metamorphic rock. The central and western parts of the county are part of the Central Valley Province, underlain by marine and non-marine sedimentary rocks. It is basically a flat, alluvial plain, with soil consisting of material deposited by the uplifting of the mountains. The foothill area of the county is essentially a transition zone, containing old alluvial soils that have been dissected by the west-flowing rivers and streams that carry runoff from the Sierra Nevada Mountains. This gently rolling topography is punctured in many areas by outcropping soft bedrock. The native mountain soils are generally quite dense and compact.

"Earthquakes are typically measured in terms of magnitude and intensity. The most commonly known measurement is the Richter Scale, a logarithmic scale which measures the strength of a quake. The Modified Mercalli Intensity Scale measures the intensity of an earthquake as a function of the following factors:

- Magnitude and location of the epicenter;
- Geologic characteristics;
- Groundwater characteristics;
- Duration and characteristic of the ground motion;
- Structural characteristics of a building.”<sup>96</sup>

"Topography within the Three Rivers area is quite varied - from relatively flat areas immediately adjacent to the north, south and middle fork of the Kaweah River to very rugged, mountainous terrain particularly at the southern end of South Fork Drive. Elevations within the UDB range from approximately 3,500 feet to the South Fork of Kaweah watershed to 900 feet near Lake Kaweah.”<sup>97</sup>

##### Faults

"Faults are the indications of past seismic activity. It is assumed that those that have been active most recently are the most likely to be active in the future. Recent seismic activity is measured in geologic terms. Geologically recent is defined as having occurred

<sup>96</sup> Tulare County. Three Rivers Community Plan 2018 Update. Pages 116-117. Tulare County Board of Supervisors Resolution Nos. 2018-81 thru -84.

<sup>97</sup> Ibid 73.

within the last two million years (the Quaternary Period). All faults believed to have been active during Quaternary time are considered "potentially active."<sup>98</sup>

"Although a number of faults have been located along the western edge of the Sierra Nevada Mountains, none are known to be active."<sup>99</sup> "There are three faults within the region that have been, and will be, principal sources of potential seismic activity within Tulare County. These faults are described below:

- San Andreas Fault. The San Andreas Fault is located approximately 40 miles west of the Tulare County boundary. This fault has a long history of activity, and is thus the primary focus in determining seismic activity within the county. Seismic activity along the fault varies along its span from the Gulf of California to Cape Mendocino. Just west to Tulare County lies the "Central California Active Area," where many earthquakes have originated.
- Owens Valley Fault Group. The Owens Valley Fault Group is a complex system containing both active and potentially active faults, located on the eastern base of the Sierra Nevada Mountains. The Group is located within Tulare and Inyo Counties and has historically been the source of seismic activity within Tulare County.
- Clovis Fault. The Clovis Fault is considered to be active within the Quaternary Period (within the past two million years), although there is no historic evidence of its activity, is classified as "potentially active." This fault lies approximately six miles south of the Madera County boundary in Fresno County. Activity along this fault could potentially generate more seismic activity in Tulare County than the San Andreas or Owens Valley fault systems. In particular, a strong earthquake on the Fault could affect northern Tulare County. However, because of the lack of historic activity along the Clovis Fault, inadequate evidence exists for assessing maximum earthquake impacts."<sup>100</sup>

### Groundshaking

"Groundshaking is the primary seismic hazard in Tulare County because of the county's seismic setting and its record of historical activity. Thus, emphasis focuses on the analysis of expected levels of groundshaking, which is directly related to the magnitude of a quake and the distance from a quake's epicenter. Magnitude is a measure of the amount of energy released in an earthquake, with higher magnitudes causing increased groundshaking over longer periods of time, thereby affecting a larger area. Groundshaking intensity, which is often a more useful measure of earthquake effects than magnitude, is a qualitative measure of the effects felt by population.

The San Joaquin Valley portion of Tulare County is located on alluvial deposits, which tend to experience greater groundshaking intensities than areas located on hard rock. Therefore, structures located in this area will tend to suffer greater damage from groundshaking than those located in the foothill and mountain areas. However, existing alluvium valleys and weathered or decomposed zones are scattered throughout the mountainous portions of the county which could also experience stronger intensities than the surrounding solid rock areas. The geologic characteristics of an area can therefore be a greater hazard than its distance to the epicenter of the quake.

In 1973, five counties within the Southern San Joaquin Valley undertook the preparation of the Five County Seismic Safety Element to assess seismic hazards. The Five County Seismic Safety Element projects that with the maximum probable earthquake of a magnitude 8 to 8.5 centered along the San Andreas Fault, "relatively low levels of shaking should be expected in the eastern and central parts of the San Joaquin Valley." The eastern portion of the county is composed of four "Sierran Zones," the boundaries of which are determined by the predicted effects of the maximum probable earthquake on the Owens Valley Fault. Since the mountains are underlain primarily by granitic rock, these zones tend to experience very low levels of groundshaking. However, most of the people residing in these zones do not live on the hard rock. Instead, residences tend to be built in alluvial valleys or the weathered and decomposed zones in the meadows or foothills. These areas will experience stronger groundshaking intensities. Characteristics within the microzones may vary greatly; thus, groundshaking potential in the Sierran zones is more accurately analyzed on a site-by-site basis.

Older buildings constructed before current building codes were in effect, and even newer buildings constructed before earthquake resistance provisions were included in the current building codes, are most likely to suffer damage in an earthquake. Most of Tulare County's buildings are no more than one or two stories in height and are of wood frame construction, which is considered the most structurally resistant to earthquake damage. Older masonry buildings (without earthquake-resistance reinforcement) are the most susceptible to structural failure, which causes the greatest loss of life. The State of California has identified unreinforced masonry buildings (URMs) as a safety issue during earthquakes. In high risk areas (Bay Area) inventories and programs to mitigate this issue

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<sup>98</sup> Op. Cit. 117

<sup>99</sup> Op. Cit.

<sup>100</sup> Op. Cit.

are required. Because Tulare County is not a high risk area, state law only recommends that programs to retrofit URM's are adopted by jurisdictions."<sup>101</sup>

### Liquefaction

"Liquefaction is a process whereby soil is temporarily transformed to a fluid form during intense and prolonged groundshaking. Areas most prone to liquefaction are those that are water saturated (e.g., where the water table is less than 30 feet below the surface) and consist of relatively uniform sands that are low to medium density. In addition to necessary soil conditions, the ground acceleration and duration of the earthquake must be of sufficient energy to induce liquefaction. Scientific studies have shown that the ground acceleration must approach 0.3g before liquefaction occurs in a sandy soil with relative densities typical of the San Joaquin alluvial deposits. Liquefaction during major earthquakes has caused severe damage to structures on level ground as a result of settling, tilting, or floating. Such damage occurred in San Francisco on bay-filled areas during the 1989 Loma Prieta earthquake, even though the epicenter was several miles away. If liquefaction occurs in or under a sloping soil mass, the entire mass may flow toward a lower elevation, such as that which occurred along the coastline near Seward, Alaska during the 1964 earthquake. Also of particular concern in terms of developed and newly developing areas are fill areas that have been poorly compacted. No specific countywide assessments to identify liquefaction hazards have been performed in Tulare County. Areas where groundwater is less than 30 feet below the surface occur primarily in the San Joaquin Valley portion of the County. However, soil types in the area are not conducive to liquefaction because they are either too coarse or too high in clay content. Areas subject to 0.3g acceleration or greater are located in a small section of the Sierra Nevada Mountains along the Tulare-Inyo County boundary. However, the depth to groundwater in such areas is greater than in the valley, which would minimize liquefaction potential as well. Detailed geotechnical engineering investigations would be necessary to more accurately evaluate liquefaction potential in specific areas and to identify and map the areal extent of locations subject to liquefaction."<sup>102</sup>

### Settlement

"Settlement can occur in poorly consolidated soils during groundshaking. During settlement, the soil materials are physically rearranged by the shaking and result in reduced stabling alignment of the individual minerals. Settlement of sufficient magnitude to cause significant structural damage is normally associated with rapidly deposited alluvial soils, or improperly founded or poorly compacted fill. These areas are known to undergo extensive settling with the addition of irrigation water, but evidence due to groundshaking is not available. Fluctuating groundwater levels also may have changed the local soil characteristics. Sufficient subsurface data is lacking to conclude that settlement would occur during a large earthquake; however, the data is sufficient to indicate that the potential exists in Tulare County."<sup>103</sup>

### Soils

"According to the Central Soils Map of Tulare County, Three Rivers (see Figure 19 of the Three Rivers Community Plan 2018 Update) is comprised of three soil classes: Class VI, Class VII, and Class VIII, all of which are not suitable for cultivation, but are suitable for pasture, rangelands, grazing and wildlife."<sup>104</sup> As noted in the *Biological Resources Assessment for the Hampton Inn and Suite Three River Project*, "According to the Web Soil Survey (NRCS 2020a), there are two soil units mapped within the Study Area: (1-5) Blasingame sandy loam, 9 to 15 percent slopes and (164) Tujunga sand (Figure 3 [in the Assessment]). Natural Resources Conservation Soil Types). Neither of these soil units are considered hydric (NRCS 2020b)"<sup>105</sup>

### Landslides

"Landslides are a primary geologic hazard and are influenced by four factors:

- Strength of rock and resistance to failure, which is a function of rock type (or geologic formation);
- Geologic structure or orientation of a surface along which slippage could occur;
- Water (can add weight to a potentially unstable mass or influence strength of a potential failure surface); and,
- Topography (amount of slope in combination with gravitation forces).

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<sup>101</sup> Op. Cit. 118.

<sup>102</sup> Op. Cit. 118.

<sup>103</sup> Op. Cit. 118.

<sup>104</sup> Op. Cit. 121.

<sup>105</sup> "Biological Resources Assessment for the Hampton Inn and Suite Three River Project". Page15. August 2020. Prepared by ECORP Consulting Inc.

Tulare County has three geologic environments: the valley, foothills, and mountains. The range in topography between these three areas presents a range of landslide hazards. As of June 2009, the California Geological Survey had not developed landslide hazard identification maps for Tulare County. However, it is reasonable to assume that certain areas in Tulare County are more prone to landslides than others. Such areas can be found in foothill and mountain areas where fractured and steep slopes are present (as in the Sierra Nevada Mountains), where less consolidated or weathered soils overlie bedrock, or where inadequate ground cover accelerates erosion. Erosion and slumping of soils can also occur along bluffs along the Kaweah, Kings, and Tule Rivers.”<sup>106</sup>

### Wastewater Treatment

Community Service Districts (CSDs) are formed to provide a permanent form of governance that can provide locally adequate levels of public facilities and services to residents and property owners within their jurisdictional boundaries.”<sup>107</sup>

According to the Tulare County LAFCO, “The Three Rivers CSD is located approximately 11.7 miles east of the City of Woodlake. The District’s jurisdictional boundaries encompass a 5,937 acre area that is spread out along Highway 198. The District was formed in 1973 (LAFCO Resolution 73-036, LAFCO Case 459). The District’s Active Powers include:

1. Preparation of project reports for sewer systems
2. Trash pick up
3. Monitoring of potable water sources
4. Monitoring of individual septic systems.”<sup>108</sup>

“The services provided by the District are limited to monitoring the water quality of sources throughout district boundaries. The ultimate gauge of efficiency for this service is whether widespread degradation of water quality occurs within district boundaries. LAFCO found no record of water quality degradation in the Three Rivers area. It is determined that there are adequate controls in place for accountability and efficiency of service provision, given the limited scope of district services.”<sup>109</sup>

“Currently, there is not a collective community sewage disposal or sewage treatment plant serving Three Rivers; therefore, residential densities will be lower than if a community system were present. The primary method of sewage treatment is by means of individual sewage disposal systems consisting of septic tanks and leach fields. Due to peculiar geology and hydrology, the entire area is not well suited for the installation of conventional septic systems. Management Disposal District was formed on April 25, 1979 by the Community Services District. The purpose of the CSD is to improve water quality by repairing failing septic systems and requiring property owners within the boundaries of the Community Services District to properly maintain their systems”<sup>110</sup>

“During the site evaluation for each new or replacement system, a percolation test and highest anticipated depth to groundwater must be conducted. Based on the determined percolation rate, the minimum depth of groundwater below the bottom of the leaching trench, and the native soil depth immediately below the leaching trench, shall not be less than described in Table 32- Tier 1 Minimum Depths to Groundwater and Minimum Soil Depth from the Bottom of the Dispersal System below [in the Three Rivers Community Plan]. Table 32- Tier 1 Minimum Depths to Groundwater and Minimum Soil Depth from the Bottom of the Dispersal System below [in the Three Rivers Community Plan].”<sup>111</sup> Engineered septic systems in the Three Rivers UDB will be reviewed and [must be] approved by the Tulare County Environmental Health Services prior to installation.”<sup>112</sup>

As contained in the Three Rivers Community Plan 2018 Update, “New onsite wastewater treatment systems in the Three River Community will be subject to Tier 1- Low Risk New or Replacement [Onsite Wastewater Treatment Systems] OWTS requirements. The Three Rivers Community is not located near any bodies of water deemed "impaired" by the SWRCB, therefore Tier 3 regulations will not apply. New and Replacement OWTS sites require a qualified professional to perform site evaluations for soil depth, highest anticipated groundwater levels within the dispersal field, percolation tests, and proper permits through the respective permitting agencies. A licensed General Engineering Contractor (Class A), General Building Contractor (Class B), Sanitation System Contractor (Specialty Class C-42), or Plumbing Contractor (Specialty Class C-36) shall install all new and replacement systems in

<sup>106</sup> Tulare County General Plan 2030 Update. Background Report. Page 8-10. Accessed October 2020 at:

<http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/Appendix%20B%20-%20Background%20Report.pdf>

<sup>107</sup> Tulare County LAFCO. 2011. Page 1-1. Group 4 Municipal Service Reviews. <http://lafco.co.tulare.ca.us/lafco/index.cfm/msr/group-4-msrs/>

<sup>108</sup> Ibid. 9-1

<sup>109</sup> Op. Cit. 9-5

<sup>110</sup> Tulare County. Three Rivers Community Plan 2018 Update. Pages 139-140.

<sup>111</sup> Ibid. 148.

<sup>112</sup> Tulare County Health and Human Services Agency, 2017. Requirements for Submission of Engineered Sewage Disposal Systems.

accordance with California Business and Professions Code Sections 7056, 7057, and 7058 and Article 3, Division 8, Title 16 of the California Code of Regulations.”<sup>113</sup>

Tier 1 Low Risk New or Replacement OWTS also requires the following:

- 5 feet minimum setback from parcel property lines and structures;
- 100 feet minimum setback from water wells and monitoring wells;
- 100 feet minimum setback from any unstable land mass or areas subject to earth slides;
- 100 feet minimum setback from springs and flowing surface water bodies;
- 200 feet minimum setback from vernal pools, wetlands, and the high water mark of lakes and reservoirs;
- 150 feet minimum setback from public water wells where the depth of effluent dispersal system does not exceed 10 feet;
- Percolation test results shall not exhibit a flow rate greater than one minute per inch (1 MPI) or slower than one hundred twenty minutes per inch (120 MPI) in the effluent disposal area
- Natural ground slope in all areas used for effluent disposal shall not exceed 25 percent;
- Expected influent flow not to exceed 3,500 gallons per day;
- Minimum twelve inches (12") soil cover on all gravity dispersal systems;
- Minimum six inches (6") soil cover on all pressure distribution systems;
- 100% replacement area available for future use;
- Dispersal systems shall not exceed 10 feet as measured from the ground surface to the bottom of the trench.

#### Paleontological Resources

Paleontological resources comprise of fossils – the remains or traces of once living organisms preserved in sedimentary deposits – together with the geologic context in which they occur. Sedimentary deposits include unconsolidated or semi consolidated “soils” or sedimentary rocks. Most fossil remains are the preserved hard parts of plants or animals, and include bones and/or teeth of once living vertebrate animals, shells or body impressions of invertebrate animals, and impressions or carbonized or mineralized parts of plants (e.g. “petrified wood”). Trace fossils include preserved footprints, trackways, and burrows of prehistoric animals and root marks created by plants.

Fossils are scientifically important as they provide the only available direct evidence of the anatomy, geographic distribution, and paleoecology of organisms of the past. Scientific studies based on fossils and comparisons between them continue to refine details of the basic history of life. In conjunction with physical geologic investigations, the use of fossils as indicators of geologic time and ancient environments also contributes to understanding of the physical history of the earth, the distribution of mineral resources, dynamics of earth processes, and past climatic changes.

#### REGULATORY SETTING

##### *Federal*

None that apply to the Project.

##### *State*

##### California Building Code

“The California Building Code is another name for the body of regulations known as the California Code of Regulations (C.C.R.), Title 24, Part 2, which is a portion of the California Building Standards Code. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable.”<sup>114</sup>

##### Alquist-Priolo Earthquake Fault Zoning Act

“The Alquist- Priolo Earthquake Fault Zoning Act (formerly the Alquist- Priolo Special Studies Zone Act), signed into law December 1972, requires the delineation of zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate

<sup>113</sup> Tulare County. Three Rivers Community Plan 2018 Update. Pages 147-148.

<sup>114</sup> Tulare County. Three Rivers Community Plan 2018 Update. Draft Environmental Impact Report. Page. 3.6-11.

development on or near active fault traces to reduce the hazards associated with fault rupture and to prohibit the location of most structures for human occupancy across these traces.”<sup>115</sup>

#### California Department of Transportation (Caltrans)

“Caltrans has developed roadway design standards including those for seismic safety. Consideration of earthquake hazards in roadway design is detailed in the Highway Design Manual published by Caltrans (2006). Modifications to local highways and roads would be required to adhere to Caltrans engineering standards to minimize settlement.”<sup>116</sup>

#### State Water Resources Control Board and Regional Water Quality Control Board

National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity- Water Quality Order 99-08 DWQ.

Typically, General Construction Storm Water NPDES permits are issued by the RWQCB for grading and earth-moving activities. The General Permit is required for construction activities that disturb one or more acres. The General Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which specifies practices that include prevention of all construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off site into receiving waters. The NPDES permits are issued for a five-year term. NPDES general permits require adherence to the Best Management Practices (BMPs) including:

- Site Planning Consideration- such as preservation of existing vegetation.
- Vegetation Stabilization- through methods such as seeding and planting.
- Physical Stabilization- through use of dust control and stabilization measures.
- Diversion of Runoff – by utilizing earth dikes and temporary drains and swales.
- Velocity Reduction – through measures such as slope roughening/terracing.
- Sediment Trapping/Filtering – through use of silt fences, straw bale and sand bag filters, and sediment traps and basins.

#### *Local*

#### Tulare County General Plan Policies

The General Plan has a number of policies that apply to projects within Tulare County. General Plan policies that relate to the Project include: *HS-1.2 Development Constraints* wherein the County shall permit development only in areas where the potential danger to the health and safety of people and property can be mitigated to an acceptable level; *HS-1.3 Hazardous Lands* wherein the County shall designate areas with a potential for significant hazardous conditions for open space, agriculture, and other appropriate low intensity uses; *HS-1.5 Hazard Awareness and Public Education* wherein the County shall continue to promote awareness and education among residents regarding possible natural hazards, including soil conditions, earthquakes, flooding, fire hazards, and emergency procedures; *HS-1.11 Site Investigations* wherein the County shall conduct site investigations in areas planned for new development to determine susceptibility to landslides, subsidence/settlement, contamination, and/or flooding; *HS-2.1 Continued Evaluation of Earthquake Risks* wherein the County shall continue to evaluate areas to determine levels of earthquake risk; *HS-2.4 Structure Siting* The wherein the County shall permit development on soils sensitive to seismic activity permitted only after adequate site analysis, including appropriate siting, design of structure, and foundation integrity; *HS-2.7 Subsidence* wherein the County shall confirm that development is not located in any known areas of active subsidence; *HS-2.8 Alquist-Priolo Act Compliance* wherein The County shall not permit any structure for human occupancy to be placed within designated Earthquake Fault Zones; *WR-2.2 NPDES Enforcement* wherein the County shall continue to support the State in monitoring and enforcing provisions to control non-point source water pollution contained in the U.S. EPA NPDES program as implemented by the Water Quality Control Board; *WR-2.3 Best Management Practices* wherein the County shall continue to require the use of feasible BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities, agricultural operations requiring a County Permit and urban runoff in coordination with the Water Quality Control Board; and *WR-2.4 Construction Site Sediment Control* wherein the County shall continue to enforce provisions to control erosion and sediment from construction sites.

<sup>115</sup> Ibid.

<sup>116</sup> Tulare County. Tulare County General Plan 2030 Update. Background Report. Page. 8-4; California DOT, 2017. Highway Design Manual. <http://www.dot.ca.gov/hq/opdp/hdm/hdmtoc.htm>



### Three Rivers Community Plan

In addition to the above-noted General Plan Policies, the Three Rivers Community Plan includes policy 5.3.4 wherein a development project provide adequate wastewater collection and treatment capacity for existing and planned development in Three Rivers that is within the boundaries of the UDB. New development is subject to Onsite Wastewater Treatments Systems (OWTS) Ordinance Code of Tulare County as follows: sections 7-01-1320 through 7-01-1740 regarding minimum lot size, set back, and testing requirements for onsite wastewater treatment systems under the local agency management program (LAMP).

### Five County Seismic Safety Element (FCSSE)

The FCSSE report represents a cooperative effort between the governmental entities within Fresno, Kings, Madera, Mariposa and Tulare Counties to develop an adoptable Seismic Safety Element as required by State law. Part I, the Technical Report, is designed to be used when necessary to provide background for the Summary document. Part II, the Summary Report, establishes the framework and rationale for evaluation of seismic risks and hazards in the region. Part II of the Seismic Safety Element, the Policy Report, has been prepared as a “model” report designed to address seismic hazards as delineated in the Technical Report. The intent has been to develop a planning tool for use by county and city governments in implementing their seismic safety elements. The planning process utilized to develop the Element was developed through the efforts of Technical and Policy Committees, composed of both staff and elected representatives from Cities, Counties, and Special Districts or Areawide Planning Organizations in cooperation with the consulting firms of Envicom Corporation and Quinton-Redgate.<sup>117</sup>

- a) **Less Than Significant Impact:** According to the Tulare County General Plan, the planning area lies in the S-1 seismic study area, characterized by a relatively thin section of sedimentary rock overlying a granitic basement.

The S-1 seismic zone, which is characterized by hard to moderately hard granite or metamorphic rock. The distance to either of the faults expected to be a should of shaking is sufficiently great that shaking should be minimal and the requirements of the Uniform Building Code Zone II should be adequate for normal activities.<sup>118</sup>

The distance to area faults i.e. the Clovis Group, Pond-Poso, and San Andreas, expected sources of significant shaking, is sufficiently great that shaking effects should be minimal.

- i) *Fault Rupture:* No substantial faults are known to occupy Tulare County according to the Alquist-Priolo Earthquake Fault Zoning Maps and the State of California Department of Conservation. The nearest known faults likely to affect the Project site are the San Andreas Fault (approximately 40 miles to the Tulare County’s western border). As noted above, the Five County Seismic Safety Element (FCSSE), the proposed Project site is located in the S-1 zone, which is characterized by hard to moderately hard granite or metamorphic a rock. The distance to either of the faults is sufficiently great that shaking should be minimal and the requirements of the Uniform Building Code Zone II should be adequate for normal activities.

Therefore, as noted earlier, no Alquist-Priolo Earthquake Fault Zones or known active faults are in or near the Project area. As such, the risk of rupture of a known earthquake fault will be less than significant.

- ii) *Ground Shaking:* The Project area is located in a seismic zone which is sufficiently far from known faults and consists primarily of a stable geological formation. Any impacts regarding strong seismic ground shaking have been discussed in Impact VI-a-i. As such, the impact due to ground shaking would be less than significant.
- iii) *Ground Failure and Liquefaction:* The proposed Project site is located in the Five County Seismic Safety Element’s S-1 zone, and therefore has a low risk of liquefaction. No subsidence-prone soils or oil or gas production is involved with the proposed Project. The any impacts will be less than significant.
- iv) *Landslides:* The proposed Project is located in the Five County Seismic Safety Element’s S-1 zone and therefore will have a minimal risk of landslides. As the proposed Project is located on an S-1 zone it likely consists of hard rock, alluvium on a valley floor, with thick sections of weathered bedrock<sup>119</sup>, is situated on relatively flat topography, and there are no geologic landforms on or near the site that could result in a landslide event. Therefore, there is no risk of landslides within or near

<sup>117</sup> *Five County Seismic Safety Element. Fresno, Kings, Madera, Mariposa, & Tulare Counties.* 1974. Pages 4-7. Prepared by Envicom Corporation.

<sup>118</sup> *Five County Seismic Safety Element - Fresno, Kings, Madera, Mariposa & Tulare Counties. Summary of Seismic Hazards & Safety Recommendations.* 1974. Page 16  
Prepared by Envicom Corporation. Available upon request at the Tulare County RMA office.

<sup>119</sup> *Ibid.* 3.

the Project area.

- b) **Less Than Significant Impact:** Site construction-related activities will include trenching, earthmoving, pouring concrete, grading, building construction typical of a hotel structure. These activities could expose soils to erosion processes. The extent of erosion will vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. The site has very little slope (i.e., a slight grade from west to east) and will have a flat topography after grading. As stated earlier, the relatively flat nature of the site reduces the need for grading which would be generally limited to access roads, parking, and the hotel structure itself. Any soils removed from these areas would likely be redistributed around and retained elsewhere on the proposed Project site. Beyond grading, soil disturbance would occur in association with trenching for emplacement of plumbing, electrical, and storm water drainage conduits.

To prevent water and wind erosion during the construction period, a Storm Water Pollution Prevention Plan (SWPPP) will be developed for the proposed Project as required for all projects which disturb more than one acre. As part of the SWPPP, the applicant will be required to provide erosion control measures to protect the topsoil. Any stockpiled soils will be watered and/or covered to prevent loss due to wind erosion as part of the SWPPP during construction. In addition, depending upon activity, the Project would be subject to Air District Rules Rule 8021 (construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities) for construction and earthmoving activities; 8031 (Bulk Materials) which limits fugitive dust emissions from the outdoor handling, storage, and transport of bulk materials (such as topsoil); 8041 (Carryout and Trackout) which requires prevention and/or cleanup of soil that is tracked out by vehicle tires exiting the site or carried out by vehicles exiting the site; 8051 (Open Areas) requiring stabilization of areas cleared of vegetation in anticipation of construction-related activities; and 8071 (Unpaved Vehicle/Equipment Traffic Areas) to limit fugitive dust emissions from unpaved vehicle and equipment traffic areas within the Project's construction-related areas. As a result of these efforts, loss of topsoil and substantial soil erosion during the construction period are not anticipated.

As such, the proposed Project would not result in substantial soil erosion or loss of thereby the impact by the proposed Project would result in a less than significant impact.

- c) **No Impact:** Substantial grade change will not occur in the topography to the point where the proposed Project will expose people or structures to potential substantial adverse effects on, or offsite, such as landslides, lateral spreading, liquefaction or collapse. As noted earlier, the proposed Project is located in the Five County Seismic Safety Element's S-1 zone, as such, the proposed Project site has a low to no risk of subsidence or liquefaction. Therefore, the proposed Project would result in no impact.
- d) **No Impact:** According to the USDA, NRCS, and the Soil Survey of Tulare County, the proposed Project site contains The Project site itself consists of Blasingame sandy loam and Tujunga soils. The Blasingame series soils consists of moderately deep, well drained, medium to very rapid runoff, moderately slow permeability soils that formed in material weathered from basic igneous rocks. Blasingame soils are on foothills and uplands at elevations of 400 to 5,000 feet and have slopes of 2 to 75 percent. The mean annual precipitation is about 18 inches.<sup>120</sup> Therefore, the native soils identified on the site do not contain the characteristics of an expansive soil. The Tujunga series consists of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. Tujunga soils are on alluvial fans and floodplains, including urban areas, above 1,500 feet in elevation. Slopes range from 0 to 12 percent. The mean annual precipitation is about 17.75 inches.<sup>121</sup> As such, based upon the soil types where the proposed Project would be located, the Project would result in no impact and would not create substantial direct or indirect risks to life or property.
- e) **Less Than Significant Impact:** The proposed Project would include the installation or use of septic tanks or other alternative waste water disposal systems. The applicant will be required to comply with Tulare County General Plan policies, Three Rivers Community Plan policies, Regional Water Quality Control Board requirements, and must also receive approval by the Tulare County Health and Human Services Agency. As such, the proposed Project would result in a less than significant impact
- f) **Less Than Significant Impact:** There are no known paleontological resources within the proposed Project area, nor are there any known geologic features in the proposed Project area. Project construction will not be anticipated to disturb any paleontological resources not previously disturbed; however, **Mitigation Measure CUL-1 subsets (a) through (c)**, as specified in Item 5 Cultural Resources (as applicable), will ensure that any impact will be less than significant.

<sup>120</sup> USDA. Official Series Description - Blasingame Series. Accessed October 2020 at: [https://soilseries.sc.egov.usda.gov/OSD\\_Docs/B/BLASINGAME.html](https://soilseries.sc.egov.usda.gov/OSD_Docs/B/BLASINGAME.html)

<sup>121</sup> Ibid. Official Series Description - Tujunga Series. Accessed October 2020 at: [https://soilseries.sc.egov.usda.gov/OSD\\_Docs/T/TUJUNGA.html#:~:text=The%20Tujunga%20series%20consists%20of%20very%20deep%2C%20somewhat,mean%20annual%20temperature%20is%20about%2018%20degrees%20C.](https://soilseries.sc.egov.usda.gov/OSD_Docs/T/TUJUNGA.html#:~:text=The%20Tujunga%20series%20consists%20of%20very%20deep%2C%20somewhat,mean%20annual%20temperature%20is%20about%2018%20degrees%20C.)

**Cumulative Impact:** As noted earlier, the CRIC study concluded that there are no surface resources within the proposed Project site. Mitigation Measures **CUL-1 subsets (a) through (c)** are included in the event surface or subsurface cultural resources are encountered. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

8.	GREENHOUSE GAS EMISSIONS					
Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	b)	Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Analysis:**

The proposed Project will result in Less Than Significant Impacts to Greenhouse Gases (GHG). The “Air Quality & Greenhouse Gas Assessment Three Rivers Hampton Inn and Suites Project” (GHG Report) was prepared by ECORP Consulting, Inc. (Consultant) in July 2020 (updated October 2020) which is included as Attachment “A” of this Initial Study. The GHG Report is used as the basis for determining that, based on the evidence/documentation and the expertise of qualified Consultant, the proposed Project will result in a less than significant impact.

**Environmental Setting**

“An increase in the near surface temperature of the earth. Global warming has occurred in the distant past as the result of natural influences, but the term is most often used to refer to the warming predicted to occur as a result of increased emissions of greenhouse gases. Scientists generally agree that the earth’s surface has warmed by about 1 degree Fahrenheit in the past 140 years, but warming is not predicted evenly around the globe. Due to predicted changes in the ocean currents, some places that are currently moderated by warm ocean currents are predicted to fall into deep freeze as the pattern changes.” “The warming of the earth’s atmosphere attributed to a buildup of CO<sub>2</sub> or other gases; some scientists think that this build-up allows the sun’s rays to heat the earth, while making the infra-red radiation atmosphere opaque to infrared radiation, thereby preventing a counterbalancing loss of heat. Ibid. Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern is that increases in GHGs are causing global climate change. Global climate change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation and temperature. The gases believed to be most responsible for global warming are water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).” “Enhancement of the greenhouse effect can occur when concentrations of GHGs exceed the natural concentrations in the atmosphere. Of these gases, CO<sub>2</sub> and methane are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are largely by-products of fossil fuel combustion, whereas methane primarily results from off-gassing associated with agricultural practices and landfills. SF<sub>6</sub> is a GHG commonly used in the utility industry as an insulating gas in transformers and other electronic equipment. There is widespread international scientific agreement that human-caused increases in GHGs has and will continue to contribute to global warming, although there is much uncertainty concerning the magnitude and rate of the warming.” “Some of the potential resulting effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CARB, 2006). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas; o Increase of heat index over land areas; and

- More intense precipitation events.”<sup>122</sup>

“Snowpack and snowmelt may also be affected by climate change. Much of California’s precipitation falls as snow in the Sierra Nevada and southern Cascades Mountain ranges, and snowpack represents approximately 35 percent of the state’s useable annual water supply.”<sup>123</sup> “The snowmelt typically occurs from April through July; it provides natural water flow to streams and reservoirs after the annual rainy season has ended.”<sup>124</sup> As air temperatures increase due to climate change, the water stored in California’s snowpack could be affected by increasing temperatures resulting in: (1) decreased snowfall, and (2) earlier snowmelt.”<sup>125</sup>

“In 2007, Tulare County generated approximately 5.2 million tonnes of Carbon Dioxide Equivalent (CO<sub>2</sub>e). The largest portion of these emissions (63 percent) is attributed to dairies/feedlots, while the second largest portion (16 percent) is from mobile sources, the third largest portion (11%) is from electricity sources.”<sup>126</sup> “Table 6-7 [of the Background Report, **Table GHG-1** in this Initial Study] identifies Tulare County’s emissions by sector in 2007.”<sup>127</sup>

In 2030, Tulare County is forecast to generate approximately 6.1 million tonnes of CO<sub>2</sub>e. The largest portion of these emissions (59%) is attributed to dairies/feedlots, while the second largest portion (20%) is from mobile sources, and third largest portion (11%) is from electricity as shown on Table 6-8 [of the Background Report, **Table GHG-2** in this Initial Study]. Per capita emissions in 2030 are projected to be approximately 27 tonnes of CO<sub>2</sub>e per resident.”<sup>128</sup>

The Tulare County General Plan contains the following: Enhancement of the greenhouse effect can occur when concentrations of GHGs exceed the natural concentrations in the atmosphere. Of these gases, CO<sub>2</sub> and methane are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are largely by-products of fossil fuel combustion, whereas methane primarily results from off-gassing associated with agricultural practices and landfills. SF<sub>6</sub> is a GHG commonly used in the utility industry as an insulating gas in transformers and other electronic equipment. There is widespread international scientific agreement that human-caused increases in GHGs has and will continue to contribute to global warming, although there is much uncertainty concerning the magnitude and rate of the warming.<sup>129</sup>

<b>Table GHG-1</b>		
<b>GHG Emissions by Sector in 2007</b>		
Sector	CO <sub>2</sub> e (tons/year)	% of Total
Electricity	542,690	11%
Natural Gas	321,020	6%
Mobile Sources	822,230	16%
Dairy/Feedlots	3,294,870	63%
Solid Waste	227,250	4%
Total	5,208,060	100%
<i>Per Capita</i>	<i>36.1</i>	
<i>Source: Tulare County General Plan 2030 Update Background Report. Page 6-31</i>		

<sup>122</sup> Op. Cit.

<sup>123</sup> Op. Cit. 8-85.

<sup>124</sup> Op. Cit.

<sup>125</sup> Op. Cit.

<sup>126</sup> Op. Cit. 6-36.

<sup>127</sup> Op. Cit. 6-38.

<sup>128</sup> Op. Cit.

<sup>129</sup> Op. Cit. 6-31.

<b>Table GHG-2 GHG Emissions by Sector in 2030</b>		
<b>Sector</b>	<b>CO<sub>2</sub>e (tons/year)</b>	<b>% of Total</b>
Electricity	660,560	11%
Natural Gas	384,410	6%
Mobile Sources	1,212,370	20%
Dairy/Feedlots	3,601,390	59%
Solid Waste	246,750	4%
<b>Total</b>	<b>6,105,480</b>	<b>100%</b>
<i>Per Capita</i>	<i>27.4</i>	
<i>Source: Tulare County General Plan 2030 Update Background Report. Page 6-31</i>		

## Regulatory Setting

### *Federal*

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years.

The United States Environmental Protection Agency (USEPA) Mandatory Reporting Rule (40 CFR Part 98), which became effective December 29, 2009, requires that all facilities that emit more than 25,000 metric tons CO<sub>2</sub>-equivalent per year beginning in 2010, report their emissions on an annual basis. On May 13, 2010, the USEPA issued a final rule that established an approach to addressing GHG emissions from stationary sources under the CAA permitting programs. The final rule set thresholds for GHG emissions that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In addition, the Supreme Court decision in *Massachusetts v. EPA* (Supreme Court Case 05-1120) found that the USEPA has the authority to list GHGs as pollutants and to regulate emissions of GHGs under the CAA. On April 17, 2009, the USEPA found that CO<sub>2</sub>, CH<sub>4</sub>, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride may contribute to air pollution and may endanger public health and welfare. This finding may result in the USEPA regulating GHG emissions; however, to date the USEPA has not proposed regulations based on this finding.

### *State*

#### California Environmental Quality Act (CEQA) Requirements

##### Section 15064.4 Determining the Significance of Impacts from Greenhouse Gas Emissions

- “(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
- (1) Quantify greenhouse gas emissions resulting from a project; and/or
  - (2) Rely on a qualitative analysis or performance based standards.
- (b) In determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
  - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
  - (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 151835(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.
- (c) A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.”<sup>130</sup>

#### Executive Order S-3-05

“In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger issued Executive Order S-3-05, which sets forth a series of target dates by which statewide emission of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The Executive Order additionally ordered that the Secretary of the California Environmental Protection Agency (Cal EPA) would coordinate oversight of the efforts among state agencies made to meet the targets and report to the Governor and the State Legislature biannually on progress made toward meeting the GHG emission targets. Cal EPA was also directed to report biannually on the impacts to California of global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry, and prepare and report on mitigation and adaptation plans to combat these impacts.

In response to the Executive Order, the Secretary of Cal EPA created the Climate Action Team (CAT), composed of representatives from the Air Resources Board; Business, Transportation, & Housing; Department of Food and Agriculture; Energy Commission; California Integrated Waste Management Board (CIWMB); Resources Agency; and the Public Utilities Commission (PUC). The CAT prepared a recommended list of strategies for the state to pursue to reduce climate change emission in the state (Climate Action Team, 2006).”<sup>131</sup>

#### Assembly Bill 32: California Global Warming Solutions Act of 2006

“In 2006, California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.), which requires the CARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020.

The bill also requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions. The bill authorizes CARB to adopt market-based compliance mechanisms. The bill additionally requires the state board to monitor compliance with and enforce any rule, regulation, order, emission limitation,

<sup>130</sup> California Environmental Quality Act (CEQA). Section 15064.4 Determining the Significance of Impacts from Greenhouse Gas Emissions.

<sup>131</sup> Tulare County General Plan 2030 Update Background Report (at Climate Action Team Report to Governor Schwarzenegger and the Legislature). 6-21 to 6-22.

emissions reduction measure, or market-based compliance mechanism adopted by the state board, pursuant to specified provisions of existing law. The bill also authorizes CARB to adopt a schedule of fees to be paid by regulated sources of GHG emissions. Because the bill requires CARB to establish emissions limits and other requirements, the violation of which would be a crime, this bill would create a state-mandated local program.

Under AB 32, by June 30, 2007, CARB was to identify a list of discrete early action GHG reductions that will be legally enforceable by 2010. By January 1, 2008, CARB was also to adopt regulations that will identify and require selected sectors to report their statewide GHG emissions. By January 1, 2011, CARB must adopt rules and regulations to achieve the maximum technologically feasible and cost-effective reductions in GHG reductions. CARB is authorized to enforce compliance with the program that it develops.”<sup>132</sup>

#### Senate Bill 97

“Governor Schwarzenegger signed Senate Bill (SB) 97 (Sutton), a CEQA and GHG emission bill, into law on August 24, 2007. SB 97 requires the Governor’s Office of Planning and Research (OPR) to prepare CEQA guidelines for the mitigation of GHG emissions, including, but not limited to, effects associated with transportation or energy consumption. OPR must prepare these guidelines and transmit them to the Resources Agency by July 1, 2009. On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for greenhouse gas emissions. The Resources Agency must then certify and adopt the guidelines by January 1, 2010. OPR and the Resources Agency are required to periodically review the guidelines to incorporate new information or criteria adopted by CARB pursuant to the Global Warming Solutions Act, scheduled for 2012.

The OPR published a Technical Advisory in June of 2008 that is an “informal guidance regarding the steps lead agencies should take to address climate change in their CEQA documents” to serve in the interim until guidelines are established pursuant to SB 97 (OPR, 2008). This Advisory recommends that CEQA documents include quantification of estimated GHG emissions associated with a proposed project and that a determination of significance be made. With regard to significance the Advisory states that “lead agencies must determine what constitutes a significant impact. In the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a “significant impact”, individual lead agencies may undertake a project-by-project analysis, consistent with the available guidance and current CEQA practice”.<sup>133</sup>

The amendments required by SB 97 were adopted by the California Natural Resources Agency (CNRA) and became effective on March 18, 2010. In late 2018, the CNRA finalized amendments to the CEQA Guidelines, including changes to CEQA Guidelines Section 15064.4 (cited above), which addresses greenhouse gas analysis. These amendments became effective on December 28, 2018.<sup>134</sup>

#### Senate Bill 375

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS), which will prescribe land use allocation in that MPO’s Regional Transportation Plan (RTP). CARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every 8 years, but can be updated every 4 years if advancements in emissions technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO’s SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG emission reduction targets, transportation projects would not be eligible for funding programmed after January 1, 2012.<sup>135</sup>

#### Executive Order B-30-15

On April 20, 2015 Governor Edmund (Jerry) Brown, Jr., signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor’s EO aligns California’s GHG reduction targets with those of leading international

<sup>132</sup> Ibid. 6-22 to 6-23.

<sup>133</sup> Op. Cit. (at Technical Advisory – CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review). 6-26 to 6-27.

<sup>134</sup> Governor’s Office of Planning and Research. CEQA and Climate Change. <https://opr.ca.gov/ceqa/climate-change.html#:~:text=Those%20amendments%20became%20effective%20on,analysis%20of%20greenhouse%20gas%20emissions>. Accessed October 2020.

<sup>135</sup> Senate Bill 375 (Steinberg). [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=200720080SB375](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080SB375). Accessed October 2020.



governments such as the 28-nation European Union, which adopted the same target in October 2014. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2°C, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.<sup>136</sup>

#### Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.<sup>137, 138</sup>

#### Senate Bill X1-2 of 2011, Senate Bill 350 of 2015, and Senate Bill 100 of 2018

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California.

In October 2015, SB 350 (Clean Energy and Pollution Reduction Act of 2015) was signed by Governor Brown, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable resources by 2030.

In 2018, SB 100 (The 100 Percent Clean Energy Act of 2018) was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.<sup>139, 140, 141</sup>

#### 2019 Building Energy Efficiency Standards

The Building and Efficiency Standards (Energy Standards) were first adopted and put into effect in 1978 and have been updated periodically in the intervening years. These standards are a unique California asset that have placed the State on the forefront of energy efficiency, sustainability, energy independence, and climate change issues. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The 2019 standards are a major step toward meeting Zero Net Energy. Single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards and nonresidential buildings will use about 30 percent less energy (due mainly to lighting upgrades). The most significant efficiency improvement to the residential Standards include the introduction of photovoltaic into the perspective package, improvements for attics, walls, water heating and lighting. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. These new standards apply only to certain nonresidential building types, as specified in the requirements.<sup>142</sup>

#### California Air Resources Board Scoping Plan

"The CARB published a *Climate Change Scoping Plan* in December 2008 (CARB, 2008c) that outlines reduction measures to lower the state's GHG emissions to meet the 2020 limit. The *Scoping Plan* "proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save

<sup>136</sup> Office of Governor Edmund G. Brown Jr. <https://www.ca.gov/archive/gov39/2015/04/29/news18938/index.html>. Accessed October 2020.

<sup>137</sup> California Legislative Information. [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160SB32](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32). Accessed October 2020.

<sup>138</sup> California Legislative Information. [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160AB197](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB197). Accessed October 2020.

<sup>139</sup> California Legislative Information. [http://www.leginfo.ca.gov/pub/11-12/bill/sen/sb\\_0001-0050/sbx1\\_2\\_bill\\_20110412\\_chaptered.html](http://www.leginfo.ca.gov/pub/11-12/bill/sen/sb_0001-0050/sbx1_2_bill_20110412_chaptered.html). Accessed October 2020.

<sup>140</sup> California Legislative Information. [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160SB350](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350). Accessed October 2020.

<sup>141</sup> California Legislative Information. [https://leginfo.ca.gov/faces/billTextClient.xhtml?bill\\_id=201720180SB100](https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB100). Accessed October 2020.

<sup>142</sup> California Energy Commission. [https://www.energy.ca.gov/sites/default/files/2020-03/Title\\_24\\_2019\\_Building\\_Standards\\_FAQ\\_ada.pdf](https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf). Accessed October 2020.



energy, create new jobs, and enhance public health”. Key elements for reducing California’s GHG emissions to 1990 levels by 2020 include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California’s clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State’s long-term commitment to AB 32 implementation.”<sup>143</sup>

#### California Air Pollution Control Officers Association

The California Association of Air Pollution Control Officers (CAPCOA) represents all thirty-five local air quality agencies throughout California. CAPCOA, which has been in existence since 1975, is dedicated to protecting the public health and providing clean air for all our residents and visitors to breathe, and initiated the Greenhouse Gas Reduction Exchange.<sup>144</sup>

“In January 2008, the California Air Pollution Control Officers Association (CAPCOA) issued a “white paper” on evaluating GHG emissions under CEQA (CAPCOA, 2008). The CAPCOA white paper strategies are not guidelines and have not been adopted by any regulatory agency; rather, the paper is offered as a resource to assist lead agencies in considering climate change in environmental documents.”<sup>145, 146</sup> In August 2010, CAPCOA issued a report as a tool to support local governments in the quantification of GHG emission reductions achieved through implementation of various GHG mitigation strategies. This paper was intended as a resource, not a guidance.<sup>147</sup>

“The Greenhouse Gas Reduction Exchange (GHG Rx) is a registry and information exchange for greenhouse gas emissions reduction credits designed specifically to benefit the state of California. The GHG Rx is a trusted source of locally generated credits from projects within California, and facilitates communication between those who create the credits, potential buyers, and funding organizations.”<sup>148</sup> “[CAPCOA’s GHG Rx] mission is to provide a trusted source of high quality California-based greenhouse gas credits to keep investments, jobs, and benefits in-state, through an Exchange with integrity, transparency, low transaction costs and exceptional customer service.”<sup>149</sup>

#### **Local**

#### San Joaquin Valley Unified Air Pollution Control District (Air District or SJVAPCD)

“The San Joaquin Valley Air District is a public health agency whose mission is to improve the health and quality of life for all Valley residents through efficient, effective and entrepreneurial air quality-management strategies.”<sup>150</sup> “The San Joaquin Valley Air Pollution Control District is made up of eight counties in California’s Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and the San Joaquin Valley Air Basin portion of Kern.”<sup>151</sup> The Air District has prepared its guidance document, “*Guidance for Assessing and Mitigating Air Quality Impacts*” (GAMAQI), to assist Lead Agencies in assessing project specific impact

<sup>143</sup> Tulare County General Plan 2030 Update Background Report (at Climate Change Scoping Plan). Pages 6-27 to 6-28.

<sup>144</sup> California Air Pollution Control Officers Association. Home page. <http://www.capcoa.org/>. Accessed October 2020.

<sup>145</sup> Tulare County General Plan 2030 Update Background Report (at California Air Pollution Control Officers Association) Page 6-28.

<sup>146</sup> CAPCOA’S white paper, “CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act”, is available online at <http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf>.

<sup>147</sup> CAPCOA’S report, Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures”, is available online at <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>.

<sup>148</sup> California Air Pollution Control Officers Association. CAPCOA GHG Rx. <http://www.capcoa.org/ghg-rx/>. Accessed October 2020.

<sup>149</sup> CAPCOA. Greenhouse Gas Reduction Exchange (GHG Rx). <http://www.ghgrx.org/>. Accessed October 2020.

<sup>150</sup> San Joaquin Valley Air Pollution Control District. About the District. [http://www.valleyair.org/General\\_info/aboutdist.htm#Mission](http://www.valleyair.org/General_info/aboutdist.htm#Mission). Accessed October 2020.

<sup>151</sup> Ibid.

on air quality and resulting from greenhouse gases.<sup>152</sup> The Air District's significance thresholds and guidance for evaluation are provided below.

"As presented in Figure 6 (Process of Determining Significance of Greenhouse Gas Emissions) [of the GAMAQI], the policy provides for a tiered approach in assessing significance of project specific GHG emission increases.

- Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the Lead Agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the Lead Agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement Best Performance Standards (BPS).
- Projects implementing BPS would not require quantification of project specific GHG emissions. Consistent with CEQA Guideline, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.
- Projects not implementing BPS would require quantification of project specific GHG emissions and demonstration that project specific GHG emissions would be reduced or mitigated by at least 29%, compared to Business as Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. Projects achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.

The District guidance for development projects also relies on the use of BPS. For development projects, BPS includes project design elements, land use decisions, and technologies that reduce GHG emissions. Projects implementing any combination of BPS, and/or demonstrating a total 29 percent reduction in GHG emissions from business-as-usual (BAU), would be determined to have a less than cumulatively significant impact on global climate change."<sup>153</sup>

"On December 17, 2009, the District's Governing Board adopted the District Policy: *Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency* [GHG Policy]. The District's Governing Board also approved the guidance document: *Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA* [GHG Guidance]. In support of the policy and guidance document, District staff prepared a staff report: *Addressing Greenhouse Gas Emissions Under the California Environmental Quality Act*. These documents adopted in December of 2009 continue to be the relevant policies to address GHG emissions under CEQA. As these documents may be modified under a separate process, the latest versions should be referenced to determine the District's current guidance at the time of analyzing a particular project."<sup>154, 155, 156</sup>

The Air District's GHG Guidance states, "Projects implementing Best Performance Standards in accordance with this guidance would be determined to have a less than significant individual and cumulative impact on global climate change and would not require project specific quantification of GHG emissions. Projects exempt from the requirements of CEQA, and projects complying with an approved GHG emission reduction plan or mitigation program would also be determined to have a less than significant individual or cumulative impact. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources and have a certified final CEQA document. Projects not implementing BPS would require quantification of project specific GHG emissions. To be determined to have a less than significant individual and cumulative impact on global climate changes, such projects must be determined to have reduced or mitigated GHG emissions by 29%, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. Furthermore, quantification of GHG emissions would be expected for all projects for which the lead agency has determined that an Environmental Impact Report is required, regardless of whether the project incorporates Best Performance Standards."<sup>157</sup>

#### Tulare County General Plan 2030 Update

<sup>152</sup> San Joaquin Valley Air Pollution Control District. GAMAQI. March 2015. Website: [http://www.valleyair.org/transportation/GAMAQI\\_12-26-19.pdf](http://www.valleyair.org/transportation/GAMAQI_12-26-19.pdf). Accessed October 2020.

<sup>153</sup> Ibid. GAMAQI. Section 8.9.1. Page 112.

<sup>154</sup> Ibid. Section 8.9. Page 110.

<sup>155</sup> San Joaquin Valley Air Pollution Control District. GHG Policy available at <https://www.valleyair.org/Programs/CCAP/12-17-09/2%20CCAP%20-%20FINAL%20District%20Policy%20CEQA%20GHG%20-%20Dec%2017%202009.pdf>.

<sup>156</sup> Ibid.

<sup>157</sup> Ibid. Section 2. Page 4.

The Tulare County General Plan 2030 Update: Part I, Chapter 9 – Air Quality contains a number of policies that apply to projects within Tulare County that support GHG reduction efforts and which have potential relevance to the Project’s CEQA review: *AQ-1.3 Cumulative Air Quality Impacts* wherein the County shall require development to be located, designed, and constructed in a manner that would minimize cumulative air quality impacts; *AQ-1.5 California Environmental Quality Act (CEQA) Compliance* wherein the County shall ensure that air quality impacts identified during the CEQA review process are consistently and reasonably mitigated when feasible; *AQ-1.7 Support Statewide Climate Change Solutions* wherein the County shall monitor and support the efforts of Cal/EPA, CARB, and the SJVAPCD, under AB 32 (Health and Safety Code §38501 et seq.), to develop a recommended list of emission reduction strategies, as appropriate, the County will evaluate each new project under the updated General Plan to determine its consistency with the emission reduction strategies; and *AQ-1.8 Greenhouse Gas Emissions Reduction Plan/Climate Action Plan* wherein the County will develop a Greenhouse Gas Emissions Reduction Plan (Plan) that identifies greenhouse gas emissions within the County as well as ways to reduce those emissions;

The Tulare County General Plan 2030 Update: Part I, Chapter 8 – Environmental Resources Management contains a number of policies that apply to projects within Tulare County that encourage energy conservation and thereby support the County’s GHG reduction efforts and which have potential relevance to the Project’s CEQA review: *ERM-4.1 Energy Conservation and Efficiency Measures* wherein the County shall encourage the use of solar and other energy conservation and efficiency features in new construction in accordance with State law; *ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation* wherein the County shall promote the planting and maintenance of shade trees along streets and within parking areas of new urban development to reduce radiation heating; *ERM-4.8 Energy Efficiency Standards* wherein the County shall encourage new development to incorporate energy efficiency and conservation measures that exceed State Title 24 standards.

The Tulare County General Plan 2030 Update: Part II, Chapter 3 – Foothill Growth Management Plan contains a number of policies that apply to projects within foothill communities in Tulare County that direct development to selected areas and thereby support GHG reduction efforts and which have potential relevance to the Project’s CEQA review: *FGMP-8.16 Proximity to Transportation* whereby the County shall encourage the concentration of development along major travel routes to allow for future public transportation services and minimize travel distances to frequently used facilities; and *FGMP-8.17 Reduce Vehicle Emissions* whereby the County shall discourage the scattering of development throughout the foothills to reduce vehicular emissions by decreasing home to destination distances.

#### Three Rivers Community Plan Update<sup>158</sup>

The Three Rivers Community Plan Update contains policies that apply to projects within the community of Three Rivers that support the County’s GHG reduction efforts: *Policy 4.1.11 Climate Action Plan (CAP)* which requires a 6% reduction of GHG emissions for development projects consisting of 50 or more dwelling units or equivalent travel demand for non-residential uses; and *Policy 6.2.2 (Link Commercial Development to Transportation Corridors)* which requires commercial development to locate in areas with adequate access to major transportation corridors.

#### Tulare County Climate Action Plan

“The County of Tulare (County) adopted the Tulare County Climate Action Plan (CAP) in August 2012. The CAP includes provisions for an update when the State of California Air Resources Board (CARB) adopts a Scoping Plan Update that provides post-2020 targets for the State and an updated strategy for achieving a 2030 target. Governor Brown signed Senate Bill (SB) 32 on September 8, 2016 which contains the new 2030 target. The CARB 2017 Scoping Plan Update for the Senate Bill (SB) 32 2030 targets was adopted by the CARB on December 14, 2017 which provided new emission inventories and a comprehensive strategy for achieving the 2030 target (CARB 2017a). With the adoption of the 2017 Scoping Plan, the County proceeded with the 2018 CAP Update that is provided in this document. The 2018 CAP Update incorporates new baseline and future year inventories to reflect the latest information and updates the County’s strategy to address the SB 32 2030 target. The 2030 target requires the State to reduce emissions by 40 percent below 1990 levels from the 2017 Scoping Plan and County data. The CAP identifies the County’s fair share of reductions required to maintain consistency with the State target.”<sup>159</sup>

The CAP was updated in 2018 to include “... emission reduction targets for the years 2020 and 2030 to match AB 32 and SB 32 targets and General Plan buildout. The CAP addresses sources under the jurisdiction and influence of Tulare County. The target is

<sup>158</sup> Three Rivers Community Plan 2018 Update.

<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/130Part%20III%20Community%20Plans%20%20of%207/007Three%20Rivers/COMMUNITY%20PLAN%20GPA%2014-004%20THREE%20RIVERS.pdf>.

<sup>159</sup> Ibid. 1.

based on forecasts of development activity from California DOF population projections. The mobile source reductions are based on the development being consistent with the goals, policies, and implementation measures in the General Plan, and the TCAG Blueprint Vision. The 2030 target uses the same approach as was used for the 2020 target.”<sup>160</sup> The CAP states, “The 2018 CAP Update includes an additional method of determining project consistency with the CAP and 2030 targets. Projects subject to CEQA review could use a checklist containing design features and measures that are needed to determine consistency. Large projects (500-unit subdivisions and 100,000 square feet of retail or equivalent intensity for other uses) and new specific plans should provide a greenhouse gas analysis report quantifying GHG emissions to demonstrate that the project emissions are at least 31 percent below 2015 levels by 2030 or 9 percent below BAU emissions in 2030. These are the amounts currently required from development related sources to demonstrate consistency with SB 32 2030 targets. Smaller projects may also prepare a GHG analysis report if the checklist is not appropriate for a particular project or is deemed necessary by the project proponent or County staff. The GHG analysis should incorporate as many measures as possible from the CalEEMod mitigation component as described in Table 15 [of the 2018 CAP Update] and can take credit for 2017 Scoping Plan measures that have not been incorporated into CalEEMod but that will be adopted prior to 2030 such as 50 percent RPS.”<sup>161</sup>

**a) Less Than Significant Impact:** The Air District’s GHG Guidance for Land Use Agencies states that projects exempt from the requirements of CEQA and projects complying with an approved GHG emission reduction plan or mitigation program would also be determined to have a less than significant individual or cumulative impact. The GHG Guidance also states that GHG emission quantification is required for any project requiring the preparation of an Environmental Impact Report (EIR). The proposed Project is an allowed use by right under the Tulare County General Plan and the emissions associated with the proposed development has been adequately addressed in the EIR prepared for the Three Rivers Community Plan Update. As such, the proposed Project is not subject to further CEQA requirements; however, the County has determined that an EIR will be prepared. Therefore, the GHG emissions resulting from the proposed Project have been quantified for disclosure purposes consistent with Air District guidance.

“Project GHG emissions were quantified using CalEEMod, version 2016.3.2. Project construction generated GHG emissions were primarily calculated using CalEEMod model defaults for Tulare County and the Project site plans. Operational GHG emissions were calculated based on the Project site plans, the estimated weekend traffic trip generation rates from VRPA Technologies, Inc. (2020), and the CalEEMod default traffic trips for Tulare County for weekday traffic trips. The Project is anticipated to generate 860 additional one-way vehicle trips per day on Saturdays, 625 additional one-way vehicle trips per day on Sundays, and 858 additional one-way vehicle trips per day on weekdays. The traffic fleet mix defaults contained in the CalEEMod model are based on the average fleet mix of Tulare County.”<sup>162</sup>

“Project GHG emissions were quantified for disclosure purposes. The Tulare County CAP does not require quantification of emissions for projects less intense than a 500-unit subdivision or 100,000 square feet of retail or equivalent intensity for other uses. The Proposed Project would include approximately 72,000 square feet of commercial hotel space, and this is less intense than the threshold requiring GHG emissions quantification. However, [pursuant to Air District guidance] the anticipated GHG emissions for the Project are quantified for disclosure purposes. The GHG emissions represent Project emissions prior to implementation of mitigation measures GHG-1 and GHG-2 (explained below), as the specific energy use offset from these measures cannot be determined until the scale and specifications of the renewable energy generation and electric vehicle (EV) charging are known.”<sup>163</sup>

### Construction

“Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 3.2 [in the GHG Report, **Table GHG-3** in this Initial Study] illustrates the specific construction generated GHG emissions that would result from construction of the Project.”<sup>164</sup>

Table GHG-3. Construction-Related Greenhouse Gas Emissions	
Emissions Source	CO <sub>2</sub> e (Metric Tons/Year)
Year One Construction (2021)	420

<sup>160</sup> Op. Cit.

<sup>161</sup> Op. Cit. 73.

<sup>162</sup> ECORP. GHG Report. Page 37.

<sup>163</sup> Ibid.

<sup>164</sup> Op. Cit. 38.

Year Two Construction (2022)	126
<b>Total Emissions</b>	<b>546</b>
<i>Source: GHG Report, Table 3-2, Page 38 (see Attachment "A") of this Initial Study.</i>	

“As shown in Table 3.2 [in the GHG Report, **Table GHG-3** in this Initial Study], Project construction would result in the generation of approximately 546 metric tons of CO<sub>2</sub>e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. The amortized construction emissions are added to the annual average operational emissions.”<sup>165</sup>

### Operations

“Operation of the Project would result in GHG emissions predominantly associated with motor vehicle use. Long-term operational GHG emissions attributable to the Project are identified in Table 3-3 [in the GHG Report, **Table GHG-4** in this Initial Study].”<sup>166</sup>

<b>Table GHG-4 Operational-Related GHG Emissions</b>	
<b>Emissions Source</b>	<b>CO<sub>2</sub>e (Metric Tons/Year)</b>
Construction Emissions (amortized over the 30-year life of the Project)	18
Area Source Emissions	0
Energy Source Emissions	295
Mobile Source Emissions	842
Solid Waste Emissions	31
Water Emissions	6
<b>Total Emissions</b>	<b>1,175</b>
<i>Source: GHG Report, Table 3-3, Page 38 (see Attachment "A") of this document</i>	

“As shown in Table 3.3 [in the GHG Report, **Table GHG-4** in this Initial Study], Project operations would result in the generation of approximately 1,175 metric tons of CO<sub>2</sub>e annually.”<sup>167</sup>

The proposed Project is an allowed use by right under the Tulare County General Plan and the emissions associated with the proposed development has been adequately addressed in the EIR Furthermore, as discussed in Item b) the proposed Project is consistent with the Tulare County CAP. Therefore, the proposed Project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment. As such, the proposed Project would result in a less than significant impact to this resource.

- b) Less Than Significant Impact:** The Air District’s GHG Guidance for Land Use Agencies states that projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions would be determined to have a less than significant individual and cumulative impact for GHG emissions. The proposed Project is consistent with the Tulare County General Plan and as discussed below, the proposed Project is consistent with Tulare County CAP.

“The Tulare County CAP (2018) is a strategic planning document that identifies sources of GHG emissions within the County, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic policies and actions to reduce emissions from the development project subject to CEQA. The GHG-reduction strategies in the Plan build key opportunities prioritized by County staff and members of the public.

To be consistent with the CAP, development projects less intense than a 500-unit subdivision or 100,000 square feet of retail or equivalent intensity for other uses can use the CAP consistency checklist. The checklist contains design features and measures that are used to determine consistency. The overarching CAP consistency requirements for all projects are outlined in Table 3-4 [in the GHG Report, **Table GHG-5** of this Initial Study].”<sup>168</sup>

<sup>165</sup> Op. Cit.

<sup>166</sup> Op. Cit.

<sup>167</sup> Op. Cit.

<sup>168</sup> Op. Cit. 38-39.

Table GHG-5. CEQA Project Requirements for Consistency with CAP	
Item	Project Compliance?
Project helps to meet the density goals from the Tulare Blueprint	Yes
Consistency with General Plan policies	Yes
Consistency with Rural Valley Land Plans or Foothill Growth Management Plan development criteria	Yes
Consistency with Urban Growth Boundary expansion criteria	Yes
Consistency for development within Rural Community Urban Development Boundaries (UDB) and Hamlet Development Boundaries HDB, and Legacy Development Boundaries (LDB)	Yes
Source: GHG Report, Table 3-4, Page 39 (see Attachment "A") of this document	

"The Project would comply with all applicable General Plan policies intended to reduce GHG emissions. The Project site in the community of Three Rivers and is covered by the Foothill Growth Management Plan of the 2030 General Plan (County of Tulare 2012). The Project would not conflict with the applicable policies of the Foothill Growth Management Plan. Furthermore, the Project would comply with the Land Use and Urban Policies of the 2030 General Plan. Finally, for the Project to be approved for development by the County of Tulare they would require the Project to meet the development requirements as they pertain to Rural Community Urban Development Boundaries and/or Hamlet Development Boundaries. The Project site is located within the Three Rivers Urban Development Boundary depicted within the 2030 General Plan. In addition, the Project is consistent with the 2009 Tulare County Regional Blueprint goals and objectives.

Furthermore, both the existing and the projected GHG inventories in the CAP were derived based on the land use designations and associated densities defined in the County's General Plan. The Proposed Project is consistent with the land use designation and development density presented in the General Plan. As previously stated, the Project site is designated by the 2030 General Plan as Urban Development Boundaries (zoned for commercial use). Since the Project is consistent with the General Plan, it is consistent with the urban development types, intensity, and patterns of land use envisioned for the site vicinity in the General Plan. As a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by the County to develop the CAP.

A more detailed review for compliance with CAP measures is required to ensure that a project is doing its part in reducing emissions. Table 3-5 [in the GHG Report, **Table GHG-6** of this Initial Study] provides a checklist containing all applicable measures that will provide reductions necessary to achieve CAP consistency."<sup>169</sup>

Table GHG-6. CAP Consistency Checklist (Applicable to the Project)		
CAP Measure	Compliance	Project Compliant Prior to Mitigation
Land Use: Project is consistent with the Tulare County General Plan policies listed in the CAP applicable to GHG emissions and sustainability.	Review for compliance during project review process.	Yes
Energy Efficiency: Project complies with current version of Title 24	Provide copy of the Title 24 Report demonstrating compliance with the applicable standards with Building Permit application.	Yes
Renewable Energy: Project includes solar panels or other alternative energy source meeting County Solar Ordinance or new Title 24 standards whichever is more stringent.	Include solar on building plans and provide Title 24 compliance reports with Building Permit applications.	No
EV Charging: Project meets charging installation/charging ready requirements of the CalGreen Code.	Include charging in building plans.	No
CalGreen Building Code Water: Project complies with indoor and outdoor water conservation measures.	Provide copy of report showing code compliance.	Yes
Water Conservation Landscaping:	Project complies with County water conservation ordinance requirements for landscaping.	Yes
Source: GHG Report, Table 3-5, Page 40 (see Attachment "A") of this document		

"As shown in Table 3-4 [in the GHG Report, **Table GHG-5** of this Initial Study], the Project is consistent with the applicable General Plan Policies. In addition, the Project is required by California state law to meet the Title 24 energy efficiency requirements, comply with the CALGreen Building Water Code (California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations), and meet the California Model Water Efficient Landscape Ordinance (MWELO) requirements. Furthermore, the County mandates that applicable codified County standards are met by the Project and will

<sup>169</sup> Op. Cit. 39

enforce the implementation of these standards as a condition of approval. During the design review process, the County will mandate that the Project not only meets state MWELo standards, but complies with the specific requirements of the County water conservation ordinance requirements for landscaping. The County will also review the trash enclosure design to ensure solid waste pick-up is feasible and will ensure the Project meets the CalRecycle requirements. Further, the County must verify the Project is consistent with the General Plan policies, and the County requires all feasible GHG-reducing strategies of the CAP are incorporated into projects and their permits through development review and application of conditions of approval as applicable.

As shown in Table 3-5 [in the GHG Report, **Table GHG-6** of this Initial Study], the Project Preliminary Concept Design does not specify that the Project design includes EV charging and a renewable energy source. As such, mitigation measures GHG-1 and GHG-2 are required to for the Project to be consistent with the CAP. <sup>170</sup>

“Mitigation Measures

**GHG-1** The Project must provide an onsite renewable energy system(s). The Project shall include solar panels or other alternative energy source meeting the County Solar Ordinance or new Title 24 standards, whichever is more stringent. The onsite renewable energy system(s) must be installed as part of the construction process and be functional upon commencement of Project operation. The Project Proponent must include solar on building plans and provide Title 24 compliance reports with Building Permit applications to the County.

*Timing/Implementation:* During the construction period

*Monitoring/Enforcement:* County of Tulare Planning and Building Department

**GHG-2** The Project shall meet the charging installation/charging ready requirements of the CALGreen Code. The Project Proponent shall include EV charging accommodations as specified in the CALGreen Code in building plans for review and approval by the County, prior to commencement of Project construction.

*Timing/Implementation:* During the construction period

*Monitoring/Enforcement:* County of Tulare Planning and Building Department

Following implementation of mitigation measures GHG-1 and GHG-2, the Project would be consistent with the Tulare County CAP for the purpose of meeting 2030 GHG emission reduction targets in compliance with SB 32.<sup>171</sup>

The proposed Project is consistent with the Tulare County General Plan and the Three Rivers Community Plan. With the implementation of mitigation measures GHG-1 and GHG-2 the proposed is consistent with the requirements of the Tulare County CAP. Therefore, the proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. As such, the proposed Project would result in a less than significant impact to this resource.

**Cumulative Impact:** Project-related GHG emissions would be considered to have a significant cumulative impact if project-specific impacts are determined to be significant. As previously noted, the proposed Project is required to comply with the Tulare County General Plan, Three Rivers Community Plan, and Tulare County CAP and is therefore, consistent with the reduction targets for years 2020 and 2030. As the proposed Project would result in Less Than Significant Project-specific Impacts, Less Than Significant Cumulative Impacts would also occur.

9.		HAZARDS AND HAZARDOUS MATERIALS:				
Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<sup>170</sup> Op. Cit. 40.

<sup>171</sup> Op. Cit. 40-41.



b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evaluation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Analysis:

#### Environmental Setting

The proposed Project is a 3-story hotel which will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.) and outdoor swimming pool/cabana building. Consistent with Tulare County parking requirements, the proposed Project includes 108 standard parking stalls (6 of which will be handicap stalls). Utilities include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration). The proposed Project is anticipated to have 12 employees, 70 customers, 1 delivery, and 1 shipment per day, for a total of 168 daily vehicle trips.

The proposed Project site is located in unincorporated community of Three Rivers in Tulare County (County), California, approximately thirty miles east of Visalia, the County Seat. The nearest city is Woodlake located approximately 15 miles west of the Project site. The community is approximately five miles south of the entrance of Sequoia National Park. It lies in a natural valley area created by the convergence of the North, Middle, and South Forks of the Kaweah River near the western edge of the Sierra Nevada Mountains.<sup>172</sup> “The Project area is located in the Sierra foothills on the western slope of the Sierra Nevada range at elevations between 700 and 3,000 feet. Geophysical factors including elevation, slope, hydrogeology and climate... This area is typified by undulating terrain that varies from relatively flat riparian valleys immediately adjacent to the North, South, and Middle Forks of the Kaweah River...Elevations along the State Highway 198 corridor range from approximately 772 feet at Lake Kaweah to a high elevation of 2400 feet east of the entrance to the Sequoia National Park.”<sup>173</sup>

“The mild climate in Three Rivers is generally characterized as Mediterranean. The area tends to be clear, sunny, warm, dry and free of fog. The mean temperatures range from a low of 35° F in January to a high of 95° F in July. The average yearly rainfall for

<sup>172</sup> Tulare County. Three Rivers Community Plan 2018 Update. Draft Environmental Impact Report. Page. 3.8-2.

<sup>173</sup> Ibid.



the area is approximately 18 inches with 90 percent of the precipitation falling between the months of November and April. The winds in the area are considered light, moving up the canyons in the mornings and down the canyons in the evening.”<sup>174</sup>

The nearest airport, Woodlake Airport (City of Woodlake) is approximately 16 miles west of the proposed Project site. Solid waste collection in the Three Rivers area is provided by Mid Valley Disposal (the current solid waste hauler) which has a license with the County of Tulare. Solid waste generated in Three Rivers is disposed of at Visalia Landfill (which is operated by the Tulare County Solid Waste Department and is located at 22466 Road 80, near Visalia).

#### Hazardous Waste Shipments Originating Within Tulare County

“A hazardous material is defined by the California Code of Regulations (CCR) as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating, illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of (CCR, Title 22, Division 4.5, Chapter 10, Article 2, Section 66260.10).”<sup>175</sup>

Similarly, hazardous wastes are defined as “[m]aterials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. According to Title 22 of the CCR, hazardous materials and hazardous wastes are classified according to four properties: toxic, ignitable, corrosive, and reactive (CCR, Title 22, Chapter 11, Article 3).”<sup>176</sup>

In 2017 (most recent year of data), the California Department of Toxic Substances Control (DTSC) Hazardous Waste Tracking System (HWTS) manifest data reports that approximately 1.494 tons of hazardous waste was transported from all categories of generators in Three Rivers; versus 2,314.42 tons in 2016 (an anomalous year where 2,309.58 tons of the total tonnage were attributed to clean-up of a contaminated soils site).<sup>177</sup>

The nearest elementary (Three Rivers Elementary School) is located in Three Rivers approximately 1.5 miles north of the Project site; while the nearest high school (Woodlake High School) is approximately 17 miles west of the Project site in the City of Woodlake.

#### **Regulatory Setting**

##### ***Federal***

“The Hazardous Material Transportation Act (HMTA) was published in 1975. Its primary objective is to provide adequate protection against the risks to life and property inherent in the transportation of hazardous material in commerce by improving the regulatory and enforcement authority of the Secretary of Transportation. A hazardous material, as defined by the Secretary of Transportation is, any “particular quantity or form” of a material that “may pose an unreasonable risk to health and safety or property.”<sup>178</sup>

#### Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

“CERCLA, commonly referred to as Superfund, was enacted on December 11, 1980. The purpose of CERCLA was to provide authorities with the ability to respond to uncontrolled releases of hazardous substances from inactive hazardous waste sites that endanger public health and the environment. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at such sites, and established a trust fund to provide for cleanup when no responsible party could be identified. Additionally, CERCLA provided for the revision and republishing of the National Contingency Plan (NCP) that provides the guidelines and procedures needed to respond to releases

<sup>174</sup> Tulare County. Three Rivers Community Plan 2018 Update. Page 73.

<sup>175</sup> Tulare County. Tulare County General Plan 2030 Update. Background Report 2010/ Page 8-26. Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/Appendix%20B%20-%20Background%20Report.pdf>.

<sup>176</sup> Ibid.

<sup>177</sup> DTSC, 2017 and 2016; accessed October 2020 at: [https://hwts.dtsc.ca.gov/hwts\\_Reports/ReportPages/Report07.aspx?year=2017&NbrRecs=All&sort=WASTE\\_STATE\\_CODE&city=THREE%20RIVERS&county=NULL&cupa=NULL](https://hwts.dtsc.ca.gov/hwts_Reports/ReportPages/Report07.aspx?year=2017&NbrRecs=All&sort=WASTE_STATE_CODE&city=THREE%20RIVERS&county=NULL&cupa=NULL) and [http://hwts.dtsc.ca.gov/hwts\\_Reports/ReportPages/Report07.aspx?year=2016&NbrRecs=All&sort=TOTAL\\_TONS&city=THREE%20RIVERS&county=NULL&cupa=NULL](http://hwts.dtsc.ca.gov/hwts_Reports/ReportPages/Report07.aspx?year=2016&NbrRecs=All&sort=TOTAL_TONS&city=THREE%20RIVERS&county=NULL&cupa=NULL); respectively.

<sup>178</sup> U.S. EPA. Hazardous Materials Transportation Act. Accessed October 2020 at: <https://archive.epa.gov/emergencies/content/lawsregs/web/html/hmtaover.html#overview>.

and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also provides for the National Priorities List, a list of national priorities among releases or threatened releases throughout the United States for the purpose of taking remedial action.”<sup>179</sup>

#### Superfund Amendments and Reauthorization Act (SARA)

“SARA amended CERCLA on October 17, 1986. This amendment increased the size of the Hazardous Response Trust Fund to \$8.5 billion, expanded EPA’s response authority, strengthened enforcement activities at Superfund sites; and broadened the application of the law to include federal facilities. In addition, new provisions were added to the law that dealt with emergency planning and community right to know. SARA also required EPA to revise the Hazard Ranking System to ensure that the system accurately assesses the relative degree of risk to human health and the environment posed by sites and facilities subject to review for listing on the National Priorities List (NPL).”<sup>180</sup>

#### ***State***

##### Hazardous Substance Account Act (1984), California Health and Safety Code Section 25300 et seq. (HSAA)

“This act, known as the California Superfund, has three purposes: 1) to respond to releases of hazardous substances; 2) to compensate for damages caused by such releases; and 3) to pay the states 10 percent share in CERCLA cleanups. Contaminated sites that fail to score above a certain threshold level in the EPA’s ranking system may be placed on the California Superfund list of hazardous wastes requiring cleanup.”<sup>181</sup>

##### California Environmental Protection Agency (CalEPA), Department of Toxic Substance Control (DTSC)

“Cal/EPA has regulatory responsibility under Title 22 of the California Code of Regulations (CCR) for administration of the state and federal Superfund programs for the management and cleanup of hazardous materials. The DTSC is responsible for regulating hazardous waste facilities and overseeing the cleanup of hazardous waste sites in California. The Hazardous Waste Management Program (HWMP) regulates hazardous waste through its permitting, enforcement and Unified Program activities. HWMP maintains the EPA authorization to implement the [Resource Conservation and Recovery Act] RCRA program in California, and develops regulations, policies, guidance and technical assistance/ training to assure the safe storage, treatment, transportation and disposal of hazardous wastes. The State Regulatory Programs Division of DTSC oversees the technical implementation of the state’s Unified Program, which is a consolidation of six environmental programs at the local level, and conducts triennial reviews of Unified Program agencies to ensure that their programs are consistent statewide and conform to standards.”<sup>182</sup>

##### California Building Code

CCR Title 24 Chapter 7 (et al) Fire and Smoke Protection “...applies to building materials, systems and/or assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface Fire Area as defined in Section 702A. The purpose of this chapter is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area to resist the intrusion of flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.”<sup>183</sup>

#### ***Local***

##### Tulare County General Plan 2030 Update

<sup>179</sup> Tulare County. Tulare County General 2030 Update. Background Report. 2010. Page 8-27.

<http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>

<sup>180</sup> Ibid.

<sup>181</sup> Tulare County. 2010. General Plan Background Report. Pages 8-28 – 8-29. Accessed at:

<http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>

<sup>182</sup> Op. Cit. 8-29.

<sup>183</sup> California Code of Regulations. Title 24 Chapter 7 (et al) Fire and Smoke Protection accessed October 2020 at: <https://up.codes/viewer/california/ca-building-code-2016/chapter/7A/sfm-materials-and-construction-methods-for-exterior-wildfire-exposure#:~:text=WILDLAND-URBAN%20INTERFACE%20FIRE%20AREA%20is%20a%20geographical%20area,to%20be%20at%20a%20significant%20risk%20from%20wildfires>

The Tulare County General Plan 2030 Update (at Chapter 10 – Health and Safety)<sup>184</sup> contains the following goals and policies that relate to hazards and hazardous materials, and which have potential relevance to the Project’s CEQA review: *HS-4.1 Hazardous Materials* wherein the County shall strive to ensure hazardous materials are used, stored, transported, and disposed of in a safe manner, in compliance with local, State, and Federal safety standards, including the Hazardous Waste Management Plan, Emergency Operations Plan, and Area Plan; *HS-4.2 Establishment of Procedures to Transport Hazardous Wastes* wherein the County shall continue to cooperate with the California Highway Patrol (CHP) to establish procedures for the movement of hazardous wastes and explosives within the County; *HS-4.3 Incompatible Land Uses* wherein the County shall prevent incompatible land uses near properties that produce or store hazardous waste; *HS-4.4 Contamination Prevention* wherein the County shall review new development proposals to protect soils, air quality, surface water, and groundwater from hazardous materials contamination; *HS-6.1 New Building Fire Hazards* wherein the County shall ensure that all building permits in urban areas, as well as areas with potential for wildland fires, are reviewed by the County Fire Chief. The following minimum requirements should be met to review developments or uses within areas of varying fire hazards; *HS-6.2 Development in Fire Hazard Zones* wherein the County shall ensure that development in very high or high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards. *HS-6.4 Encourage Cluster Development* wherein the County shall encourage cluster developments in areas identified as subject to high or very high fire hazard, to provide for more localized and effective fire protection measures such as consolidations of fuel build-up abatement, firebreak maintenance, firefighting equipment access, and water service provision; *HS-6.6 Wildland Fire Management Plans* wherein the County shall require the development of wildland fire management plans for projects adjoining significant areas of open space that may have high fuel loads; and *HS-6.7 Water Supply System* wherein the County shall require that water supply systems be adequate to serve the size and configuration of land developments, including satisfying fire flow requirements.

**a) and b) Less Than Significant Impact:** The proposed 3-story hotel which will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.), 108 standard parking stalls (6 of which will be handicap stalls) and utilities including a septic tank with filter and dripline system and new domestic well. Storm water drainage will be retained on-site (with an option for biofiltration). Proposed Project construction will not likely require the transport and use of small quantities of hazardous materials in the form of gasoline, diesel, and oil. Although there is the potential for small leaks due to refueling of the construction equipment if refueling were to occur on -site, standard construction Best Management Practices (BMPs) included in the SWPPP will reduce the potential for accidental release of construction-related fuels and other hazardous materials. These BMPs will prevent, minimize, or remedy storm water contamination from spills or leaks, control the amount of runoff from the site, and require proper disposal or recycling of hazardous materials.

Proposed Project operations will not require the storage of hazardous materials, such as fuel and lubricants. It is likely the proposed Project will use and store typical housekeeping products such as drain cleaners, spot remover, disinfectants, etc. The storage, transport, and use of these materials will comply with Local, State, and Federal regulatory requirements.

Therefore, the proposed Project will not result in a significant hazard to the public or the environment and impacts will be less than significant.

- c) No Impact:** The nearest school, Three Rivers Elementary School, is approximately 1.5 miles north of the proposed Project site. As described earlier, the Project involves construction of hotel as the main structure, parking, access/egress driveway, etc. and will not emit hazardous emissions, involve hazardous materials, or create a hazard to the school. There will be no impact.
- d) No Impact:** According to the State of California Department of Toxic Substances Control (DTSC) – Envirostor Search, no hazardous materials sites exist within an approximate two-mile radius of the proposed Project site.<sup>185</sup> The proposed Project site is not listed as hazardous materials sites pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control per a review of “Identified Hazardous Waste Sites” (conducted October 2020), by RMA staff. Therefore, as the proposed Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 it would not create a significant hazard to the public or the environment
- e) No Impact:** The nearest airport, Woodlake Airport, is approximately sixteen miles west of the proposed Project site; The non-operational Three Rivers airport is located approximately two miles north of the proposed Project site. There are no private airports within the Project vicinity. The proposed Project will not conflict with Tulare County Airport Land Use Plan (ALUP)

<sup>184</sup> Tulare County. Tulare County General Plan 2030 Update. Chapter 10 Health and Safety Element (which can be found on PDF page 251). Accessed October 2020 at: <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/GENERAL%20PLAN%202012.pdf>.

<sup>185</sup> California Dept. of Toxic and Substances Control Accessed October 2020 at: <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Tulare+County%2C+CA>.

policy and it is not within any airport's safety zone. The proposed Project will not result in a safety hazard for people working in the area. As such, the Project would result in no impact to this resource.

- f) No Impact:** The proposed Project includes an access/egress driveway to SR 198, it does not have direct access/egress to SR 198. As such, it would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evaluation plan. Therefore, the proposed Project will not interfere with implementation of an emergency response plan or evacuation.
- g) Less Than Significant Impact:** The proposed Project is located in an active area of wildland fire occurrence. Expansion of the proposed Project area may result in exposure of people or structures to an increased risk of loss, injury or death due to wildland fire events. The Tulare County 2030 General Plan Update includes Three Rivers within a "very high" fire threat area containing fire hazards based on fuels, terrain, weather, and other relevant factors.<sup>186</sup> As noted in the environmental impact report prepared for the Three Rivers Community Plan, "The County of Tulare and the State of California maintain policies and regulations that seek to minimize the exposure of foothill communities and mountain service centers to wildfire events. In geographical terms, the Three Rivers UDB largely falls into CalFire's State Responsibility Area (SRA). CalFire oversight of at-risk locales, such as foothill communities, includes programs and regimens of wildland fire engineering, vegetation management programs, risk analysis, education, enforcement, and land use planning to the end of diminishing and ameliorating the risk posed by wildland fire."<sup>187</sup> The proposed Project will not contain any housing or buildings where workers will reside or be stationed that will be at risk of fire. As a hotel, the primary occupants will be employees and transient visitors/guests. In the event of fire threat, because of its proximity to SR 198, these persons can readily access SR 198 to evacuate if necessary. Also, complying with Calfire and Tulare County fire code standards (e.g., fire resistant materials, sprinkler system, fireflow, fire hydrants, access (for firefighting or other first responder apparatus), etc.) would ensure that the proposed Project will be constructed to maximize protection from wildfire. As such, the Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires and would result in a less than significant impact to this resource.

**Cumulative Impact:** As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

10.		HYDROLOGY AND WATER QUALITY				
Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	i)	Result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>186</sup> Tulare County General Plan 2030 Update.2012. Figure 10-2

<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>

<sup>187</sup> Three Rivers Community Plan Draft Environmental Impact Report. Page 3.8-19.

ii)	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv)	Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	Conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Analysis:

The proposed Project will result in Less Than Significant Impacts to the Hydrology and Water Quality Resource. *The “Hampton Inn & Suites Report of Waste Discharge Technical Report Wastewater Treatment System for the Proposed Hampton Inn & Suites 40758 Sierra Drive, Three Rivers, California.”* (Waste Discharge Technical Report) prepared by qualified experts Ald General Engineering, Inc. and the *“Abbreviated Water Supply Evaluation to support the Three Rivers Community Plan EIR Memorandum”* (contained in the Three Rivers Community Plan 2018 Draft EIR. Appendix “G”). prepared by qualified experts Tully & Young, Inc., which are included in Attachment “D” of this Initial Study. The Waste Discharge Technical Report and Water Supply Evaluation Memorandum are used as the basis for determining that, based on the evidence/documentation and the expertise of qualified consultants, the proposed Project will result in a less than significant impact.

#### Environmental Setting

The Three Rivers study area is located in the Southern Sierra Nevada Mountains within the Southern Sierra Integrated Regional Water Management Plan (SSIRWMP) area (Please see figure 3.9-1 [of the Draft EIR]). A 2014 SSIRWMP Final Report summarizes the regional hydrological picture by stating:

“The Southern Sierra Region covers approximately 6,195 square miles (3,964,800 acres) and includes the foothills and mountain regions of the Kern, Poso, White, Tule, Kaweah, Kings and San Joaquin River watersheds. These watersheds cover the Sierra Nevada portion of Fresno and Tulare counties and a portion of Madera County. The Region is considered appropriate as a RWMG since it has a strong hydrologic basis with borders based on watershed boundaries and the Sierra Nevada crest. The area covered by the Southern Sierra RWMG is coterminous with the area covered by [the] IRWMP.”<sup>188</sup> However, as noted in the SSIRWMP, “Most of the local water users rely on hard rock (typically granitic) wells that have limited ability to hold and transmit groundwater, and typically have low yields. The water budget is not well understood in most of the region.”<sup>189</sup>

“Nine watersheds have been identified within the Kaweah River watershed, and these are designated as local watersheds... Land ownership in the local watersheds is 54 percent government owned and 46 percent privately owned. There are 2,118 private parcels within the study area, with 80 percent being less than 10 acres. Most of the smaller parcels are located next to the Kaweah River and its tributaries.”<sup>190</sup>

“Two types of aquifers are present: a small, shallow alluvial aquifer along the river bottom and a fractured bedrock aquifer. The rock fracture aquifer consists of an intersecting network of planar breaks in the rock, which in some cases extend for miles and cross watershed boundaries. In the Three Rivers area, the fractures cut across differing geologic units of granitic and metamorphic rock, resulting in a sporadic adverse effect on water quality. Water wells provide nearly all of the drinking water, with surface water and springs providing the remainder. Well yields varied from a low of less than 2 gallons per minute (8 percent of the wells) to more

<sup>188</sup> Tulare County. Three Rivers Community Plan 2018 Update. Draft Environmental Impact Report (Draft EIR) *Southern Sierra Integrated Regional Water Management Plan*. 2014. Page ES-2. Prepared by Provost and Pritchard. Included in Appendix “G” of the Draft EIR.

<sup>189</sup> Ibid.

<sup>190</sup> California Department of Water Resources. *Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California*. 2016. Page 1. Included in Appendix “G” of the Draft EIR.

than 100 gallons per minute; 50 percent of the wells had yields greater than 15 gallons per minute. One-third of the wells are less than 100 feet deep. Shallow, low-yielding wells have a greater potential for failure in a drought.”<sup>191</sup>

“Groundwater in wells is a blend of high-quality surface water and variable-quality groundwater flowing through rock fractures. Water quality varies from high-quality water with a very low mineral content to a few wells containing notably elevated dissolved minerals, such as sulfur or hydrogen sulfide. Groundwater with high levels of these dissolved minerals is related to the underlying bedrock type of the well, typically metamorphic rock.”<sup>192</sup>

### **Watershed (Surface Water)**

As summarized in the Draft EIR for the Three Rivers Community Plan 2018 Update for surface water, “The study area is located within the watershed of the Upper Kaweah River which consists of 359,000 acres or 561 square miles of land. The Kaweah River watershed study area consists of two parts: the upper Kaweah River watershed, and the smaller local watersheds of the Kaweah River which surround Three Rivers (Figure 4). For the upper Kaweah River watershed, information collected for this report consisted of available data regarding water systems which provide public drinking water supplies for various parts of Sequoia National Park. The data included: number of water systems and their locations, sources of water to the various systems, types of water sources, and water quality and water chemistry data. For the smaller, local watersheds, the information collected included water system and water quality information; climate data, climate change, river hydrology, geologic setting, population and demographics, land use, land ownership, parcel size, and information contained on well logs. The smaller, local watersheds consist of those which provide drinking water supplies to the Three Rivers community, referred to as the nine local watersheds of the Three Rivers area. Together, the nine watersheds comprise the area within which most residential areas occur in the Kaweah River watershed and which provide most of the drinking water supplies for residences, motels and trailer parks, businesses, and public entities such as schools. The watersheds range in size from 6,000 to nearly 13,000 acres and in elevation from 700 feet to 9,250 feet mean sea level (msl).”<sup>193</sup>

Included in the Draft EIR are Table 3.9-1<sup>194</sup> which identifies the nine local watersheds of the Kaweah River tributaries, and Figure 3.9-1<sup>195</sup> [in the Draft EIR, **Figure HYD-1** in this Initial Study] showing the respective watersheds’ locations. As shown in **Figure HYD-1**, the proposed Project site is within the Lake Kaweah watershed which receives waters from North, Middle, and East Forks of the Kaweah River; the North Fork Kaweah River is within the North Fork Kaweah River, Lower North Fork Kaweah River watersheds; the Middle Fork Kaweah River is within the Marble Fork Kaweah River, North Side Lake Kaweah, and Lake Kaweah watersheds and; East Fork Kaweah River is within the East Fork Kaweah River and Lower East Fork Kaweah River watersheds. As such, the proposed Project’s potential water usage would be supplied by 7 of the 9 watersheds shown in **Figure HYD-1** and all but the South Fork Kaweah River tributary to the Kaweah River. Combined, these tributaries consist of 67,789 acres of the estimated 82,636 acres within nine local watershed of the Three Rivers planning area.<sup>196</sup>

### **Surface Water Quality**

As summarized in the Draft EIR for the Three Rivers Community Plan 2018 Update for surface water quality, “Streams flowing through the upper Kaweah River watershed drain the western slopes of the Sierra Nevada. The dominance of granitic rock and the undeveloped and protected portions of the watershed in the Sequoia National Park results in good quality surface water. Information collected regarding surface water quality of the Kaweah River comes from water sampling from public drinking water supplies. The SWRCB, Drinking Water Program has required the periodic sampling and analytical testing of water from public drinking water supplies. This has included: groundwater from wells, groundwater from springs, groundwater under the influence of surface water from radial wells with radials extending underneath the river, and surface water from intakes on the river.”<sup>197</sup>

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<sup>191</sup> Ibid.

<sup>192</sup> Ibid.

<sup>193</sup> Tulare County. Three Rivers Community Plan 2018 Update Draft EIR. Page 3.9-4.

<sup>194</sup> Ibid.

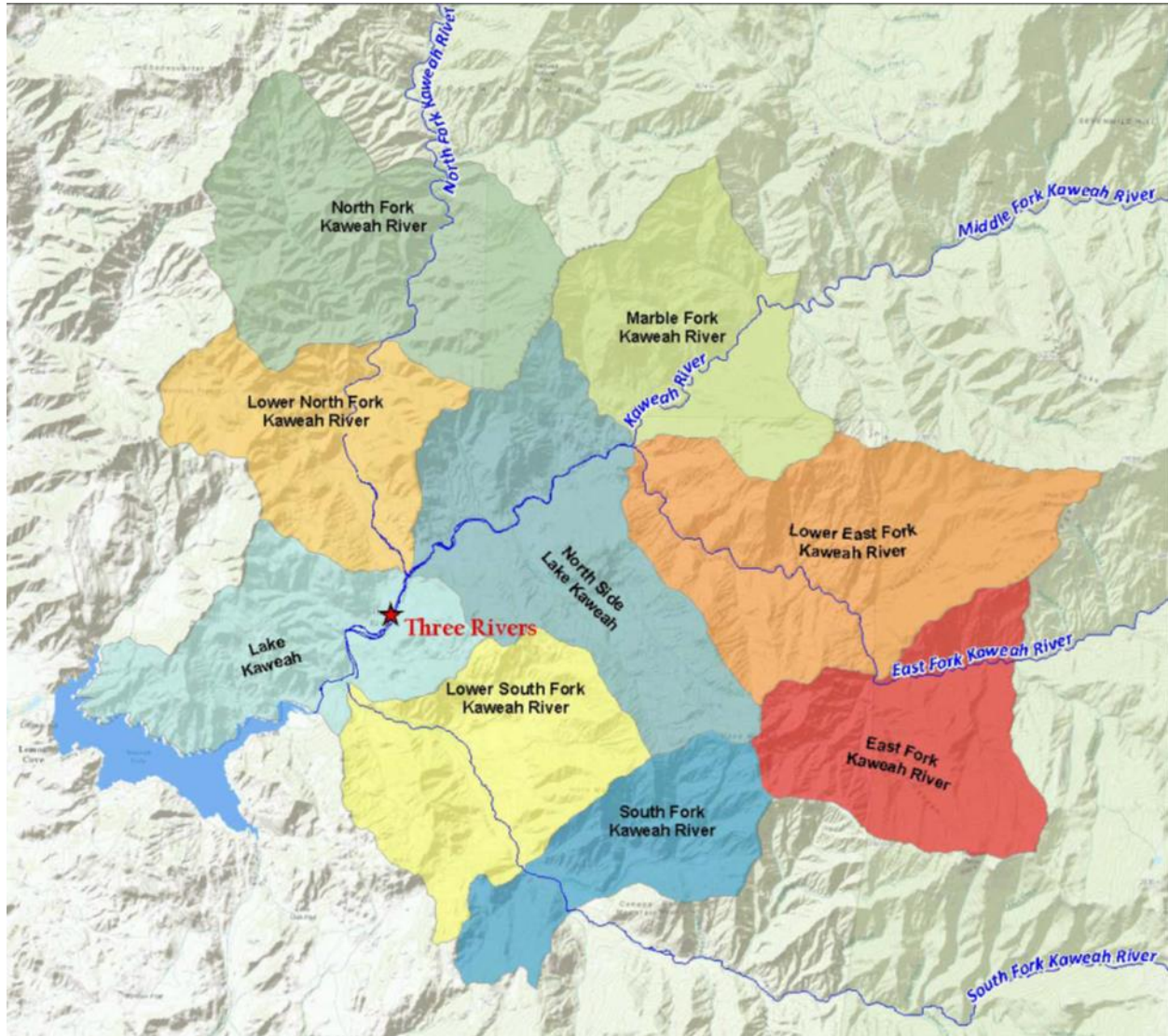
<sup>195</sup> Op. Cit. 3.9-5.

<sup>196</sup> Op. Cit. 3.9-4. Table 3.9-4 Nine Local Watersheds. The 67,789 acres results from subtracting the 14,847 acres of the South Fork tributary from the total 82,636 acres shown in Table 3.9- of the Draft EIR.

<sup>197</sup> Op. Cit. 3.9-5. – 3.9-6.



**Figure HYD 1**  
Nine Local Watersheds<sup>198</sup>



### Surface Water Supply

“There are 23 public drinking water systems in the watersheds of the Three Rivers area. Five of these systems utilize surface water. The State Water Resources Control Board (SWRCB) required sampling of the public water supplies includes analytical tests from 1974 through 2014, the last date for which data was searched. The number and type of tests that were performed varied significantly from system to system and from year to year. The possible analyses included Title 22 organics, general mineral, general physical, nitrate, and, radiological constituents such as uranium, radium, and gross alpha. Test results are provided in Appendix A of the 2016 DWR Preliminary Report on Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California. A review of the results show that no sample tests exceeded primary drinking water standards. A single sample exceeded the secondary drinking water standard for manganese. The standard is 50 mg/L and test results showed 81 mg/L. Manganese may cause staining in clothing and other materials. As might be expected, the Kaweah River through Three Rivers provides high quality surface.”<sup>199</sup>

<sup>198</sup> Op. Cit. 3.9-4.

<sup>199</sup> Op. Cit. 3.9-6.

## **Watershed (Groundwater)**

As summarized in the Draft EIR for the Three Rivers Community Plan 2018 Update for groundwater, “Precipitation from Pacific storms or from summer orographic storms in the watershed either evaporates, occurs as runoff to the Kaweah River as described above, or infiltrates the ground surface into an underlying network of rock fractures. Groundwater occurs both in the fractured bedrock and in unconsolidated river bottom sediments of the Kaweah River. Groundwater flow is generally to the southwest, from areas of recharge in the mountains and along the Kaweah River to areas of discharge.”<sup>200</sup>

### Alluvial Aquifer

“Riverbed sediments and shallow decomposed granite have formed an alluvial aquifer in a narrow band along the Kaweah River. It has an observable width of a few tens of feet to a few hundred feet. It also has a variable thickness. It is thinnest where the river is steep and cascading down resistant bedrock. It is thickest where the stream gradient gentles and widens along straight stretches between river bends. There are one or more radial (wagon wheel) wells located adjacent to the river with shallow radials that extend under the river bed, capturing poorly filtered water.”<sup>201</sup>

### Bedrock Aquifer

“Crystalline bedrock is nearly impermeable; movement of water through the rocks is completely dependent on the presence of fractures in the rock. Groundwater percolates downward through soil and weathered rock into the fractured bedrock. The thin soil mantle which overlies the bedrock is large or extensive, and by itself, the soil layer does not yield significant quantities of water to wells. But the layer does aid in recharge by providing temporary storage of precipitation. Moisture in seasonally saturated soil migrates into rock fractures and then into the bedrock aquifer.”<sup>202</sup>

### Groundwater Quality

“The primary source of water for both individual systems and for private water systems classified as public drinking water supplies is groundwater from water wells drilled in fractured bedrock. For public drinking water systems, water from wells comprise 81% of the sources, springs comprise 3% of the sources, and surface water sources comprise 16% of the total. Stated another way, the sampled sources for the 23 water systems consist of 30 active and inactive wells, one spring, and six surface water intakes from the Kaweah River or treatment units for the surface water intakes...Test results of these 23 private water systems are provided in Appendix A of the 2016 DWR Preliminary Report on Geology, Hydrology, Quality of Water, and Water Supply of the Three Rivers Area, California. A review of the results show that two of the water systems had primary drinking water standard exceedances for arsenic and three water systems had exceedances for uranium and gross alpha. These exceedances may be due to the wells drawing water from fractured granitic bedrock. It is not uncommon for wells completed in granite to experience problems from these constituents. In addition, two water systems had periodic exceedances for nitrate. There were very few secondary drinking water standards exceedances. Three water systems had samples with exceedances for manganese, two with color standard exceedances, and a single water system with exceedances for iron.”<sup>203</sup>

### Groundwater Quality Information from Well Logs

“The well log review of the 486 well logs identified in the Three Rivers area showed that for ten of the well logs the well driller noted an issue with water quality. The comments made note of either high salt, “water very salty”, hydrogen sulfide, sulfur water, or “considerable hydrogen sulfide and salt”. The ten wells represent 2% of the well logs. The actual number of wells impacted by salt or sulfur is unknown but probably higher than that represented by notations on well logs. The wells are present at locations along the main branch of the Kaweah River. There does not appear to be a pattern as to their occurrence. Plotting salt and/or sulfur well locations on the geologic map suggests that some of the wells may be correlated with an underlying bedrock of limestone or metamorphic rock. Other wells do not appear to have a correlation with rock type. In other regions of the Sierra Nevada, salt, sulfur, and high temperature wells have been identified adjacent to ancient and inactive faults. The faults appear to act as conduits and source of origin of the poor quality water. It is not known if the wells are located on or adjacent to such a feature, but there are no known mapped faults present.”<sup>204</sup>

<sup>200</sup> Op. Cit. 3.9-6.

<sup>201</sup> Op. Cit.

<sup>202</sup> Op. Cit. 3.9-6 – 3.9-7.

<sup>203</sup> Op. Cit. 3.9-7.

<sup>204</sup> Op. Cit. 3.9-7 – 3.9-8.



## Water Supply Evaluation, Three Rivers Community Plan EIR

The “*Abbreviated Water Supply Evaluation to support the Three Rivers Community Plan EIR Memorandum*” (Water Supply Memorandum or Memorandum), prepared by qualified experts consultant Tully & Young, Inc., is a memorandum to support the CEQA analysis regarding the availability and sufficiency of water supplies to meet the forecast water demands allowed by the Three Rivers Community Plan. The Memorandum contains an analysis that estimate future water demands, water demands of existing users, factors affecting future water use, water conservation objectives, indoor infrastructure requirements, California Model Water Efficient Landscape Ordinance and County Ordinances, and importantly, a future water use forecast.<sup>205</sup> Further, the Memorandum also discusses water supply and reliability, groundwater and surface water supply characteristics, water supply availability, sufficiency of water supplies, and also provided Consultants determination of potential impacts as a result of the ultimate growth contemplated by the Three Rivers Community Plan.<sup>206</sup>

In summary, the Memorandum concludes that there is sufficient water supply to meet the approximately 940 acre-feet annually of future water demand at full build-out of the Three Rivers Community Plan, including residential, commercial, and industrial demand based on the estimated 50,000 acre-feet of annual average groundwater recharge in the watershed. As indicated in the Memorandum, “As presented in Section 2 [of the Memorandum], the future demand is anticipated to be approximately 940 acre-feet annually, which represents less than two percent of the over 50,000 acre-feet of average groundwater recharge in the watershed. On a watershed basis, there is and will continue to be sufficient water supplies recharging the fractured rock and alluvial aquifers to meet the forecast future demands. For purposes of this memo, all new water demands will be met by groundwater resources rather than surface rights.”<sup>207</sup> The Memorandum also cautions, “However, the placement of individual wells could have an adverse impact on other local wells if not properly spaced or otherwise constructed to protect existing well operations. The County’s General Plan includes specific policies to provide adequate protections so as to cause this potential impact to be less than significant, if any. Specific policies are discussed under Section 4.2. The County also maintains a well permitting process, allowing an assessment of the unique circumstances for each potential new well to assure setbacks from other wells and from septic systems are appropriate. The combination of the policies and permitting/approval procedures will assure that new wells will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.”<sup>208</sup>

Further, the Memorandum concludes that the Three Rivers Community Plan (that is, the ultimate full build-out as contemplated in the Plan), would result in less than significant impacts to water resources<sup>209</sup> and contains a listing of selected General Plan policies that will provide the assurances necessary to render the impacts to local water resources as less than significant.<sup>210</sup> It is noted that the listing provide in the Memorandum does not necessarily apply to a commercial project (for example, a residential development, connection to community water system, connection to a wastewater system, etc.). As discussed below, this Initial Study provides a listing of General Plan policies that may apply to the proposed Project that differs from the listing provided in the Memorandum.

## **Regulatory Framework**

### ***Federal***

#### Clean Water Act

The Clean Water Act (CWA) is intended to restore and maintain the chemical, physical, and biological integrity of the nation’s waters (33 CFR 1251). The regulations implementing the CWA protect waters of the U.S. including streams and wetlands (33 CFR 328.3). The CWA requires states to set standards to protect, maintain, and restore water quality by regulating point source and some non-point source discharges. Under Section 402 of the CWA, the National Pollutant Discharge Elimination System (NPDES) permit process was established to regulate these discharges.

<sup>205</sup> Tulare County. Three Rivers Community Plan 2018 Draft EIR. December 2017. “*Abbreviated Water Supply Evaluation to support the Three Rivers Community Plan EIR Memorandum*” Pages 4-10. Prepared by Tully & Young, Inc. (included in Appendix “G” of the Draft EIR) and included in Appendix “D” of this Initial Study.

<sup>206</sup> Ibid. 10-17.

<sup>207</sup> Op. Cit. 12.

<sup>208</sup> Op. Cit. 12.

<sup>209</sup> Op. Cit. 12-13.

<sup>210</sup> Op. Cit. 14-17.

The National Flood Insurance Act (1968) makes available federally subsidized flood insurance to owners of flood-prone properties. To facilitate identifying areas with flood potential, Federal Emergency Management Agency (FEMA) has developed Flood Insurance Rate Maps (FIRM) that can be used for planning purposes.

## ***State***

### **State Water Resources Control Board**

The State Water Resources Control Board (SWRCB), located in Sacramento, CA, is the agency with jurisdiction over water quality issues in the State of California. The SWRCB is governed by the Porter-Cologne Water Quality Act (Division 7 of the California Water Code) which establishes the legal framework for water quality control activities by the SWRCB. The intent of the Porter-Cologne Act is to regulate factors which may affect the quality of waters of the State to attain the highest quality which is reasonable, considering a full range of demands and values. Much of the implementation of the SWRCB's responsibilities is delegated to its nine Regional Boards. The proposed Project site is located within the Central Valley Region.

### **Regional Water Quality Board**

The Central Valley Regional Water Quality Control Board (RWQCB) administers the NPDES storm water-permitting program in the Central Valley region. Construction activities on one acre or more are subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit). The General Construction Permit requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The plan will include specifications for Best Management Practices (BMPs) that will be implemented during proposed Project construction to control degradation of surface water by preventing the potential erosion of sediments or discharge of pollutants from the construction area. The General Construction Permit program was established by the RWQCB for the specific purpose of reducing impacts to surface waters that may occur due to construction activities. BMPs have been established by the RWQCB in the California Storm Water Best Management Practice Handbook (2003), and are recognized as effectively reducing degradation of surface waters to an acceptable level. Additionally, the SWPPP will describe measures to prevent or control runoff degradation after construction is complete, and identify a plan to inspect and maintain these facilities or project elements.

## ***Local***

### **Tulare County Land Development Regulations**

The Tulare County Resource Management Agency (RMA) is responsible for review, approval, and enforcement of planning and land development throughout the unincorporated portions of Tulare County. County of Tulare regulations that direct planning and land development (and related water and wastewater utilities) include the Tulare County General Plan, Zoning Ordinance, Subdivision Ordinance, and CEQA procedures. These responsibilities are divided between Planning Branch, Public Works Branch, and other divisions or departments of RMA, and in coordination with the Environmental Health Division of the Tulare County Health and Human Services Agency, and the Tulare County Fire Department.

The County's flood damage prevention code is intended to promote public health, safety, and general welfare in addition to minimizing public and private losses due to flood conditions. The County code provisions to protect against flooding include requiring uses vulnerable to floods be protected against flood damage at the time of initial construction; controlling the alteration of natural flood plains; and preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas. The County flood damage prevention code, most recently amended by Ord. No. 3212 and effective October 29, 1998, is modeled based upon FEMA guidance.

### **Tulare County General Plan 2030 Update**

The Tulare County General Plan 2030 Update: (Chapter 10 – Health and Safety and Chapter 11 – Water Resources) contains the following goals and policies that relate to hydrology and water quality and which have potential relevance to the Project's California Environmental Quality Act (CEQA) review: *AG-1.17 Agricultural Water Resources* wherein the County shall seek to protect and enhance surface water and groundwater resources critical to agriculture; *HS-4.4 Contamination Prevention* wherein the County shall review new development proposals to protect soils, air quality, surface water, and groundwater from hazardous materials contamination; *PFS-2.3 Well Testing* wherein the County shall require new development that includes the use of water wells to be accompanied by evidence that the site can produce the required volume of water without impacting the ability of existing wells to meet their needs; *PFS-2.5 New Systems or Individual Wells* where connection to a community water system is not feasible per PFS-

2.4: Water Connections, service by individual wells or new community systems may be allowed if the water source meets standards for quality and quantity; *PFS-3.1 Private Sewage Disposal Standards*: wherein the County shall maintain adequate standards for private sewage disposal systems (e.g., septic tanks) to protect water quality and public health; *PFS-3.5 Wastewater System Failures* wherein the County shall require landowners to repair failing septic tanks, leach field, and package systems that constitute a threat to water quality and public health or connect to an existing community system through applicable County and/or Regional Water Quality Control Board standards and requirements; *WR-1.1 Groundwater Withdrawal* wherein the County shall cooperate with water agencies and management agencies during land development processes to help promote an adequate, safe, and economically viable groundwater supply for existing and future development within the County. These actions shall be intended to help the County mitigate the potential impact on ground water resources identified during planning and approval processes; *WR-2.1 Protect Water Quality* wherein all major land use and development plans shall be evaluated as to their potential to create surface and groundwater contamination hazards from point and non-point sources. This policy requires the County to confer with other appropriate agencies, as necessary, to assure adequate water quality review to prevent soil erosion; direct discharge of potentially harmful substances; ground leaching from storage of raw materials, petroleum products, or wastes; floating debris; and runoff from the site; *WR-2.2 National Pollutant Discharge Elimination System (NPDES) Enforcement* wherein the County shall continue to support the State in monitoring and enforcing provisions to control non-point source water pollution contained in the U.S. EPA NPDES program as implemented by the Water Quality Control Board; *WR-2.3 Best Management Practices (BMPs)* wherein the County shall continue to require the use of feasible BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities, agricultural operations requiring a County Permit and urban runoff in coordination with the Water Quality Control Board; *WR-2.4 Construction Site Sediment Control* wherein the County shall continue to enforce provisions to control erosion and sediment from construction sites and; *WR-3.5 Use of Native and Drought Tolerant Landscaping* wherein the County shall encourage the use of low water consuming, drought-tolerant and native landscaping and emphasize the importance of utilizing water conserving techniques, such as night watering, mulching, and drip irrigation.

- a) **Less Than Significant Impact:** The State Water Resources Control Board requires any new construction project greater than one acre to complete a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP would be prepared for the proposed Project by a qualified engineer or erosion control specialist as a condition of approval and would be submitted to the County for review and approval before being implemented during construction. The SWPPP would be designed to reduce potential impacts related to erosion and surface water quality during construction activities and throughout the life of the proposed Project. It would include proposed Project information and best management practices (BMP). The BMPs would include dewatering procedures, stormwater runoff quality control measures, concrete waste management, watering for dust control, and construction of perimeter silt fences, as needed. Implementation of the SWPPP will minimize the potential for the proposed Project to substantially alter the existing drainage pattern in a manner that will result in substantial erosion or siltation onsite or offsite. There will be no discharge to any surface or groundwater sources which may impact water quality standards. As such, the proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, the proposed Project would result in a less than significant impact to this resource.
- b) **Less Than Significant Impact:** The proposed Project site is located in the Kaweah Watershed. The Department of Water Resources (DWR) has estimated that the nine (9) watersheds within the Kaweah Watershed cover 82,636 acres. As noted earlier, combined, the tributaries supplying the Kaweah Watershed consists of 67,789 acres of the estimated 82,636 acres of the nine local watershed of the Three Rivers planning area. As noted earlier, the “*Abbreviated Water Supply Evaluation to support the Three Rivers Community Plan EIR Memorandum*” (Memorandum) concludes that there is sufficient water supply to meet the approximately 940 acre-feet annually of future water demand at full build-out of the Three Rivers Community Plan, including residential, commercial, and industrial demand of the estimated 50,000 acre-feet of annual average groundwater recharge in the watershed. The proposed Project applicant’s engineer (Ald General Engineering) estimates that it will use approximately 15.37 acre feet of water per year (or approximately 5,009,625 gallons per year or 13,725 gallons per day<sup>211</sup>). Of the 940 acre-feet annual future water demand estimated in the Memorandum, the proposed Project would consume approximately 0.0163% of the 940 acre-feet (or about 0.0003%) of the estimated annual 50,000 acre-feet of the groundwater recharge in the watershed. It is noted that Ald General Engineering also provided as estimate for a parcel directly west of the proposed Project site of 3,450 gallons per day of water usage (or 1,259,250 gallons per year or 3.86 acre-feet per year). Combined, this would result in approximately 19.23 acre-feet per year (or approximately 0.0204%) of the estimate 940 acre-feet of annual future demand of the entire Three Rivers Community Plan planning area. As such, the proposed Project (including the potential project north of

<sup>211</sup> “Hampton Inn & Suites Report of Waste Discharge Technical Report Wastewater Treatment System for the Proposed Hampton Inn & Suites 40758 Sierra Drive, Three Rivers, California.” (Waste Discharge Technical Report) September 2020. Page 4. Prepared by Ald General Engineering, Inc. and included in Attachment “D” of this Initial Study.

the proposed Project site) would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

- c) **Less Than Significant Impact:** Overall, the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces.

i) *Erosion and Siltation; Less Than Significant Impact:* The extent of potential erosion will vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. As noted in the Project Description (Attachment “D”) the relatively flat nature of the site reduces the need for grading which would be limited to access roads, substation, inverter pads, and switchyard. Any soils removed from these areas would be redistributed around and retained elsewhere on the Project site (i.e., along solar panel support rack alignments).<sup>212</sup> The site is and will continue to have a relatively-flat topography after site construction. Also, as noted earlier, a SWPPP will be in place during construction, as described in Impact 10-a. Therefore, construction-related activities will minimally disturb the ground surface resulting in a less than significant impact from erosion and siltation.

ii) *Runoff resulting in Flooding On- or Off-site; Less Than Significant Impact:* The site will not resulting in waters capable of flooding either on- or off-site. The site is not subject to flooding and lies within Flood Zone X (area of minimal flooding) per the Federal Emergency Management Agency FIRM map.<sup>213</sup> Also, the site will not generate substantial amounts of runoff that would result in on- or off-site flooding due to the nature of the Project as a renewable energy producer (i.e., solar energy). The Project will avoid runoff type water from dust suppression activities and PV panel washing through implementation of conditions of approval and project design features. As such, the Project would result in a less than significant impact to or from this resource Item.

iii) *Runoff affecting Drainage Systems and Polluted Runoff; No Impact.* See Items 10 c) i) and ii) .Also, the Project will not connect to any existing or planned stormwater drainage system, as such it will not provide any additional sources of polluted runoff. As noted earlier, the very nature of the Project (as a renewable energy producer) does not lend itself as a contributor of polluted runoff. Therefore, the Project would result in no impact to this resource. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and as such, would result in no impact.

- d) **No Impact:** The Project is not located on or near any areas that would result in or be impact by a flood hazard, tsunami, or seiche zones, that would result in a risk release of pollutants due to project inundation. As noted in Item 10 c) ii), the Project does not lie within an area nor is it subject not subject to flooding within Flood Zone X (area of minimal flooding) per the Federal Emergency Management Agency FIRM map; it is not exposed to or near any river, reservoirs, pond, or lake subject to seiches from earthquake activity; and it is greater than 100 miles east of the nearest coastline that would be subject to tsunami. Therefore, there would be no impact from potential inundation by the flood hazard, tsunami, or seiches.

- e) **No Impact:** these Item 10 b); as such, the proposed Project would not conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan.

**Cumulative Impact:** As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

11. LAND USE AND PLANNING						
Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	a)	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	b)	Cause a significant environmental impact due to a conflict with any land use plan,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>212</sup> Ibid.

<sup>213</sup> Federal Emergency Management Agency FIRM Panel 06107CL300E June 16, 2009. Accessed May 2019 at: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-119.24027126756349,36.137670866489145,-119.15718716111826,36.17232174266695>

		policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				
<p><b>Analysis:</b></p> <p>Environmental Setting</p> <p>Tulare County is located in a geographically diverse region with the majestic peaks of the Sierra Nevada framing its eastern region, while its western portion includes the San Joaquin valley floor, a fertile area that is extensively cultivated. In addition to its agricultural production, the county's economic base also includes agricultural packing and shipping operations. Small and medium size manufacturing plants are located in the western part of the county and are increasing in number. Tulare County contains portions of Sequoia National Forest, Sequoia National Monument, Inyo National Forest, and Kings Canyon National Park. Sequoia National Park is entirely contained within the county.<sup>214</sup></p> <p>The County encompasses approximately 4,840 square miles of classified lands (lands with identified uses) and can be divided into three general topographical zones: valley region; foothill region east of the valley area; and mountain region just east of the foothills. The eastern half of the county is generally comprised of public lands, including the Mountain Home State Forest, Golden Trout Wilderness area, and portions of the Dome Land and south Sierra Wilderness areas.<sup>215</sup> Federal lands, which include wilderness, national forests, monuments and parks, and County parks, account for 52 percent of the County land. Agricultural uses, which include row crops, orchards, dairies, and grazing lands on the Valley floor and foothills account for 43 percent of the County land. Urban uses including incorporated cities, communities, hamlets, unincorporated urban uses, and infrastructure rights-of-way account for the remaining land in the County.<sup>216</sup></p> <p>Land use in Tulare County is predominately agriculture, and the County is committed to retaining the rich agricultural land. The foothill and mountain regions are controlled predominantly by the State and federal governments. However, as population increases, so does the demand for public services, including solid waste disposal. Agricultural land around the cities is being converted into urban uses. Housing, land, employment and economics are balanced to minimize the amount of agricultural land utilized for urban development. Economic principles tend to take precedence over the conservation of land.</p> <p>As indicated in the 2018 Regional Transportation Plan &amp; Sustainable Communities Strategy (RTP/SCS), Draft Environmental Impact Report (SCH #2012081070); "A vital input to the SCS development process was a credible forecast of population, housing and jobs. TCAG developed a new forecast for this RTP/SCS based on the most comprehensive and up-to-date regional forecasts and projections available. The growth forecast for the 2018 RTP/SCS incorporates substantial new data available from the 2010 Census and new projections published by the California Department of Finance, Demographic Research Office (DOF) in 2017. The growth forecast, based on the DOF projection, is much more restrained than in the previous 2014 RTP/SCS (see RTP Appendix F). The new demographic forecast is summarized in Table 3.0-5 [of the RTP/SCS], Tulare County Demographic Forecast The new 2017 DOF population projection for the year 2040 (594,348) is significantly lower than that of the 2013 DOF projection for the year 2040 (722,838) used for the 2014 RTP/SCS, a difference of 128,490 persons. This is due to lower birthrates consistent with the state as a whole and the fact that Tulare County is still experiencing negative net migration (-150 persons in 2015) as opposed to the peak (+4,473 persons in 2004), as a result of the Great Recession."<sup>217</sup></p> <p>Approximately 189,400 people were employed in Tulare County in September 2020. The unemployment rate in the Tulare County was 13.1 percent in August 2020, down from a revised 16.1 percent in July 2020, and above the year-ago estimate of 9.2 percent. This compares with an unadjusted unemployment rate of 11.6 percent for California and 8.5 percent for the nation during the same period.<sup>218</sup> The current COVID-19 crisis (2020) has resulted in fluctuating employment; however, this fluctuation is anomalous and anticipated to self-adjust over time.</p>						

<sup>214</sup> Tulare County. 2010. Tulare County General Plan 2030 Update Background Report. Page 1-2.

<sup>215</sup> Ibid. 1-4.

<sup>216</sup> Tulare County, 2012, page 4-3. Tulare County General Plan 2030 Update.

<http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>

<sup>217</sup> RTP/SCS PEIR 2018. Pages 3.0-47 and -48. April 2018. Accessed October 2020 at: <https://tularecog.org/tcag/planning/regional-transportation-plan-rtp/rtp-20181/environmental-impact-report/>

<sup>218</sup> California Employment Development Department. Labor Market Information 2019. Accessed October 2020 at: [https://www.labormarketinfo.edd.ca.gov/file/1fmonth/visa\\$pd\\$pdf](https://www.labormarketinfo.edd.ca.gov/file/1fmonth/visa$pd$pdf)

As of January 1, 2020, population estimates produced annually by the Department of Finance calculated Tulare County with a population estimate of 479,977 residents<sup>219</sup>. The State Controller's Office uses Finance's estimates to update their population figures for distribution of state subventions to cities and counties, and to comply with various state codes. Additionally, estimates are used for research and planning purposes by federal, state, and local agencies, the academic community, and the private sector.

### Community of Three Rivers

"Three Rivers is a diverse, rural community located in the western foothills of the Sierra Nevada Mountain Range in the unincorporated portion of Tulare County. It is situated approximately 52 miles southeast of Fresno in the north central area of Tulare County. Three Rivers is positioned adjacent to State Route 198, which connects it with Visalia, the County Seat, located 30 miles southwest of Three Rivers. The community is five miles south of the entrance to Sequoia National Park. It lies in a natural valley area created by the convergence of the North, Middle, East, and South Forks of the Kaweah River near the eastern edge of the Lake Kaweah."<sup>220</sup>

### Three Rivers Urban Development Boundary

"The Urban Boundaries Element, first adopted in 1974, identified two types of boundaries: Urban Area Boundaries (UABs) and Urban Improvement Areas (UIAs). At the time of the Urban Boundaries Element adoption, the UIAs were defined as the twenty-year growth boundaries and the UABs were defined as the ultimate growth boundary for each city and community. In 1983, the Urban Boundaries Element was amended to replace the UIAs with UDBs, and to modify the UAB model to include a "comment" area around incorporated cities, keeping UABs as the next logical area for urban expansion. In addition, UABs were no longer established around unincorporated communities."<sup>221</sup>

"The UDB lines established a twenty-year growth boundary for unincorporated communities for which services will likely be extended to allow new urban growth. The County used population, existing County policies, and a development suitability analysis to determine the location and size of the community UDBs."<sup>222</sup>

"The Urban Boundaries Element directed that community plans be adopted for 22 unincorporated communities to guide future development within their community boundaries. Community Plans supplement County-wide General Plan policies. These plans have their own Land Use Diagrams and circulation plans, and include land use designations and development standards to guide area growth."<sup>223</sup> Three Rivers is among the communities with adopted community plans as of 2009.

The Three Rivers Community Plan (General Plan Amendment GPA 14-004) was adopted on June 26, 2018 via Tulare County Board of Supervisors Resolution No's. 2018-0481, 2018-0482, 2018-0483, and 2018-0484; Tulare County Planning Commission Recommendations: Resolution No's. 9457, 9458, 9459, 9460, 9461, 9462, and 9463; Zoning District Map: PZC 17-048; and Section 18.9 Zoning Ordinance (Mixed Use): PZC 17-047. "All community plans, including this one, must address a range of diverse, sometimes divergent, public interests. They must do so within a consistent, well-integrated policy framework. A county utilizes broad discretion to weigh and balance competing interests in formulating community plan policies. In implementing those policies, it is the task of the Board of Supervisors, or its delegates, to make determinations in a manner that promotes the objectives and policies of all aspects of the community plan, and does not obstruct their attainment. Policy implementation may require reasonable and thoughtful consideration of a number of community plan policies. Such implementation decisions will be made on a case-by-case basis as the Board of Supervisors, Planning Commission, County staff, and others work to implement the entire community plan. When implementing the Community plan or reviewing projects or approvals for consistency with the Community plan, the County will need to balance numerous planning, environmental and policy considerations."<sup>224</sup>

<sup>219</sup> California Department of Finance. 2019 E-1 Population Estimates for Cities, Counties, and the State—January 1, 2018 and 2019. Accessed October 2020 at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/>.

<sup>220</sup> Tulare County. Three Rivers Community Plan 2018 Update. Pages 23. Accessed October 2020 at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>

<sup>221</sup> Tulare County. Tulare County General Plan 2030 Update. 2012. Page 2-4. <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/000General%20Plan%202030%20Part%20I%20and%20Part%20II/General%20Plan%202012.pdf>

<sup>222</sup> Ibid.

<sup>223</sup> Op. Cit.

<sup>224</sup> Tulare County. Three Rivers Community Plan 2018 Update. Pages 44-45. Accessed October 2020 at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>

## Existing Land Uses

Project site is located in the unincorporated community of Three Rivers and is adjacent to an existing hotel along and east of SR 198/Sierra Drive. The County requires development within existing eligible State Scenic Highway corridors to adhere to land use and design standards and guidelines required by the State Scenic Highway Program. The immediate area surrounding the Project site is generally level; there are two nearby hills northeast and east of the site and numerous hills north and west the site (north and west of the Kaweah River). The Comfort Inn and Suites is located to the northeast, the Kaweah River is west of site (west of SR 198) and scattered development (i.e., two rural residences), undeveloped land to the southeast and, a rural residence and two large compressed natural gas tanks to the south.

## Zoning and Land Use

The site is located within the Three Rivers Community planning area which designates the existing proposed Project area as C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone); as such, the proposed Project is an allowed use.

## Regulatory Setting

### ***Federal***

Federal regulations for land use are not relevant to the Project because it is not a federal undertaking (the Project site is not located on lands administered by a federal agency, and the project applicant is not requesting federal funding or a federal permit).

### ***State***

The Project is being evaluated pursuant to CEQA; however, there are no state regulations, plans, programs, or guidelines associated with land use and planning that are applicable to the proposed Project.

### ***Local***

## Tulare County General Plan 2030 Update

The Tulare County General Plan 2030 Update (Chapter 4 – Land Use, Chapter 8 – Environmental Resources Management and Part II Chapter 1 - Rural Valley Lands Plan) contains the following goals and policies that relate to land use and which have potential relevance to the Project's California Environmental Quality Act (CEQA) review: *ED-3.1 Diverse Economic Base* wherein the County shall actively promote the development of a diversified economic base by continuing to promote agriculture, recreation services, and commerce, and by expanding its efforts to encourage industrial development including the development of energy resources; *ED-5.7 Foothills* wherein the County shall encourage additional recreational and visitor-serving development in the Sierra and foothills in areas such as Three Rivers and Springville; *ED-5.14 Interagency Cooperation* wherein the County shall cooperate with federal land management agencies to develop and promote Three Rivers and Springville as gateway communities; *ERM-2.9 Compatibility* wherein the County will encourage the development of mineral deposits in a manner compatible with surrounding land uses; *PF-1.1 Maintain Urban Edges* wherein the County shall strive to maintain distinct urban edges for all unincorporated communities within the valley region or foothill region, while creating a transition between urban uses and agriculture and open space; *PF-1.2 Location of Urban Development* wherein the County shall ensure that urban development only takes place in the following areas:

1. Within incorporated cities and CACUDBs;
2. Within the UDBs of adjacent cities in other counties, unincorporated communities, planned community areas, and HDBs of hamlets;
3. Within foothill development corridors as determined by procedures set forth in Foothill Growth Management Plan;
4. Within areas set aside for urban use in the Mountain Framework Plan and the mountain sub-area plans; and
5. Within other areas suited for non-agricultural development, as determined by the procedures set forth in the Rural Valley Lands Plan.

*PF-1.3 Land Uses in UDBs/HDBs* wherein the County shall encourage those types of urban land uses that benefit from urban services to develop within UDBs and HDBs. Permanent uses which do not benefit from urban services shall be discouraged within these areas. This shall not apply to agricultural or agricultural support uses, including the cultivation of land or other uses accessory to the cultivation of land provided that such accessory uses are time-limited through Special Use Permit procedures; *PF-1.4 Available Infrastructure* wherein the County shall encourage urban development to locate in existing UDBs and HDBs where infrastructure is available or may be established in conjunction with development. The County shall ensure that development does not occur unless



adequate infrastructure is available, that sufficient water supplies are available or can be made available and that there are adequate provisions for long term management and maintenance of infrastructure and identified water supplies; *PF-2.1 Urban Development Boundaries – Communities* wherein the County shall limit urban development to the area within the designated UDB for each community; *PF-2.4 Community Plans* wherein the County shall ensure that community plans are prepared, updated, and maintained for each of the communities. These plans shall include the entire area within the community’s UDB and shall address the community’s short and long term ability to provide necessary urban services; *PF-2.7 Improvement Standards in Communities* wherein the County shall require development within the designated UDBs to meet an urban standard for improvements. Typical improvements shall include curbs, gutters, sidewalks, and community sewer and water systems; *PF-2.8 Inappropriate Land Use* wherein areas within UDBs are hereby set aside for those types of urban land uses which benefit from urban services. Permanent uses which do not benefit from such urban services shall be discouraged within the UDBs; *PF-3.4 Mixed Use Opportunities* wherein unless or until a traditional plan approach is requested by the hamlet and such a plan is adopted, land use designations within the HDB shall be the mixed use land use designations as provided in Chapter 4-Land Use that promotes the integration of a compatible mix of residential types and densities, commercial uses, public facilities and services, and employment opportunities; *LU-4.4 Travel-Oriented Tourist Commercial Uses* wherein the County shall require travel-oriented tourist commercial uses (for example, entertainment, commercial recreation, lodging, fuel) to be used in areas where traffic patterns are oriented to major arterials and highways. Exceptions may be granted for resort or retreat related developments that are sited based on unique natural features; *LU-7.15 Energy Conservation* wherein the County shall encourage the use of solar power and energy conservation building techniques in all new development AND; *LU-7.16 Water Conservation* wherein the County shall encourage the inclusion of “extra-ordinary” water conservation and demand management measures for residential, commercial, and industrial indoor and outdoor water uses in all new urban development.

#### Policy Relationship to the General Plan

“The Three Rivers Community Plan is a component in Part III of the Tulare County General Plan and, as such, has the same force and effect as any other adopted element of the General Plan. Structurally, the Three Rivers Community Plan is part of the Land Use and Circulation Element of the overall General Plan. The principal emphasis of the community plan is on establishing local land use and circulation system patterns and prescribing associated standards and policies. In addition to the specific prescriptions of the community plan, the broader policies and standards of the overall Land Use and Circulation Element apply to Three Rivers. Also applicable to Three Rivers, and governing all future development in the community, are the other elements (e.g. Planning Framework, Environmental Resources Management, Air Quality, Health and Safety, Transportation and Circulation, etc.) of the Tulare County General Plan. In instances where the policies and/or standards of the Three Rivers Community Plan are more specific or more restrictive than those in other elements of the General Plan, the community plan shall take precedence and prevail.”<sup>225</sup>

“Another overall principle to guide the reading and interpreting of the Community plan and its policies is that none of its provisions will be interpreted by the County in a manner that violates State or Federal law. For example, PFS-1.3: Impact Mitigation (Tulare County General Plan Chapter 14), requires new development to pay for its proportionate share of the costs of infrastructure required to serve the project. This policy will be implemented subject to applicable legal standards, including but not limited to the U.S. Constitution’s “Takings” clause. In reading every provision of the Community plan, one should infer that it is limited by the principle: “to the extent legally permitted.”<sup>226</sup>

#### Three Rivers Community Plan

Following are goals, objective, policies within the Three Rivers Community Plan 2018 Update that apply to the proposed Project: Goal 1: Compatible Development: Maintain the Rural Gateway Character of Three Rivers through land uses and new development that are compatible and consistent with the existing development in Three Rivers, preserve the unique visual and community character and natural environment and create a distinct sense of place. *Objective 1.1 Development Compatibility*: Ensure compliance with the Community Plan to ensure compatibility between and within new and existing development. *Policies: 1.1.1 New Residential Development Compatibility* to ensure that new residential development is compatible with the character of the community through the enforcement of rural standards and guidelines; *1.1.2 Mixed Uses* to ensure that development to accommodate growth includes a balanced mix of residential, commercial and public uses that enhance the community’s economic vitality while maintaining its rural character and quality of life; *1.1.3 Commercial Uses- Limiting Negative Impacts* to limit commercial or recreational uses that generate negative impacts, such as noise, lighting, traffic, odors and emissions in residential and rural residential neighborhoods; *1.1.4 Compatible Commercial Establishments* to encourage compatible commercial establishments necessary to serve residents and tourists that are commensurate with the scale and intensity of the community, preserve the environment, and which do not have to the extent feasible,

<sup>225</sup> Ibid. 209.

<sup>226</sup> Op. Cit.



significant traffic, light, noise or visual impacts to the community; *1.1.5 Cluster Commercial Uses* to cluster commercial uses in compact areas and development patterns to discourage strip development and encourage the development of a Town Center or Centers; *1.1.6 Land Use Protections* to protect land uses adjacent to SR 198 from noise impacts by requiring adequate landscape screening and buffering; *1.1.7 Buffers* to require adequate buffers (setback, side and rear yards, landscaping and screening) between commercial and/or industrial development and residential areas; *1.1.8 Increase Public Input* to increase the opportunities for public involvement and participation for planning and development processes in Three Rivers; *1.1.9 LU-1.3 Prevent Incompatible Uses* wherein the County shall discourage the intrusion into existing residential and rural residential areas of new incompatible land uses that produce significant noise, odors, or fumes; *1.1.12 LU-4.5 Commercial Building Design* wherein the County shall encourage that new commercial development is consistent with the existing design of the surrounding community or neighborhood by encouraging similar façades, proportionate scale, parking, landscaping, and lighting that provides for night sky conservation and protection and; *1.1.15 LU-7.14 Contextual and Compatible Design* wherein the County shall ensure that new development respects Three Rivers' long heritage by requiring that development respond to its context, be compatible with the traditions and character of the community, and develop in an orderly fashion which is compatible with the scale of surrounding structures. *Objective 1.2 Rural Gateway Character:* Maintain and balance the existing natural environment with the rural gateway character of Three Rivers. *Policies:* *1.2.1 New Development Compatibility* to ensure that the size, type, and scale of new development in Three Rivers is compatible with the rural character of the community and; *1.2.13 SL-3.3 Highway Commercial* wherein the County shall require highway commercial uses to be located and designed to reduce their visual impact on the travel experience along State scenic highways and County scenic routes. *Objective 1.3 Rural Development Standards:* Establish and implement standards for rural development which incorporate the rural standards of the community. *Policies:* *1.3.1 County Project Review Committee* wherein new development proposals may be subject to County Project Review Committee for all new development in Three Rivers; *1.3.2 Development Standards* to ensure that development proposals conform to all development standards and guidelines to the extent feasible as determined to be reasonable and appropriate by the affected decision makers; *1.3.3 Noise Standards* to apply the noise standards found in the Tulare County Health and Safety Element (Part 1 Section 10.8). Utilize recommendations included in the community plan EIR to address and develop feasible noise standards to the extent feasible reflective of a foothill canyon environment; *1.3.4 Setbacks* to require adequate setbacks for residential, commercial and industrial uses, including, side and rear yards, landscaping and screening, as determined by the County Project Review Committee; *1.3.5 Signage Standards* to require standards for signage in Three Rivers, including regulations for: size, height, scale, color, lighting, and material. Incorporate Caltrans signage standards with community standards, as they apply to SR 198; *1.3.6 Lighting Standards* to establish lighting standards and guidelines as feasible and appropriate to minimize light pollution, glare, and light trespass and to protect the dark skies in Three Rivers and; *1.3.7 Vegetation Standards* to establish vegetation standards for residential and commercial development, and encourage the use of native vegetation in landscaping, when visible to common roadways. *Objective 1.4 Quality Office, Commercial and Light Industrial Development:* Establish and apply development and design standards to ensure quality professional office, commercial, and light, non-polluting industrial development. *Policies:* *1.4.1 Professional Office Design Standards* to design professional office, commercial and light, non-polluting, industrial developments to minimize adverse traffic impacts to residential areas; *1.4.2 Buffer Strips* to require office, commercial, and light industrial development to provide a naturally planted buffer strip, including shade trees, to separate the structures and the parking areas from SR 198; *1.4.3 Visual Standards* to establish landscaping, screening, and visual standards for commercial and industrial uses along SR 198 and; *1.4.4 Visual Screening* to require automobile storage yards and commercial and multi-family trash bins to be screened from view. *Goal 2: Economic Vitality:* A strong, diversified economic environment within Three Rivers which is consistent with the rural and visual atmosphere of the community. *Policies:* *2.1.3 Concentrate Commercial Development* to promote a concentration of industrial, professional office, and commercial activities and high density residential development within selected areas to allow for cost efficient provision of necessary services and to protect residential neighborhoods from negative impacts; *2.1.4 Highway-Oriented Commercial Development* to maintain existing commercial areas along SR 198 to the extent feasible for highway-oriented commercial development; *2.1.5 ED-5.4 Recreational Accommodations* wherein the County shall support the development of visitor-serving attractions and accommodations in unincorporated areas near natural amenities and resources that would not be diminished by tourist activities; *2.1.6 ED-5.5 Rivers* wherein the County shall encourage the development of recreational activities and promote tourism along the Kaweah River; *2.1.7 ED-5.6 Lakes* wherein the County shall promote Lake Kaweah as a major recreational area that includes camping, water sports, hiking, golf, conference/hotel facilities, and historic attractions; *2.1.8 ED-5.7 Foothills* wherein the County shall encourage additional recreational and visitor-serving development in the Sierra and foothills in areas such as Three Rivers; *2.1.11 ED-5.10 Visitor-Serving Business* wherein the County shall encourage visitor-serving businesses to coordinate their advertising; *2.1.13 ED-5.13 National Parks Tourism* wherein the County shall work with Sequoia and Kings Canyon National Parks, Giant Sequoia National Monument, Sequoia National Forest, and others to market these areas of the County as tourist destinations and; *2.1.14 ED-5.14 Interagency Cooperation* wherein the County shall cooperate with federal land management agencies to develop and promote Three Rivers as a gateway community. *Objective 2.2 Business Attraction, Expansion, and Retention:* To promote business growth and industry diversification and maintain a favorable business climate and a supportive economic foundation. *Policies:* *2.2.1 ED-2.1 Business Retention* wherein the County shall participate in regional business retention and expansion programs, such as the Rapid Response program to ensure that County services are accessible to businesses. *2.2.2 ED-2.5 Small Business* by recognizing the powerful job creation potential of small businesses, the County shall support entrepreneurial development and small business expansion and; *2.2.3 ED-2.6 Agency Support for Small Businesses* wherein the County

shall coordinate with other agencies to provide well-tailored services and job creation resources for small businesses, such as incubator zones. *Goal 4: Protection And Conservation Of The Environment:* Land use patterns and design solutions which protect and conserve the environmental quality and natural beauty in Three Rivers. *Objective 4.1 Protection of the Natural Environment:* Protect the natural environment by prohibiting land uses, activities, and development patterns that will have an adverse effect on the environmental quality of Three Rivers. *Policies:* *4.1.1 Preserving the Natural Environment* to maintain a serene and attractive natural environment by prohibiting land use activities that create excessive and unwanted noise and/or light in the community; *4.1.2 CEQA Compliance* to be consistent with CEQA, protect water quality and wildlife including sensitive and critical habitat in Three Rivers by prohibiting, to the extent feasible and appropriate, land use activities that endanger water quality and/or wildlife as a result of pollution and/or sedimentation and; *4.1.3 Mitigating Traffic Impacts* to ensure that new development does not excessively increase traffic flow through existing or planned residential areas. The County shall require an analysis of traffic impacts for land development projects that may generate increased traffic on County roads. Typically, applicants of projects generating over 100 peak hour trips per day or where LOS “D” or worse occurs, will be required to prepare and submit this study. The traffic impact study will evaluate impacts from all vehicles, including truck traffic.

**a) and b) No Impact:** The proposed Project is located within the Three Rivers Community Plan Urban Area Boundary and is properly zoned to accommodate the proposed Project. Further, the proposed Project is consistent with Tulare County General Plan policies and Three Rivers Community Plan goals, objectives, and policies noted above. The Project will not physically divide any established community or cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the Project would result in no impact to these resources.

**Cumulative Impact:** As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

## 12. MINERAL RESOURCES

Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Analysis:

#### Environmental Setting

Per the Tulare County General Plan Background Report, Tulare County is divided into two major physiographic and geologic provinces: the Sierra Nevada Mountains and the Central Valley. The Sierra Nevada Physiographic Province, in the eastern portion of the Tulare County, is underlain by metamorphic and igneous rock. It consists mainly of homogeneous granitic rocks, with several islands of older metamorphic rock. The central and western parts of the County are part of the Central Valley Province, underlain by marine and non-marine sedimentary rocks. It is basically a flat, alluvial plain, with soil consisting of material deposited by the uplifting of the mountains.

Economically, the most important minerals that are extracted in Tulare County are sand, gravel, crushed rock, and natural gas. Other minerals that could be mined commercially include tungsten, which has been mined to some extent, and relatively small amounts of chromite, copper, gold, lead, manganese, silver, zinc, barite, feldspar, limestone, and silica. Minerals that are present but do not exist in the quantities desired for commercial mining include antimony, asbestos, graphite, iron, molybdenum, nickel, radioactive minerals, phosphate, construction rock, and sulfur.

Aggregate resources are the most valuable mineral resource in Tulare County because it is a major component of the Portland cement concrete (PCC) and asphaltic concrete (AC). PCC and AC are essential to constructing roads, buildings, and providing for other infrastructure needs. There are four streams that have provided the main source of high quality sand and gravel in Tulare County:

Kaweah River, Lewis Creek, Deer Creek and the Tule River. The highest quality deposits are located at the Kaweah and Tule Rivers. Lewis Creek deposits are considerably inferior to those of the other two rivers.

#### Regulatory Setting

##### ***Federal***

There are no federal or local regulations pertaining to mineral resources relevant to the proposed project.

##### ***State***

#### California Surface Mining and Reclamation Act of 1975

Enacted by the State Legislature in 1975, the Surface Mining and Reclamation Act (SMARA), Public Resources Code Section 2710 et seq., insures a continuing supply of mineral resources for the State. The act also creates surface mining and reclamation policy to assure that:

- Production and conservation of minerals is encouraged;
- Environmental effects are prevented or minimized;
- Consideration is given to recreational activities, watersheds, wildlife, range and forage, and aesthetic enjoyment;
- Mined lands are reclaimed to a useable condition once mining is completed; and
- Hazards to public safety both now and in the future are eliminated.

Areas in the State (city or county) that do not have their own regulations for mining and reclamation activities rely on the Department of Conservation, Division of Mines and Geology, Office of Mine Reclamation to enforce this law. SMARA contains provisions for the inventory of mineral lands in the State of California. The State Geologist, in accordance with the State Board's Guidelines for Classification and Designation of Mineral Lands, must classify Mineral Resource Zones (MRZ) as designated below:

- MRZ-1. Areas where available geologic information indicates that there is minimal likelihood of significant resources.
- MRZ-2. Areas underlain by mineral deposits where geologic data indicate that significant mineral deposits are located or likely to be located.
- MRZ-3. Areas where mineral deposits are found but the significance of the deposits cannot be evaluated without further exploration.
- MRZ-4. Areas where there is not enough information to assess the zone. These are areas that have unknown mineral resource significance.

SMARA only covers mining activities that impact or disturb the surface of the land. Deep mining (tunnel) or petroleum and gas production is not covered by SMARA.

#### The Division of Mine Reclamation (DMR)

"In 1991, the Division of Mine Reclamation (DMR) was created to provide a measure of oversight for local governments as they administer the Surface Mining and Reclamation Act (SMARA) within their respective jurisdictions. While the primary focus is on existing mining operations and the return of those mined lands to a usable and safe condition, issues relating to abandoned legacy mines are addressed through the Abandoned Mine Lands Unit."<sup>227</sup>

In April 2016 following significant revisions to the Surface Mining and Reclamation Act of 1975 (SMARA), the Division of Mine Reclamation (DMR) was created, effective January 1, 2017. DMR replaces the Office of Mine Reclamation that was established in 1991 to provide a measure of oversight for local governments as they administer SMARA within their respective jurisdictions.<sup>228</sup>

##### ***Local***

#### Tulare County General Plan 2030 Update

<sup>227</sup> California Department of Conservation. Accessed October 2020 at: <https://www.conservation.ca.gov/dmr>

<sup>228</sup> Ibid. Accessed October 2020 at: <https://www.conservation.ca.gov/index/Documents/DMR-fact-sheet-2017.pdf>

The Tulare County General Plan 2030 Update: Chapter 8 – Environmental Resources Management contains the following goals and policies that relate to mineral resources and which have potential relevance to the Project’s California Environmental Quality Act (CEQA) review: *ERM-2.1 Conserve Mineral Deposits* wherein the County will encourage the conservation of identified and/or potential mineral deposits, recognizing the need for identifying, permitting, and maintaining a 50 year supply of locally available PCC grade aggregate; *ERM-2.2 Recognize Mineral Deposits* wherein the County will recognize as a part of the General Plan those areas of identified and/or potential mineral deposits and; *ERM-2.9 Compatibility* wherein the County will encourage the development of mineral deposits in a manner compatible with surrounding land uses.

- a) **No Impact:** Mineral resources located within Tulare County are predominately sand and gravel resources primarily provided by four streams: Kaweah River, Lewis Creek, Deer Creek, and the Tule River. The Kaweah River is the nearest of these four streams to the proposed Project site and is located west of the proposed Project site. Although very near the Kaweah River, the Project will not result in the loss of an available known mineral resource. The Tulare County General Plan Update (see Figure 8.1 Mineral Resource Zone in the General Plan) shows the locations of State-designated Mineral Resource Zones. According to the map, the proposed Project site is not located in or near a Mineral Resource Zone. The California Department of Conservation indicates that the nearest, active mining operation (Britten Granite, decomposed granite) is located approximately 0.5 miles east of the Project site.<sup>229</sup> As such, the proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- b) **No Impact:** The proposed Project site is not delineated on a local land use plan as a locally important mineral resource recovery site. Therefore, the proposed Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

**Cumulative Impact:** As there are no known mineral resources on the proposed Project site, and the nearest operation is an active decomposed granite operation, the proposed Project would not contribute to a cumulative impact.

13.	NOISE					
	Would the project result in:					
Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	b)	Generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Analysis:						
The proposed Project will result in Less Than Significant Impacts to the Noise Resources. The “Noise Impact Assessment for the Three Rivers Hampton Inn & Suites Project August” (NIA) prepared by ECORP Consulting, Inc. (Consultant) is included as Attachment “E” of this Initial Study. This NIA is used as the basis for determining that, based on the evidence/documentation						

<sup>229</sup> State of California Department Of Conservation Division of Mine Reclamation, Maps: Mines and Mineral Resources accessed May 2019 at: <https://maps.conservation.ca.gov/mol/index.html>.

(including incorporation of recommendations contained in the Report) and the expertise of qualified consultant ECORP Consulting, Inc. (Consultant), the proposed Project will result in a less than significant impact.

### **Environmental Setting**

The Health and Safety section of Tulare County's 2030 General Plan serves as the primary policy statement for the County for implementing policies to maintain and improve the noise environment in Tulare County. The Health and Safety section presents Goals and Objectives relative to planning for the noise environment within the County. Future noise/land use incompatibilities can be avoided or reduced with implementation of Tulare County's noise criteria and standards. Tulare County realizes that it may not always be possible to avoid constructing noise sensitive developments in existing noisy areas and therefore provides noise reduction strategies to be implemented in situations with potential noise/land use conflicts.

Within the Tulare County General Plan Background Report, existing noise levels were recorded within unincorporated areas of County. Noise level data collected during continuous monitoring included the hourly Leq and Lmax and the statistical distribution of noise levels over each hour of the sample period. The community noise survey results indicate that typical noise levels in noise-sensitive areas of the unincorporated areas of Tulare County are in the range of 29-65 dB Ldn. As would be anticipated, the quietest areas are those that are removed from major transportation-related noise sources and industrial or stationary noise sources.<sup>230</sup>

### ***Existing Environmental Noise Setting***

#### **Noise Sensitive Land Uses**

As indicated in the Noise Impact Assessment (NIA) for the proposed Project, "Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The Project site is generally surrounded by farmland and rural residential development, with commercial development concentrated along State Route (SR) 198. The nearest noise-sensitive receptors to the Project site are the Comfort Inn and Suites hotel building, located approximately 113 feet north of the Project site, a vacant commercial building located approximately 96 feet west of the Project site at the nearest point, and a residence located across State Highway [SR] 198 from the site at approximately 270 feet to the west. The distances to the Comfort Inn and Suites and the vacant commercial building were measured from the property line of the Proposed Project to the physical building. The parking lot and outdoor area associated with hotels and commercial uses are not considered sensitive receptors. Noise-sensitive hotel activities, such as sleeping and resting, would be performed indoors."<sup>231</sup>

#### **Existing Ambient Noise Environment**

In addition to describing noise sensitive land uses within the vicinity of the proposed Project, the NIA also includes a description of the existing ambient noise environment as follows; "The primary noise source in the Project vicinity is traffic. Existing roadway noise levels were calculated for the roadway segments in the Project vicinity. This task was accomplished using the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) (see Attachment B [of the NIA]) and traffic volumes from the Project's Traffic Impact Study (VRPA Technologies, Inc. 2020). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) used in the FHWA model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data shows that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along these roadway segments are presented in Table 2-3.

<sup>230</sup> County of Tulare General Plan 2030 Background Report. Page 8-77.

<sup>231</sup> "Noise Impact Assessment for the Three Rivers Hampton Inn & Suites Project August." 2020. Page 10. Prepared by ECORP Consulting, Inc.

**Table 2-3. Existing (Baseline) Traffic Noise Levels**

Roadway Segment	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway
<b>SR 198</b>		
South of Old Three Rivers Road	Residential and Commercial	58.4
Between Old Three River Road & Project Driveway	Residential and Commercial	58.4
North of Project Driveway	Residential and Commercial	58.4
<b>Old Three Rivers Road</b>		
East of SR 198	Residential	48.7
<i>Source: Traffic noise levels were calculated by ECORP using the FHWA roadway noise prediction model in conjunction with the trip generation rate identified by VRPA Technologies, Inc. (2020). Refer to Attachment B for traffic noise modeling assumptions and results.</i> <i>Note: A total of two intersections were analyzed in the Traffic Impact Study; roadway segments that impact sensitive receptors were included.</i>		

As shown, the existing traffic-generated noise level on Project-vicinity roadways currently ranges from 48.7 to 58.4 dBA CNEL. As previously described, CNEL is 24-hour average noise level with a 5 dBA “weighting” during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

The community of Three Rivers in the County of Tulare, which encompasses the Project site, is impacted by various noise sources. It is subject to both typical urban and rural noise, such as noise generated by traffic, heavy machinery, and day-to-day outdoor activities as well as noise generated from the various land uses (i.e., residential, commercial, and agricultural) throughout Three Rivers that generate stationary source noise. Mobile sources of noise, especially cars and trucks, are the most common source of noise in the community. The ambient noise environment in the County of Tulare is largely influenced by roadway noise. The Project site is located directly off SR 198, identified by the Tulare General Plan as one of two major regional state highways which traverse the County. The General Plan states that SR 198 connects from U.S. Highway 101 on the west and continues eastward to the County of Tulare, passing through the City of Visalia and into Sequoia National Park (Tulare 2012).<sup>232</sup>

#### Regulatory Setting

##### ***Federal***

##### Federal Highways Administration (FHWA) Highway Traffic Noise Prediction methodology

“In March 1998, the Federal Highway Administration (FHWA) released the Traffic Noise Model, Version 1.0 (FHWA TNM®). It was developed as a means for aiding compliance with policies and procedures under FHWA regulations. Since its release in March 1998, Version 1.0a was released in March 1999, Version 1.0b in August 1999, Version 1.1 in September 2000, Version 2.0 in June 2002, Version 2.1 in March 2003 and the current version, Version 2.5 in April 2004. The FHWA TNM is an entirely new, state-of-the-art computer program used for predicting noise impacts in the vicinity of highways. It uses advances in personal computer hardware and software to improve upon the accuracy and ease of modeling highway noise, including the design of effective, cost-efficient highway noise barriers.”<sup>233</sup>

##### Federal Aviation Administration (FAA)

“Aircraft operated in the U.S. are subject to certain federal requirements regarding noise emissions levels. These requirements are set forth in Title 14 CFR, Part 36. Part 36 establishes maximum acceptable noise levels for specific aircraft types, taking into account the model year, aircraft weight, and number of engines.”<sup>234</sup>

<sup>232</sup> Ibid. 10-11.

<sup>233</sup> U.S. Department of Transportation. Federal Highway Administration. Traffic Noise Model. Accessed October 2020 at: [http://www.fhwa.dot.gov/environment/noise/traffic\\_noise\\_model/](http://www.fhwa.dot.gov/environment/noise/traffic_noise_model/). Accessed October 2020.

<sup>234</sup> Tulare County Association of Governments 2018 Regional Transportation Plan/Sustainable Communities Draft EIR. Page 4.8-17. <https://tularecog.org/tcag/planning/regional-transportation-plan-rtp/rtp-20181/environmental-impact-report/>

## Federal Transit Administration

The Federal Transit Administration (FTA) has published guidance relative to vibration impacts. According to the FTA, engineered concrete and masonry buildings can be exposed to groundborne vibration levels of 0.3 inch per second without experiencing structural damage. Buildings extremely susceptible to vibration damage can be exposed to groundborne vibration levels of 0.12 inch per second without experiencing structural damage.<sup>235</sup>

## Federal Vibration Policies

The Federal Railway Administration (FRA) and the Federal Transit Administration (FTA) have published guidance relative to vibration impacts. According to the FRA, fragile buildings can be exposed to ground-borne vibration levels of 0.5 PPV without experiencing structural damage. The FTA has identified the human annoyance response to vibration levels as 80 RMS (Root Mean Square = The square root of the arithmetic average of the squared amplitude of the signal).<sup>236</sup>

## *State*

The California Noise Control Act was enacted in 1973 (Health and Safety Code § 46010 et seq.), and states that the Office of Noise Control (ONC) should provide assistance to local communities in developing local noise control programs. It also indicates that ONC staff will work with the OPR to provide guidance for the preparation of the required noise elements in city and county General Plans, pursuant to Government Code § 65302(f). California Government Code § 65302(f) requires city and county general plans to include a noise element. The purpose of a noise element is to guide future development to enhance future land use compatibility.

The State of California General Plan Guidelines, published by the Office of Planning and Research (OPR 2017), provides guidance in implementing Government Code 65302 (f) relating to a noise element of a general plan. In addition to the required noise element contents, OPR also provide its Noise Element Guidance in Appendix D of the General Plan Guidelines.<sup>237</sup> Government Code 62302(f) requires:

- “(1) A noise element that shall identify and appraise noise problems in the community. The noise element shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for all of the following sources:
- (A) Highways and freeways.
  - (B) Primary arterials and major local streets.
  - (C) Passenger and freight online railroad operations and ground rapid transit systems.
  - (D) Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation.
  - (E) Local industrial plants, including, but not limited to, railroad classification yards.
  - (F) Other ground stationary noise sources, including, but not limited to, military installations, identified by local agencies as contributing to the community noise environment
- (2) Noise contours shall be shown for all of these sources and stated in terms of community noise equivalent level (CNEL) or day-night average level (Ldn). The noise contours shall be prepared on the basis of noise monitoring or following generally accepted noise modeling techniques for the various sources identified in paragraphs (1) to (6), inclusive.
- (3) The noise contours shall be used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of community residents to excessive noise.
- (4) The noise element shall include implementation measures and possible solutions that address existing and foreseeable noise problems, if any. The adopted noise element shall serve as a guideline for compliance with the state’s noise insulation standard for the acceptability of projects within specific CNEL/Ldn contours. The guidelines also present adjustment factors that may be used in order to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community’s sensitivity to noise, and the community’s assessment of the relative importance of noise pollution.”<sup>238</sup>

## Noise Compatibility Guidelines

<sup>235</sup> Ibid. 118.

<sup>236</sup> U.S. Department of Transportation, “The Noise and Vibration Impact Assessment Manual”. September 2018. FTA Report No. 0123 Federal Transit Administration Page 113. [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf)

<sup>237</sup> Office of Planning and Research Chapter 4: Required Elements. Noise. Page 131. Accessed October 2020 at: [https://www.opr.ca.gov/docs/OPR\\_COMPLETE\\_7.31.17.pdf](https://www.opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf)

<sup>238</sup> Ibid. 131-132.



“The state has published guidance for locating land uses in areas compatible with the existing noise environment. These guidelines are shown in Table 4.8-7, Land Use Compatibility for Community Noise Environments [in the 2018 TCAG RTP/SCS. Program EIR]. For example, it would normally be acceptable for a single-family residence to be located in an area with an existing noise level of 60 dBA CNEL or less.”<sup>239</sup>

#### California Department of Transportation (Caltrans)

“The State of California establishes noise limits for vehicles licensed to operate on public roads. For heavy trucks, the state passby standard is consistent with the federal limit of 80 dBA at 15 meters from the centerline. The state passby standard for light trucks and passenger cars (less than 4.5 tons gross vehicle rating) is also 80 dBA at 15 meters from the centerline.”<sup>240</sup> Caltrans also has standards for new roadway, new proposed freeways, aeronautics, and aviation; however; these standards would not apply to this proposed Project.

#### **Local**

Analytical noise modeling techniques, in conjunction with actual field noise level measurements, were used to develop generalized Ldn or Community Noise Equivalent Level (CNEL) contours for traffic noise sources within Tulare County for existing conditions. Traffic data representing annual average daily traffic volumes, truck mix, and the day/night distribution of traffic for existing conditions (1986) and future were obtained from the Tulare County Public Works Department and used in the Tulare County Noise Element. The Tulare County General Plan 2030 Update Health & Safety Element (2012) includes noise and land use compatibility standards for various land uses. These are shown in **Table NOI-1** Land Use Compatibility for Community Noise Environments<sup>241</sup>;

**Table NOI-1**

Land Use Category	Community Noise Exposure-L <sub>dn</sub> or CNEL (dB)					
	50	55	60	65	70	80
Residential - Low Density Single Family, Duplex, Mobile Homes						
Residential - Multi-Family						
Transient Lodging - Motels, Hotels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concerts Halls, Amphitheaters						
Sports Arenas, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Professional						
Industrial, Manufacturing, Utilities, Agriculture						
<b>Normally Acceptable</b>	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.					
<b>Conditionally Acceptable</b>	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.					
<b>Normally Unacceptable</b>	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.					
<b>Clearly Unacceptable</b>	New construction or development generally should not be undertaken.					

[Source: Figure Noise-1, State Land Use Compatibility Standards for Community Noise Environment, California Governor's Office of Planning and Research, October 2003]

#### Tulare County General Plan 2030 Update/Health and Safety Element

<sup>239</sup> Tulare County Association of Governments 2018 Regional Transportation Plan/Sustainable Communities Draft EIR. Page 4.8-19.  
<https://tularecog.org/tcag/planning/regional-transportation-plan-rtp/rtp-20181/environmental-impact-report/>

<sup>240</sup> Ibid. 4.8-20.

<sup>241</sup> Tulare County General Plan 2030 Update. Goals and Policies Report. Page 10-25.



“The Health and Safety Element of the General Plan provides policy direction for minimizing noise impacts in the County and for establishing noise control measures for construction and operation of land use projects. By identifying noise-sensitive land uses and establishing compatibility guidelines for land use and noise, noise considerations will influence the general distribution, location, and intensity of future land use. The result is that effective land use planning and mitigation can alleviate the majority of noise problems.

The most basic planning strategy to minimize adverse impacts on new land uses due to noise is to avoid designating certain land uses at locations within the County that would negatively affect noise sensitive land uses. Uses such as schools, hospitals, childcare, senior care, congregate care, churches, and all types of residential use should be located outside of any area anticipated to exceed acceptable noise levels as defined by the Land Use Compatibility for Community Noise Environments table and pertinent goals and policies. Additionally, these uses should be protected from excess noise through sound attenuation measures such as site and architectural design and sound walls.

The County of Tulare has adopted these guidelines as a basis for planning decisions based on noise considerations. The land use compatibility guidelines are shown in Table 2-4 [of the NIA, **Table NOI-2** herein]. In the case that the noise levels identified at a proposed project site fall within levels considered normally acceptable, the project is considered compatible with the existing noise environment. The General Plan also identifies noise goals and policies set to minimize noise impacts within the County.<sup>242</sup>

<b>Table NOI-2. Land Use Compatibility for Community Noise Environments</b>				
<b>Land Use Category</b>	<b>Community Noise Exposure (Ldn or CNEL, dB)</b>			
	<b>Normally Acceptable</b>	<b>Conditionally Acceptable</b>	<b>Normally Unacceptable</b>	<b>Clearly Unacceptable</b>
Residential - Low Density Single Family, Duplex, Mobile Homes	≤ 60	55 - 70	70 -75	≥ 75
Residential – Multi-Family	≤ 65	60 - 70	70 -75	≥ 75
Transient Lodging – Motels, Hotels	≤ 65	60 - 70	70 - 80	≥ 80
Schools, Libraries, Churches, Hospitals, Nursing Homes	≤ 70	60 - 70	70 - 80	≥ 80
Auditoriums, Concerts Halls, Amphitheaters	NA	≤ 70	NA	≥ 65
Sports Arenas, Outdoor Spectator Sports	NA	≤ 75	NA	≥ 70
Playgrounds, Neighborhood Parks	≤ 70	NA	68-75	≥ 73
Golf Courses, Riding Stables, Water Recreation, Cemeteries	≤ 75	NA	70 – 80	≥ 80
Office Buildings, Business Commercial and Professional	≤ 70	68 – 78	≥ 75	NA
Industrial, Manufacturing, Utilities, Agriculture	≤ 75	70 - 80	≥ 75	NA
<i>Source: County of Tulare General Plan Health and Safety Element</i> <i>Notes:</i> <i>NA: Not Applicable; CNEL: Community Noise Equivalent Level</i> <i>Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.</i> <i>Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.</i> <i>Normally Unacceptable – New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Outdoor areas must be shielded.</i> <i>Clearly Unacceptable – New construction or development should generally not be undertaken</i>				

The Tulare County General Plan 2030 Update: Chapter 10 – Health and Safety contains the following goals and policies that relate to noise and which have potential relevance to the Project’s California Environmental Quality Act (CEQA) review: *HS-8.1 Economic*

<sup>242</sup> “Noise Impact Assessment for the Three Rivers Hampton Inn & Suites Project” August, 2020. Page 10. Prepared by ECORP Consulting, Inc. Pages 11-12.

*Base Protection* wherein the County shall protect its economic base by preventing the encroachment of incompatible land uses on known noise-producing industries, railroads, airports, and other sources; *HS-8.2 Noise Impacted Areas* wherein the County shall designate areas as noise-impacted if exposed to existing or projected noise levels that exceed 60 dB Ldn (or Community Noise Equivalent Level (CNEL)) at the exterior of buildings.; *HS-8.3 Noise Sensitive Land Uses* wherein the County shall not approve new noise sensitive uses unless effective mitigation measures are incorporated into the design of such projects to reduce noise levels to 60 dB Ldn (or CNEL) or less within outdoor activity areas and 45 dB Ldn (or CNEL) or less within interior living spaces; *HS-8.5*; *HS-8.6 Noise Level Criteria* wherein the County shall ensure noise level criteria applied to land uses other than residential or other noise-sensitive uses are consistent with the recommendations of the California Office of Noise Control (CONC); *HS-8.8 Adjacent Uses* wherein the County shall not permit development of new industrial, commercial, or other noise-generating land uses if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas designated and zoned for residential or other noise-sensitive uses, unless it is determined to be necessary to promote the public health, safety and welfare of the County; *HS-8.11 Peak Noise Generators* wherein the County shall limit noise generating activities, such as construction, to hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generating activities shall be allowed to occur outside of normal business hours without County approval; *HS-8.13 Noise Analysis* wherein the County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Health and Safety Element, where there is development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses; *HS-8.14 Sound Attenuation Features* wherein the County shall require sound attenuation features such as walls, berming, heavy landscaping, between commercial, industrial, and residential uses to reduce noise and vibration impacts; *HS-8.15 Noise Buffering* wherein the County shall require noise buffering or insulation in new development along major streets, highways, and railroad tracks; *HS-8.16 State Noise Insulation* wherein the County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code; *HS-8.17 Coordinate with Caltrans* wherein the County shall work with Caltrans to mitigate noise impacts on sensitive receptors near State roadways, by requiring noise buffering or insulation in new construction; *HS-8.18 Construction Noise* wherein the County shall seek to limit the potential noise impacts of construction activities by limiting construction activities to the hours of 7 a.m. to 7 p.m., Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors and; *HS-8.19 Construction Noise Control* wherein the County shall ensure that construction contractors implement best practices guidelines (i.e. berms, screens, etc.) as appropriate and feasible to reduce construction-related noise-impacts on surrounding land uses.

- a) **Less Than Significant Impact:** As detailed in the NIA, “The nearest noise receptors to the Project site are the Comfort Inn and Suites located approximately 113 feet north of the Project site, a vacant commercial building located approximately 96 feet west of the Project parking lot at the nearest point, and a residence located across State Highway [SR 198] from the site at approximately 270 feet to the west. As previously described, per General Plan Safety Element policy *HS-8.18*, construction activity is exempted provided that noise generating activity does not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday. As mandated by General Plan policy *HS-8.11*, no peak noise generating activities shall be allowed to occur outside of normal business hours without County approval. In addition, General Plan Policy *HS-8.19* requires construction noise control best practices to be implemented to minimize construction noise impacts.

Construction noise associated with the Proposed Project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. To estimate the worst-case construction noise levels that may occur at the nearest noise-sensitive receptors in the Project vicinity, the construction equipment noise levels were calculated using the Roadway Noise Construction Model for the site preparation, grading and building construction, paving and architectural coating. The anticipated short-term construction noise levels generated for the necessary equipment is presented in Table 2-5 [in the NIA, Table NOI-32 herein].

The nearest noise-sensitive receptor is located approximately 190 feet from the center of the Project site. As shown in Table 2-5 [in the NIA, **Table NOI-3** herein], the predicted maximum eight-hour noise levels at the vacant commercial building to the west could potentially reach approximately 74.4 dBA Leq, which is below the NIOSH threshold of 85 dBA. Thus, construction noise would reach even lower levels at the Comfort Inn and Suites and the nearest residence.

**Table NOI-3. Construction Average (dBA) Noise Levels at Nearest Receptor**

Equipment	Estimated Exterior Construction Noise Level @ Nearest Residence (dBA Leq)	NIOSH Construction Noise Standards (dBA Leq)	Exceeds Standard at Nearest Sensitive Receptor?

Site Preparation			
Grader	69.4	85	No
Scraper	68.0	85	No
Tractor/ Loader/ Backhoe	62.0	85	
<b>Combined Site Preparation Equipment</b>	<b>72.2</b>	85	<b>No</b>
Grading			
Rubber Tired Dozers	66.1	85	No
Graders	69.4	85	No
Tractors/Loaders/Backhoes (2)	62.0 (each)	85	No
<b>Combined Grading Equipment</b>	<b>72.0</b>	85	<b>No</b>
Building Construction/ Paving/ Architectural Coating			
Crane	61.0	85	No
Forklifts (2)	63.5 (each)	85	No
Generator Set	66.0	85	No
Tractors/Loaders/Backhoes (2)	62.0 (each)	85	No
Welders (3)	58.4	85	No
Cement and Mortar Mixer	63.2	85	
Paver	62.6	85	No
Rollers (2)	61.4 (each)	85	No
Paving Equipment	62.6	85	No
Air Compressors	66.3	85	No
<b>Combined Building Equipment</b>	<b>74.4</b>	85	<b>No</b>
<p><i>Source: Construction noise levels were calculated by ECORP Consulting, Inc. using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Attachment A for Model Data Outputs.</i></p> <p><i>Notes: Construction equipment used during construction derived from CalEEMod 2016.3.2. CalEEMod is designed to calculate air pollutant emissions from construction activity and contains default construction equipment and usage parameters for typical construction projects based on several construction surveys conducted in order to identify such parameters. The distance to the nearest sensitive receptor was calculated from the center of the Project site consistent with FTA (2018) recommendations (approximately 190 feet). Building construction, paving and architectural coating are assumed to occur simultaneously.</i></p>			

As shown [in **Table NOI-2**], no individual piece of construction equipment or cumulative construction equipment would exceed the NOISH threshold of 85 dBA at the closest residence. Therefore, Project construction activities would not expose persons to and generate noise levels in excess of NOISH standards and all construction activities would occur during the times permitted by the County.<sup>243</sup>

The Tulare County Resource Management Agency (RMA) agrees with the conclusions contained within and supported in the NIA prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would not expose persons to and generate noise levels in excess of NOISH standards and would comply with County noise limitation periods.

#### *Project Operational Offsite Traffic Noise*

The calculated noise levels as a result of the Project at affected sensitive land uses are compared to the operational noise standards in the County General Plan (Policy HS-8.3). In the case that the existing ambient noise levels already exceed the applicable numeric noise threshold, an increase of more than 5 dBA over the existing ambient noise level is considered significant. As previously described, a change in level of at least 5 dBA is required before any noticeable change in community response would be expected.

<sup>243</sup> Ibid. 18-19.

**Table NOI-4. Existing Plus Project Conditions - Predicted Traffic Noise Levels**

Roadway Segment	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway		Noise Standard (dBA CNEL)	Exceed Standard/ Significant Impact?
		Existing Conditions	Existing + Project Conditions		
SR 198					
South of Old 3 Rivers Road	Residential and Commercial	58.4	58.6	60	No
Between Old 3 Rivers Road and Project Driveway	Residential and Commercial	58.4	58.5	60	No
North of Project Driveway	Residential and Commercial	58.4	58.4	60	No
Old Three River Road					
East of SR 198	Residential	48.7	48.7	60	No
Source: Traffic noise levels were calculated by ECORP Consulting using the FHWA's Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels in conjunction with the trip generation rate identified by VRPA Technologies, Inc. 2020. Refer to Attachment B for traffic noise modeling assumptions and results.					
Notes: A total of 2 intersections were analyzed in the Traffic Impact Study; however, all roadway segments that impact sensitive receptors were included for the purposes of this analysis.					

As shown in Table 2-6 [in the NIA, **Table NOI-4** herein], predicted increase in traffic noise levels associated with the Project would be less than the County noise standards.” The RMA agrees with the conclusions contained within and supported in the NIA prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would result in noise level below the County noise standards.

#### *Operational Stationary Noise*

The loudest source of noise associated with the proposed hotel would be parking lot noise. Previous measurements were taken by ECORP staff during a weekday in the middle of a parking lot serving a large grocery store identified noise levels reaching 61.1 dBA at approximately 5 feet distant. These measurements were taken with a Larson Davis SoundExpert LxT precision sound level meter, which satisfies the American National Standards Institute for general environmental noise measurement instrumentation. Prior to the measurements, the SoundExpert LxT sound level meter was calibrated according to manufacturer specifications with a Larson Davis CAL200 Class I Calibrator. The proposed hotel would not be expected to generate noise levels at the same intensity as a large grocery store and therefore this reference noise applied to the Project is conservative.

The Project is proposing the development of a 105-room hotel. As stated previously, the parking lot would be the main source of stationary noise. Based on prior parking lot noise measurements taken by ECORP staff, the Project parking lot is conservatively estimated to reach a maximum noise level of 61.1 dBA, as explained above.

Considering the conservative parking lot noise measurement of 61.1 dBA at approximately five feet distant, the nearest noise-sensitive receptor, the vacant commercial building located 96 feet away from the Proposed Project Parking lot, would experience operational stationary noise levels of below 35.5 dBA. This falls below the County of Tulare operational noise threshold of 60 dBA (Policy HS-8.8).

Thus, the Proposed Project would not result in noise levels in excess of County noise standards. The Project would have a less than significant impact in this area.

The RMA agrees with the conclusions contained within and supported in the NIA prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would not exceed County noise standards.

#### *Land Use Compatibility*

The County of Tulare provides a Land Use Compatibility Table to gauge the compatibility of new land uses (the Proposed Project) relative to existing noise levels. As shown in Table 2-4 [in the NIA, **Table NOI-2** herein], a clearly compatible noise level for locating hotel uses is anything 65 dBA and under.

The predominate noise source in the Project vicinity is generated by traffic on SR 198. As shown in Table 2-6 above [in the NIA, **Table NOI-4** herein], traffic noise would not exceed 60 dBA under existing plus Project conditions.

Considering the attenuation of sound with distance and the reduction of exterior-to-interior noise levels provided by building walls, the noise experienced inside the proposed new hotel would be significantly less than 61.1 dBA. Thus, noise emitted from the adjacent hotel and commercial building would not exceed 65 dBA.

Therefore, the Project is considered a compatible land use with the adjacent hotel and vacant commercial building, both in terms of commercial land use class and in terms of noise falling in the normally compatible range for hotels and motels. Thus, the proposed and existing land uses are considered compatible.<sup>244</sup>

The RMA agrees with the conclusions contained within and supported by qualified expertise in the NIA prepared by consultant ECORP Consulting, Inc., that the proposed Project would result in a less than significant impact.

**b) Less Than Significant Impact:** A vibration analysis is also included in the NIA prepared by ECORP Consulting, Inc. As such, the NIA presents substantial and expert evidence that the proposed Project would not adversely impact the vibration component of the Noise resource. Vibration decreases rapidly with distance and it is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with typical construction equipment are summarized in Table 2-7 [in the NIA, **Table NOI-5** herein].

The County of Tulare does not regulate construction vibration. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020) recommended standard of 0.2 inch per second PPV with respect to the prevention of structural damage for normal buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings.

<b>Table NOI-5. Representative Vibration Source Levels for Construction Equipment</b>	
<b>Equipment Type</b>	<b>Peak Particle Velocity at 20 Feet (inches per second)</b>
Large Bulldozer	0.124
Caisson Drilling	0.124
Loaded Trucks	0.106
Rock Breaker	0.115
Jackhammer	0.049
Small Bulldozer/Tractor	0.004
<i>Source: FTA 2018; Caltrans 2020</i>	

Based on the vibration levels presented in Table 2-7 [in the NIA, **Table NOI-5** herein], ground vibration generated by heavy-duty equipment would not be anticipated to exceed approximately 0.124 inch per second PPV at 20 feet. Thus, the nearby structures would not be negatively affected.<sup>245</sup>

In addition to analyzing the potential for the to expose structures to substantial groundborne vibration during construction, the NIA analyzed the potential of the proposed Project's operation to result in excessive groundborne vibration. As concluded in the NIA, "Project operations would not include the use of any stationary equipment that would result in excessive groundborne vibration levels"<sup>246</sup>

<sup>244</sup> Op. Cit. 18-20.

<sup>245</sup> Op. Cit. 21-22.

<sup>246</sup> Op. Cit. 22.

The RMA agrees with the conclusions contained within and supported by qualified expertise in the NIA prepared by consultant ECORP Consulting, Inc., that the proposed Project would not generate excessive groundbourne vibration or groundbourne noise.

- c) **No Impact:** The nearest public airport or public use or airport, Woodlake Airport (in the City of Woodlake) is located approximately 16 miles west of the proposed Project site. Therefore, the proposed Project site is located outside of the 55 dB CNEL noise contour. The proposed Project is not within an airport land use plan or within two miles of a public airport or public use airport. The proposed Project will not conflict with Tulare County Airport Land Use Plan policy. The project would not expose people residing or working in the project area to excessive noise levels. This conclusion is supported by the NIA which notes, “Although aircraft flight patterns may cover Three Rivers, noise from aircrafts is not a significant issue in the community. As shown in the Tulare General Plan, the community of Three Rivers is well outside of the airport zone. Aircraft noise does not significantly impact the community of Three Rivers and the Proposed Project would not expose people visiting or working on the Project site to excess airport noise levels.”<sup>247</sup> The RMA agrees with the conclusions contained within and supported in the NIA prepared by qualified expert consultant ECORP Consulting, Inc. Therefore, there will be no impact.

**Cumulative Impact:** Cumulative noise impacts were analyzed in the NIA for cumulative construction noise and cumulative both analyses concluded that the proposed Project would not result in cumulative impacts; to wit regarding cumulative construction noise, “Construction activities associated with the Proposed Project and other construction projects in the area may overlap, resulting in construction noise in the area. However, construction noise impacts primarily affect the areas immediately adjacent to the construction site. Construction noise for the Proposed Project was determined to be less than significant following compliance with the County General Plan’s construction timing and construction noise control guidelines. The individual Project would not exceed the NOISH construction noise standard prior to implementation of construction noise control. Cumulative development in the vicinity of the Project site could result in elevated construction noise levels at sensitive receptors in the Project area.”<sup>248</sup> Regarding cumulative operational noise the NIA concluded, the cumulative long-term noise sources associated with development at the proposed Project site, combined with other cumulative projects, could cause local noise level increases. Noise increase as a result of the proposed Project would not exceed County standards. Therefore, the proposed Project would not contribute to cumulative impacts during operations.<sup>249</sup>

The RMA agrees with the conclusions contained within and supported in the NIA prepared by qualified expert consultant ECORP Consulting, Inc., that the proposed Project would not significantly contribute to a cumulative impact to this resource. Further, as there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

#### 14. POPULATION AND HOUSING

Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Analysis:

#### Environmental Setting

<sup>247</sup> Op. Cit.

<sup>248</sup> Op. Cit.

<sup>249</sup> Op. Cit. 23.

The California Department of Finance (DOF) provides population estimates for Tulare County. According to DOF population estimates, between 2010 and 2018, Tulare County grew from 442,179 to 475,834<sup>250</sup> persons; an increase of 33,655 persons. Between 2010 and 2018, the County experienced an average yearly population growth of 0.84 percent, for a total (Year 2018) population of 475,837. As of January 1, 2020, population estimates produced annually by the Department of Finance calculated Tulare County with a population estimate of 479,977 residents<sup>251</sup>.

As indicated in the 2018 Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS), Draft Environmental Impact Report (SCH #2012081070); “A vital input to the SCS development process was a credible forecast of population, housing and jobs. TCAG developed a new forecast for this RTP/SCS based on the most comprehensive and up-to-date regional forecasts and projections available. The growth forecast for the 2018 RTP/SCS incorporates substantial new data available from the 2010 Census and new projections published by the California Department of Finance, Demographic Research Office (DOF) in 2017. The growth forecast, based on the DOF projection, is much more restrained than in the previous 2014 RTP/SCS (see RTP Appendix F). The new demographic forecast is summarized in Table 3.0-5 [of the RTP/SCS], Tulare County Demographic Forecast. The new 2017 DOF population projection for the year 2040 (594,348) is significantly lower than that of the 2013 DOF projection for the year 2040 (722,838) used for the 2014 RTP/SCS, a difference of 128,490 persons. This is due to lower birthrates consistent with the state as a whole and the fact that Tulare County is still experiencing negative net migration (-150 persons in 2015) as opposed to the peak (+4,473 persons in 2004), as a result of the Great Recession.”<sup>252</sup>

## **Regulatory Setting**

### ***Federal***

#### U.S. Department of Housing and Urban Development (HUD)

“HUD’s mission is to create strong, sustainable, inclusive communities and quality affordable homes for all. HUD is working to strengthen the housing market to bolster the economy and protect consumers; meet the need for quality affordable rental homes; utilize housing as a platform for improving quality of life; build inclusive and sustainable communities free from discrimination; and transform the way HUD does business.”<sup>253</sup> However, as the Project does not propose any housing, HUD or other federal regulations do not apply to this Project.

### ***State***

#### California Department of Housing and Community Development (HCD)

HCD’s mission is to “Promote safe, affordable homes and strong vibrant communities throughout California.”<sup>254</sup> “In 1977, the State Department of Housing and Community Development (HCD) adopted regulations under the California Administrative Code, known as the Housing Element Guidelines, which are to be followed by local governments in the preparation of local housing elements. AB 2853, enacted in 1980, further codified housing element requirements. Since that time, new amendments to State Housing Law have been enacted. Each of these amendments has been considered during development of this Housing Element.”<sup>255</sup>

#### California Relocation Assistance Act

The State of California adopted the California Relocation Assistance Act (California Government Code §7260 et seq.) in 1970. This State law, which follows the federal Uniform Relocation Assistance and Real Property Acquisition Act, requires public agencies to provide procedural protections and benefits when they displace businesses, homeowners, and tenants in the process of implementing

<sup>250</sup> State of California, Department of Finance. E-4 Population Estimates for City, Counties, and the State, 2011-2018 With 2010 Census Benchmark. Sacramento, California. November 2012. Accessed in October 2020 at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-4/2010-18/>

<sup>251</sup> California Department of Finance. 2019 E-1 Population Estimates for Cities, Counties, and the State—January 1, 2018 and 2019. Accessed December 2019 at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/>.

<sup>252</sup> RTP/SCS PEIR 2018. Pages 3.0-47 and -48. April 2018. Accessed October 2020 at: <https://tularecog.org/tcag/planning/regional-transportation-plan-rtp/rtp-20181/environmental-impact-report/>

<sup>253</sup> U.S. Department of Housing and Urban Development, Mission, <https://www.hud.gov/about/mission>. Accessed October 2020.

<sup>254</sup> California Department of Housing and Community Development, Mission, <http://www.hcd.ca.gov/about/mission.shtml>. Accessed October 2020.

<sup>255</sup> Tulare County Housing Element 2015 Update. Page 1-3.

public programs and projects. This State law calls for fair, uniform, and equitable treatment of all affected persons through the provision of relocation benefits and assistance to minimize the hardship of displacement on the affected persons.

### ***Local***

#### Tulare County Regional Housing Needs Assessment Plan 2014-2023

The Tulare County Association of Governments (TCAG) was responsible for allocating the State's projections to each local jurisdiction within Tulare County including the County unincorporated area, which is reflected in this Housing Element. Tulare County has no control over the countywide population and housing projections provided to TCAG when it prepared the Regional Housing Needs Assessment Plan.

#### Tulare County Regional Blueprint 2009

This Blueprint includes the following preferred growth scenario principals:<sup>256</sup>

- Increase densities county-wide by 25% over the status quo densities;
- Establish light rail between cities;
- Extend Highway 65 north to Fresno County;
- Expand transit throughout the county;
- Maintain urban separators around cities; and
- Growth will be directed toward incorporated cities and communities where urban development exists and where comprehensive services and infrastructure are or will be provided.

#### Tulare County Housing Authority

"The Housing Authority of the County of Tulare (HATC) has been officially designated as the local public housing agency for the County of Tulare by the Board of Supervisors and was created pursuant to federal and state laws. ...HATC is a unique hybrid: a public sector agency with private sector business practices. Their major source of income is the rents from residents. The HATC mission is "to provide affordable, well-maintained rental housing to qualified low- and very low-income families. Priority shall be given to working families, seniors and the disabled. Tenant self sufficiency and responsibility shall be encouraged. Programs shall be self-supporting to the maximum extent feasible.""<sup>257</sup>

"HATC provides rental assistance to very low and moderate-income families, seniors and the handicapped throughout the county. HATC offers many different programs, including the conventional public housing program, the housing choice voucher program (Section 8), the farm labor program for families with farm labor income, senior housing programs, and other programs. They also own or manage some individual subsidized rental complexes that do not fall under the previous categories, and can provide information about other affordable housing that is available in Tulare County. All programs are handicap accessible. Almost all of the complexes have 55-year recorded affordability covenants."<sup>258</sup>

#### Tulare County General Plan/Housing Element Policies

As this is a commercial hotel project that provides temporary, transient housing for visitors/tourists and others seeking temporary accommodations (i.e., no housing units are proposed); there are no policies from the Tulare County General Plan/Housing Element that would apply to this Project.

**a) and b) No Impact:** The proposed Project is the construction and operation of a new hotel within the community of Three Rivers. Construction workers may be drawn from the local and regional area and would not result in the need for additional, permanent housing to accommodate this temporary workforce. The proposed Project will not induce population growth; rather, as noted earlier, it will provide temporary accommodations for visitors/tourists. There will be no impact that the proposed Project would induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). Additionally, the Project would not

<sup>256</sup> TCAG. Tulare County Regional Blueprint. May 2009. Page 18. <http://www.tularecog.org/RTPSCS/TulareCountyBluePrint.pdf> . Accessed May 2019.

<sup>257</sup> Tulare County Housing Element 2015 Update. Page 5-12. <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/110Part%20I%20Voluntary%20Elements%20Chapters%206,%2012%20and%2015/001CHP%206%20Tulare%20County%20Housing%20Element%20Update%202015/CHP%206%20TULARE%20COUNTY%20HOUSING%20ELEMENT%20UPDATE%202015.pdf>

<sup>258</sup> Ibid.



displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. As such, the proposed Project will result in **No Impact** to this resource.

**Cumulative Impact:** As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

## 15. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:		SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Analysis:

#### Environmental Setting

Several agencies provide fire protection within Three Rivers including the County of Tulare, Cal Fire, the National Park Service, and the U.S. Forest Service, the latter two organizations through memoranda of understanding (MOU) with Tulare County.<sup>259</sup> Cal Fire Station 35, Tulare County Station 14 (located at 41412 South Fork Drive in Three Rivers) and the National Park Service's Hammond Station (located at 44726 Mineral King Road) are within the Three Rivers UDB and provide the community with apparatus and crews to respond to fire outbreaks (structural and wildland) during fire season. Generally Cal Fire has responsibility over wildland and vegetation fires, and the County handles structural fires.<sup>260</sup> Additionally, the next nearest Tulare County Fire Station is Fire Station 13 located in Lemon Cove (at 32490 State Route 198), approximately 12 miles southwest of Three Rivers.<sup>261</sup>

The Tulare County Sheriff's Department has a resident deputy serving the rural population of Three Rivers. The resident deputy works one shift, five days week. The Sheriff's Department does not maintain a substation in Three Rivers. After hours law enforcement response to the community is dependent on request for service.<sup>262</sup>

The Three Rivers Union Elementary School is located on a 9.14-acre parcel of land (at 41932 State Route 198) within the Three Rivers Union School District. The school offers Kindergarten through 8th grade education and has had an average enrollment of 139 total students between school years 2014-2015 thru 2019-2020.<sup>263</sup> The school has 20 full and part-time employees including 10 teachers. Students beyond the 8th grade level attend Woodlake Union High School District. The Woodlake Union High School District serves grades 9-12 in the central region of Tulare County. The school district operates on a traditional schedule with 33 teachers. There is a maximum student capacity of 800 and an average daily attendance of 825 students. The district has two high schools, Bravo Lake High (continuation) serving grades 9-12 and Woodlake Union High serving grades 9-12.<sup>264</sup> Enrollment for year Grades 9-12 during the 2019-20 school year was 726 students.<sup>265</sup>

<sup>259</sup> Tulare County. Three Rivers Community Plan 2018 Update Draft EIR. Page 3.14-3.

<sup>260</sup> Ibid.

<sup>261</sup> Op. Cit.

<sup>262</sup> 3.14-4.

<sup>263</sup> CA Department of Education. 2020. Enrollment by Multi-Years 2016-2020. Accessed October 2020 at: <https://dq.cde.ca.gov/dataquest/dq census/EnrGrdYears.aspx?cds=5472207&agglelevel=district&year=2019-20>

<sup>264</sup> Tulare County, 2010. Tulare County General Plan 2030 Update Background Report. Page 7-86. <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/BackgroundReport.pdf>

<sup>265</sup> CA Department of Education. 2020. 2019-2020 Enrollment by Grade. Figure derived by using percentage of students in Grades 9-12 of total Woodlake School District student enrollment. Accessed October 2020 at: <https://dq.cde.ca.gov/dataquest/dq census/EnrGrdLevels.aspx?cds=54767945430285&agglelevel=school&year=2019-20>

Three Rivers does not have any public parks. The community is bordered to the west by a federal recreation area and to the north, south and east by a national park and BLM-administered multi-use area(s). See Item 15 Recreation, below.

#### Regulatory Setting

##### ***Federal***

None that are applicable to this Project.

##### ***State***

##### California Fire Code and Building Code

The purpose of the California Fire Code (Title 24, Part 9 of the California Code of Regulations) is to establish the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety and general welfare from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency operations.<sup>266</sup>

##### ***Local***

##### Tulare County Sheriff

The Tulare County Sheriff's Department (TCSd) is the primary law enforcement service provider for the unincorporated areas of Tulare County. The TCSd provides crime prevention and apprehension services across a wide range of activity sectors including: personal crime; property crime; agricultural crime; cybercrime; forensic services and specialized services (e.g., Dive team, Search and Rescue team, etc.). The Sheriff's Department also operates detention facilities for women, men and, juveniles.

##### Tulare County Fire Department (TCFD)

"Tulare County Fire Department mission is to provide all persons who reside, work or travel within the County of Tulare, with the protection of life, property and the environment within those areas, where the Tulare County Fire Department has direct protection responsibility by virtue of law, contract or mutual understanding. Tulare County Fire seeks to reduce public exposure to fire, risk and injury prevention programs that include public education, fire protection planning, fire prevention education, code enforcement, and fire suppression cost recovery."<sup>267</sup>

##### Tulare County General Plan 2030 Update

The following Tulare County General Plan 2030 Update, Chapter 14 – Public Facilities and Services, contains the following policies that relate to public services and may apply to this Project: *HS-7.6 Search and Rescue* wherein the County should continue to provide search and rescue operation capabilities for the Tulare County Sheriff's Department in mountainous areas; *PFS-7.2 Fire Protection Standards* wherein the County shall require all new development to be adequately served by water supplies, storage, and conveyance facilities supplying adequate volume, pressure, and capacity for fire protection; *PFS-7.3 Visible Signage for Roads and Buildings* wherein the County shall strive to ensure all roads are properly identified by name or number with clearly visible signs; *PFS-7.5 Fire Staffing and Response Time Standards* wherein the County shall strive to maintain fire department staffing and response time goals consistent with National Fire Protection Association (NFPA) standards; *PFS-7.6 Provision of Station Facilities and Equipment* wherein the County shall strive to provide sheriff and fire station facilities, equipment (engines and other apparatus), and staffing necessary to maintain the County's service goals. The County shall continue to cooperate with mutual aid providers to provide coverage throughout the County; *PFS-7.12 Design Features for Crime Prevention and Reduction* wherein the County shall promote the use of building and site design features as means for crime prevention and reduction; and *PFS-7.9 Sheriff Response Time* wherein the County shall work with the Sheriff's Department to achieve and maintain a response time of:

1. Less than 10 minutes for 90 percent of the calls in the valley region; and
2. 15 minutes for 75 percent of the calls in the foothill and mountain regions.

<sup>266</sup> 2016 California Fire Code (Title 24, Part 9 of the California Code of Regulations). Page 3. Accessed May 2019.  
<https://www.citymb.info/Home/ShowDocument?id=28089>

<sup>267</sup> Tulare County. Three Rivers Community Plan 2018 Update Draft EIR. Page 3.14-8.

### The Three Rivers Community Plan

The Tree Rivers Community Plan also includes *Goal 7: Provide Adequate Emergency And Safety Access: Objective 7.1 Adequate Emergency Access*: Ensure adequate access for emergency and safety vehicles, consistent with the State Response Area (SRA) standards, Foothill Growth Management Plan Development Standards, and Tulare County Improvement standards as applicable. *Policy 7.1.2 Accessibility to Public Safety Services* to require that new development is accessible to the Tulare County Fire Department and Sheriff's Department.<sup>268</sup>

- a) **Fire Protection – Less Than Significant Impact:** The County of Tulare will continue to provide fire protection services to the proposed Project site upon development. No residential construction is identified with this Project. Any vegetation that could present a fire hazard will be removed from the Project site. Additionally, the proposed Project site will be predominantly developed with the hotel (and ancillary uses such as the swimming pool) and paved parking areas thereby minimizing areas for ground cover to take root and prevent it from becoming a fire fuel hazard. As noted in the adopted Three Rivers Community Plan Update, "Community response time varies from one minute on a fairly flat terrain to three minutes on steeper terrain." As a result of Cal Fire Station 35, Tulare County Station 14 and the National Park Service's Hammond Station being located within Three Rivers and project design features, impacts to fire protection services will be less than significant.
- b) **Police Protection - Less than Significant:** The County of Tulare will continue to provide police protection services to the Project site upon development. Emergency response is adequate to the Project site. Should additional police protection services be required, the County of Tulare would request mutual assistance from other law enforcement agencies (e.g., Woodlake P.D., Exeter P.D., California Highway Patrol, etc.) to augment police services. As discussed in Item 14 a), no residential is proposed for this Project. As such, any impact to police services will be less than significant.
- c) **Schools – No Impact:** The nearest school, Three Rivers Elementary School, is located approximately 1.25 miles north of the proposed Project site in the Three Rivers. However, as discussed in Item 14 a), the Project will not include construction of any residential structures which could result in increases of school-aged children, nor change the existing land use. The Project will not result in an increase of population that will require additional school facilities because no employees will be assigned to on-site occupancy. There will be no impact.
- d) **Parks – No Impact:** Cutler County Park is the nearest County-operated park and is located approximately twenty miles west of the proposed Project site. As the proposed Project will not induce population growth, the proposed Project will not create a need for additional park or recreational services. No employees will be assigned to on-site occupancy at the proposed Project site. There will be no impact. Also, see Item 16 Recreation.
- e) **Other public facilities – No Impact:** The proposed Project will not require the need for other public facilities, as such, the proposed Project will result in no impact to this resource.

**Cumulative Impact:** The nature of the project will not result in permanent population growth, as such, the proposed Project would not result in demands for additional or expansion of school-related facilities. Fire and police protection services will remain as currently provided for both permanent residents and seasonal visitors/tourists. The proposed Project will not need to rely on or result in the need for addition or alteration of any public services and will utilize existing services provided by Tulare County. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

16.		RECREATION				
Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	a)	Would the project increase the use of existing neighborhood and regional parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>268</sup> Tulare County. Three Rivers Community Plan 2018 Update. Page 270.

		or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
	b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Analysis:

### Environmental Setting

“Tulare County contains several county, state, and federal parks. Aside from parks in the county, there are many open space areas as well. This section will highlight these various parks and open space areas and identify recreational opportunities within them.”<sup>269</sup> Two new parks were completed and became operational in the unincorporated communities of Plainview (Plainview Community Park) in 2016 and Earlimart (Earlimart Community Park) in 2017. In addition to the 15 parks and recreation facilities that are owned and operated by Tulare County, there are State Parks and Forests, National Parks and National Forests, trails, and recreational areas. Cutler County Park (an approximately 70-acre facility) is the nearest park to the Project site and located approximately twenty miles west of the proposed Project site. Lastly, each incorporated city in the County maintains and operates municipal park and recreation facilities which can also be accessed by the County's total population.

### Federal

#### Lakes Kaweah and Success

“Lake Kaweah was formed after the construction of the Terminus Dam on the Kaweah River in 1962. The lake offers many recreational opportunities including fishing, camping, and boating. Lake Kaweah is located 20 miles east of Visalia on Highway 198 and was constructed by the U.S. Army Corps of Engineers for flood control and water conservation purposes. The lake has a maximum capacity to store 143,000 acre-feet of water. There are a total of 80 campsites at the lake’s Horse Creek Campground, which contains toilets, showers and a playground. Campfire programs are also available. Aside from camping, boat ramps are provided at the Lemon Hill and Kaweah Recreation Areas. Both Kaweah and Horse Creek provide picnic areas, barbecue grills and piped water. Swimming is allowed in designated areas. In addition, there is a one-mile hiking trail between Slick Rock and Cobble Knoll, which is ideal for bird watching.

Lake Success was formed by construction of the Success Dam on the Tule River in 1961. The lake offers many recreational activities including fishing, boating, waterskiing, and picnicking. The U.S. Army Corps of Engineers (USACOE) constructed this reservoir for both flood control and irrigation purposes. The lake has a capacity of 85,000 acre-feet of water. The lake is located eight miles east of Porterville in the Sierra Nevada foothills area. Recreational opportunities include ranger programs, camping at the Tule campground, which provides 104 sites, boating, fishing, picnic sites, playgrounds and a softball field. Seasonal hunting is also permitted in the 1,400-acre Wildlife Management Area.”<sup>270</sup>

#### National Parks and National Forests

“Most of the recreational opportunities in the county are located in Sequoia National Forest, Giant Sequoia National Monument, and in Sequoia and Kings Canyon National Parks (SEKI). Although these parks span adjacent counties, they make a significant contribution to the recreational opportunities that Tulare County has to offer.”<sup>271</sup>

#### Sequoia National Forest

“Sequoia National Forest takes its name from the Giant Sequoia, which is the world’s largest tree. There are more than 30 groves of sequoias in the lower slopes of the park. The park includes over 1,500 miles of maintained roads, 1,000 miles of abandoned roads and 850 miles of trails for hikers, off-highway vehicle users and horseback riders. The Pacific Crest Trail connecting Canada and

<sup>269</sup> Tulare County General Plan 2030 Update Background Report. February 2010. Page 4-1. Access <http://generalplan.co.tulare.ca.us/documents.html> then scroll to Recirculated Draft EIR, the click on “Appendix B-Background Report”

<sup>270</sup> Ibid. 4-7

<sup>271</sup> Op. Cit. 4-8.

Mexico, crosses a portion of the forest, 78 miles of the total 2,600 miles of the entire trail. It is estimated that 10 to 13 million people visit the forest each year.”<sup>272</sup>

#### Giant Sequoia National Monument

“The Giant Sequoia National Monument was created in 2000 by President Clinton in an effort to preserve 34 groves of ancient sequoias located in the Sequoia National Forest. The Monument includes a total of 327,769 acres of federal land, and provides various recreational opportunities, including camping, picnicking, fishing, and whitewater rafting. According to the Giant Sequoia National Monument Management Plan EIS, the Monument includes a total of 21 family campgrounds with 502 campsites and seven group campgrounds. In addition, there are approximately 160 miles of system trails, including 12 miles of the Summit National Recreation Trail.”<sup>273</sup>

#### Sequoia and Kings Canyon National Parks (SEKI)

“The U.S. Congress created the Kings Canyon National Park in 1940 and Sequoia National Park in 1890. Because they share many miles of common boundaries, they are managed as one park. The extreme large elevation ranges in the parks (from 1,500 to 14,491 feet above sea level), provide for a wide range of vegetative and wildlife habitats. This is witnessed from exploring Mt. Whitney, which rises to an elevation of 14,491 feet, and is the tallest mountain in the contiguous United States. During the summer months, park rangers lead walks through the parks, and tours of Crystal and Boyden Caves. During the winter, visitors explore the higher elevations of the parks via cross country skis or snowshoes, or hike the trails in the foothills. The SEKI also contains visitor lodges, the majority of which are open year round. According to the National Parks Conservation Association, a combined total of approximately 1.5 million people visit the two parks on an annual basis.”<sup>274</sup>

#### ***State***

“The Mountain Home State Forest is a State Forest managed by the California Department of Forestry and Fire Protection (CDF). The Forest consists of 4,807 acres of parkland containing a number of Giant Sequoias, and is located just east of Porterville. The Forest is a Demonstration Forest, which is considered timberland that is managed for forestry education, research, and recreation. Fishing ponds, hiking trails, and campsites are some of the amenities that can be found in the Forest.”<sup>275</sup> Colonel Allensworth State Historic Park (approximately 3,715 acres in area) is located in the unincorporated community of Allensworth in southwestern Tulare County.

#### ***Other Recreational Facilities***

Other recreational resources available in Tulare County include portions of the Pacific Crest Trail, South Sierra Wilderness Area, Dome Land Wilderness Area, Golden Trout Wilderness Area, International Agri-Center, and the Tulare County Fairgrounds.<sup>276</sup>

In addition, there are several nature preserves open to the public which are owned and operated by non-profit organizations, including the Kaweah Oaks Preserve and Dry Creek- Homer Ranch preserves, both owned and operated by Sequoia Riverlands Trust

#### ***Local***

##### Parks

Three Rivers does not have a County owned-operated public park. As noted earlier, Cutler County Park is the nearest County owned/operated park near the Project site. It is an approximately 70-acre day use park; reservations for picnic areas are available and there is no entrance fee.

##### Schools

“A total of 48 school districts provide education throughout Tulare County... Of the 48 school districts, seven are unified districts providing educational services for kindergarten through 12<sup>th</sup> grade. The remaining 41 districts consist of 36 elementary school

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<sup>272</sup> Op. Cit. 4-9.

<sup>273</sup> Op. Cit.

<sup>274</sup> Op. Cit.

<sup>275</sup> Op. Cit. 4-7.

<sup>276</sup> Op. Cit. 4-10 to 4-11.

districts and four high school districts. Many districts only have one school.”<sup>277</sup> As noted earlier, the nearest school is Three Rivers Elementary located in Three Rivers, approximately 1.25 miles north of the proposed Project site on a 9.14-acre parcel. The school offers Kindergarten through 8th grade education and has had an average enrollment of 139 total students between school years 2014-2015 thru 2019-2020.

#### Regulatory Setting

##### **Federal**

None that apply to this Project.

##### **State**

None that apply to this Project.

##### **Local**

None that apply to this Project.

**a) No Impact:** As discussed in Item 15 e), the proposed Project will not increase the demand for recreational facilities nor will it put a strain on the existing recreational facilities. Although approximately 13 employees will work at the proposed Project site, no population growth will be associated with the proposed Project or necessitated by the proposed Project as the employees are anticipated to be drawn from the local workforce. The only potential impact on recreational facilities may occur if construction workers decide to recreate at their own leisure outside of work hours. As noted earlier, the nearest County owned/operated park is Cutler County Park approximately 20 miles west of the proposed Project site. As such, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Therefore, there will be no impact to this resource.

**b) No Impact:** The proposed Project does not include recreational facilities, As there is no population growth associated with the proposed Project, there will be no need to construct or expand any recreational facilities as there would be no adverse physical effect on the environment; therefore, there would be impact to this resource.

**Cumulative Impact:** The nature of the proposed Project will not result in permanent population growth, as such, the proposed Project would not result in demands for additional or expansion of recreation-related facilities. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

## 17. TRANSPORTATION

Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Conflict with a program, plan, ordinance or policy addressing circulation systems, including transit, roadway, bicycle and pedestrian facilities?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, (e.g., farm equipment)?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Result in inadequate emergency access?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>277</sup> Tulare County General Plan 2030 Update Background Report. Pages 7-75 and 7-76. <http://generalplan.co.tulare.ca.us/documents.html> then scroll to Recirculated Draft EIR, the click on “Appendix B-Background Report”

## Analysis:

The proposed Project will result in Less Than Significant Impacts to Transportation resources. The “Three Rivers Hampton Inn & Suites” Traffic Impact Study Report (Traffic Impact Study or TIS) was prepared by a VRPA Technologies, Inc. (Consultant) in June 2020 which is included as Attachment “F” of this Initial Study. This TIS is used as the basis for determining that, based on the evidence/documentation (including incorporation of recommendations contained in the TIS) and the expertise of qualified consultant VRPA Technologies, Inc., the proposed Project will result in a less than significant impact.

## Environmental Setting

“Tulare County has two major regional highways, State Highway [SR] 99 and 198. State Highway 99 [SR] connects Tulare County to Fresno and Sacramento to the north and Bakersfield to the south. State Highway [SR] 198 connects from U.S. Highway 101 on the west and continues eastward to Tulare County, passing through the City of Visalia and into Sequoia National Park. The highway system in the County also includes State highways, County-maintained roads, and local streets within each of the eight cities.”<sup>278</sup>

“Tulare County’s transportation system is composed of several State Routes, including three freeways, multiple highways, as well as numerous county and city routes. The County’s public transit system also includes two common carriers (Greyhound and Orange Belt Stages), the AMTRAK Service Link, other local agency transit and paratransit services, general aviation, limited passenger air service and freight rail service.”<sup>279</sup>

“Travel within Tulare County is a function of the size and spatial distribution of its population, economic activity, and the relationship to other major activity centers within the Central Valley (such as Fresno and Bakersfield) as well as more distant urban centers such as Los Angeles, Sacramento, and the Bay Area. In addition, there is considerable travel between the northwest portions of Tulare County and southern Fresno County and travel to/from Kings County to the west. Due to the interrelationship between urban and rural activities (employment, housing, services, etc.) and the low average density/ intensity of land uses, the private automobile is the dominant mode of travel for residents in Tulare County.”<sup>280</sup>

As described in the TIS, “This Traffic Impact Study (TIS) has been prepared for the purpose of analyzing traffic conditions related to the Three Rivers Hampton Inn & Suites Development (Project). The Project seeks to develop a 105-room hotel to be located off of State Route (SR) 198 (Sierra Drive), approximately 1,100 feet north of Old 3 Rivers Road in the Three Rivers Community.

Three Rivers is located in the Kaweah River canyon, just above Lake Kaweah, approximately 28 miles east of the City of Visalia as shown in Figure 1-1 [in the TIS]. Three Rivers’ name comes from its location near the junction of the North, Middle, and South Forks of the Kaweah River. The surrounding terrain is marked by oak woodland forest and foothills. Three Rivers is located in the northern portion of Tulare County at an elevation of 825 feet above sea level with a total area of 45.4 square miles. Three Rivers is the gateway town for the Ash Mountain Main Entrance to Sequoia-Kings Canyon National Park, home of the Giant Sequoia trees.”<sup>281</sup>

The TIS also describes the following: Project Access: The Project will have one (1) driveway along SR 198, approximately 1,100 feet to the north of Old 3 Rivers Road; Study Area: The Project location is shown in Figure 1-2 [of the TIS] and the Project site plan is provided in Appendix A [of the TIS]. The following intersections analyzed in this TIS are shown in Figure 1-2 [of the TIS] and include the intersections of SR 198 (Sierra Drive) / Project Driveway and Old Three Rivers Road; Study Scenarios of level of service (LOS) for the following traffic scenarios: Existing, Existing Plus Project, Near-Term Plus Project, Cumulative Year 2042 Without Project, and Cumulative Year 2042 Plus Project.”<sup>282</sup>

The TIS also provides a description of the Methodology used for intersection analysis and policies to maintain level of service (LOS). It is important distinguish varying LOS thresholds (they are, A through F with A being optimum while F is the minimum), thus the TIS explains how Tulare County’s and Caltrans’ LOS may differ. However, for the Three Rivers area (i.e., along SR 198), Caltrans agrees that the County’s General Plan minimum of LOS D would be appropriate within the Three Rivers Urban Development Boundary (UBD) planning area.”<sup>283</sup>

<sup>278</sup> Tulare County. Three Rivers Community Plan 2018 Update Draft Environmental Impact Report (Draft EIR). Page 3.16-2.

<sup>279</sup> Ibid.

<sup>280</sup> Op. Cit.

<sup>281</sup> “Three Rivers Hampton Inn & Suites” Traffic Impact Study Report.” June 2020. Prepared by a VRPA Technologies, Inc. and included in Attachment “F” of this document.

<sup>282</sup> Ibid. 1.

<sup>283</sup> Op. Cit. 5.

Included within the TIS are descriptions of various existing conditions to consider including. As noted in the TIS, “The first step toward assessing Project traffic impacts is to assess existing traffic conditions. Typically, existing peak hour counts are collected in the study area for purposes of evaluating existing conditions. However, the present COVID-19 pandemic has altered travel patterns in the State of California, especially with the closure of the Sequoia-Kings Canyon National Park. As a result, existing traffic counts would be skewed and wouldn’t reflect typical travel patterns in the study area.”<sup>284</sup> In addition to Existing Traffic Counts, Consultant VRPA also considered Roadway Geometrics; Existing Functional Roadway Classification System, Affected Streets and Highways; Level of Service (that is Intersection Capacity Analysis and Queuing Analysis); Public Transit and Active Transportation Systems. The considerations are contained in and full described in the TIS on pages 7 through 13.<sup>285</sup>

With Existing Conditions in hand, Consultant provided: an assessment of traffic the proposed Project is expected to generate and the impact of that traffic on the surrounding street system in regards to Trip Generation by the project which may impact surrounding street and high segments and intersections; distribution of traffic caused by the proposed Project; an analysis of existing plus proposed Project scenario to include existing traffic plus traffic generated by development of the proposed Project; an analysis of approved or pending developments that have not yet been built in the vicinity of the Project in addition to the proposed Project), an analysis of near-term plus proposed Project traffic conditions, a cumulative Year 2042 without the proposed Project traffic conditions; a cumulative Year 2042 plus proposed Project traffic conditions, an intersection capacity analysis and; a queuing analysis.<sup>286</sup>

## Regulatory Setting

### ***Federal***

None that apply to this proposed Project.

### ***State***

#### Caltrans: Transportation Concept Reports

Each District of the State of California Transportation Department (Caltrans) prepares a Transportation Concept Report (TCR) for every state highway or portion thereof in its jurisdiction. The TCR usually represents the first step in Caltrans’ long-range corridor planning process. The purpose of the TCR is to determine how a highway will be developed and managed so that it delivers the targeted LOS and quality of operations that are feasible to attain over a 20-year period, otherwise known as the “route concept” or beyond 20 years, for what is known as the “ultimate concept”. As the proposed Project is within the Caltrans District 6 region, SR 198 TCR would apply to the proposed.

#### Caltrans Guide for the Preparation of Traffic Impact Studies

“The California Department of Transportation (Caltrans) has developed this "Guide for the Preparation of Traffic Impact Studies" in response to a survey of cities and counties in California. The purpose of that survey was to improve the Caltrans local development review process (also known as the Intergovernmental Review/California Environmental Quality Act or IGR/CEQA process). The survey indicated that approximately 30 percent of the respondents were not aware of what Caltrans required in a traffic impact study (TIS).”<sup>287</sup>

### ***Local***

#### Tulare County Transportation Control Measures (TCM)

“Transportation Control Measures (TCM) are designed to reduce vehicle miles traveled, vehicle idling, and/or traffic congestion in order to reduce vehicle emissions. Currently, Tulare County is a nonattainment region under the Federal Clean Air Act (CAA) and the California Clean Air Act (CCAA). Both of these acts require implementation of TCMs. These TCMs for Tulare County are as follows:

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<sup>284</sup> Op. Cit. 7.

<sup>285</sup> Op. Cit. 7.

<sup>286</sup> Op. Cit. 14-23.

<sup>287</sup> Tulare County. Three Rivers Community Plan 2018 Update. Draft Environmental Impact Report. 2018. Page 3.16-22 and -23.



- Rideshare Projects;
- Park and Ride Lots;
- Alternate Work Schedules;
- Bicycle Facilities;
- Public Transit;
- Traffic Flow Improvement; and
- Passenger Rail and Support Facilities.”<sup>288</sup>

#### Tulare County Association of Governments (TCAG)

Assembly Bill (AB) 69 State law has required the preparation of Regional Transportation Plans (RTPs) to address transportation issues and assist local and state decision makers in shaping California’s transportation infrastructure.”<sup>289</sup> The Tulare County Association of Government has prepared the 2014 Regional Transportation Plan. Specific policies that may apply to the proposed Project include:<sup>290</sup>

#### Tulare County General Plan 2030 Update

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: *TC-1.16 County Level Of Service (LOS) Standards* wherein the County shall strive to develop and manage its roadway system (both segments and intersections) to meet a LOS of “D” or better in accordance with the LOS definitions established by the Highway Capacity Manual; and *HS-1.9 Emergency Access* wherein the County shall require, where feasible, road networks (public and private) to provide for safe and ready access for emergency equipment and provide alternate routes for evacuation.

The Three Rivers Community Plan 2018 Update contains Objectives/Tactics<sup>291</sup> that may be applicable to this proposed Project. It is noted that the entirety of an Objective/Tactic may not apply to the proposed Project. Some Objectives/Tactics contain some elements that would apply and others that may not or not feasible due to physical constraints or jurisdiction by a non-Tulare County entity (e.g., Caltrans) where the County has no jurisdiction and does not have the authority to make policy decisions. Following are some Objectives/Tactics that may apply to the proposed Project: *Objective 1*: Design and implement a multi - modal transportation system that will serve projected future travel demand, minimize congestion, and address future growth in Three Rivers; *Objective 4*: Ensure the provision of adequate off- street parking for all land uses; *Objective 10*: Support the use of Transportation Demand Management (TDM) strategies to reduce dependence on the single - occupant vehicle, increase the ability of the existing transportation system to carry more people, and enhance mobility along congested corridors.

- a) **Less Than Significant Impact:** Based on the analysis contained in the TIS, qualified expert consultant VRPA determined that the proposed Project would result in a less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. As noted in the TIS, “An important goal is to maintain acceptable levels of service along the highway, street, and road network. To accomplish this, Tulare County RMA and Caltrans adopt minimum levels of service in an attempt to control congestion that may result as new development occurs. Tulare County’s 2030 General Plan, policy number TC-1.16, identifies a minimum LOS standard of “D” on the County roadway system (both segments and intersections). Caltrans’ SR-198 Transportation Concept Report (TCR) identifies the 2040 concept as LOS “D”.

Results of the analysis show that the proposed Project will not exceed the minimum LOS standard of “D” as shown in Tables 2-1 and 3-2 [in the TIS].

The Project does not conflict with any applicable adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Tulare County Area Transit (TCaT) Route 30 (Northeast County Route) operates between the Three Rivers Memorial Building and the Visalia Transit Center in downtown Visalia. Route 30 provides 4 roundtrips to the Visalia Transit Center on weekdays and 1 roundtrip on the weekend, all at 4-hour intervals. Implementation of the Project will not hinder the operation of Route 30 in the Three Rivers Community.

<sup>288</sup> Tulare County. Tulare County 2030 General Plan 2030 Update Recirculated Draft Environmental Impact Report. Page 3.2-2.

<sup>289</sup> California Transportation Commission, 2017; 2017 Regional Transportation Plan Guidelines for Metropolitan Planning Organizations. Page 9. [http://www.dot.ca.gov/hq/tpp/offices/orip/rtp/index\\_files/2017FINALDraft\\_MPORTPGuidelines.pdf](http://www.dot.ca.gov/hq/tpp/offices/orip/rtp/index_files/2017FINALDraft_MPORTPGuidelines.pdf)

<sup>290</sup> Tulare County Association of Governments. Regional Transportation Plan. 2018 Policy Element. Page A-15 and A-16. <https://tularecog.org/tcag/planning/regional-transportation-plan-rtp/rtp-2018/policy-element/>

<sup>291</sup> Three Rivers Community Plan 2018 Update. Pages 320-321, 322, and 325. Accessed at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/community-plans/updated-community-plans/three-rivers-community-plan-adopted-pdf/>

Caltrans' SR 198 TCR indicated that bicycles are permitted along the SR 198 corridor in the Three Rivers Community. The proposed Project will not prohibit the use of bicycles along SR 198. The SR 198 TCR also indicates that pedestrian facilities are nonexistent in the Three Rivers community. The Project will comply with Tulare County General Plan goals, which include Bicycle/Pedestrian Trail System (TC-5.1) and Consideration of Non-Motorized Modes in Planning and Development (TC-5.2).

Therefore, the Project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. Therefore, no mitigation is needed. As such, the proposed Project would result in a less than significant impact."<sup>292</sup>

- b) Less Than Significant Impact:** Based on the analysis contained in the TIS, qualified expert consultant VRPA determined that the proposed Project would result in a less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. As noted in the TIS, "In the fall of 2013, Senate Bill 743 (SB 743) was passed by the legislature and signed into law by the governor. For California, this legislation will eventually change the way that transportation studies are conducted for environmental documents. Delay-based metrics such as roadway capacity and level of service will no longer be the performance measures used for the determination of the transportation impacts of projects in studies conducted under CEQA. Instead, new performance measures such as vehicle miles travelled (VMT) or other similar measures will be used.

July 1, 2020 is the statewide implementation date and agencies may opt-in use of new metrics prior to that date. Therefore, the traffic analysis currently follows current practice regarding state and local guidance as of the date of preparation.

Tourism is the largest and most important industry in the Three Rivers area, as the town is situated near Sequoia National Forest, which receives over 1.2 million annual visitors, and Kings Canyon National Park, which receives nearly 700,000 annual visitors. The industries and businesses surrounding Three Rivers are almost all related to visitors passing through, en route to the Sequoia National Forest and Kings Canyon National Park. The Three Rivers Community and surrounding area features a multitude of boutique lodging facilities, restaurants, and small retail shops to support the area's small population and transient travelers.

The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable accommodations or stay in properties located outside the market area. Seeking accommodations outside of the desired market area increases VMT since travelers would be forced to travel longer distances to secure accommodations. The development of the Project would reduce the unaccommodated demand, thus reducing VMT in the market area. Therefore, no mitigation is needed. As such, the proposed Project would result in a less than significant impact."<sup>293</sup>

- c) Less Than Significant Impact:** Based on the analysis contained in the TIS, qualified expert consultant VRPA determined that the proposed Project would result in a less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. As noted in the TIS, "The Project would not result in hazards due to design features, since all proposed improvements (Project Driveway) would be built to County design standards. Access to the proposed Project will be provided at one (1) driveway along SR 198 (Sierra Drive), which is an existing driveway within Tulare County jurisdiction. Internal traffic and parking operations will be designed in accordance with Tulare County design standards. The proposed Project seeks to utilize a plot of relatively undeveloped land for a hotel with approximately 105 rooms in a rural area surrounded by rural/agricultural residences. The Project would not increase the use of farm equipment on streets and roads in the Three Rivers Community. As a result, the Project will not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Therefore, no mitigation is needed."<sup>294</sup> As such, the proposed Project would result in a less than significant impact.
- d) No Impact:** Based on the analysis contained in the TIS, qualified expert consultant VRPA determined that the proposed Project would result in a less than significant impact. Tulare County RMA agrees with and supports the assessment and conclusion. As noted in the TIS, The Project would not result in any degradation of emergency access within the community. Congestion at an intersection or along a roadway can adversely impact emergency access. Results of the traffic analysis shows that all of the

<sup>292</sup> "Three Rivers Hampton Inn & Suites Traffic Impact Study Report." June 2020. Pages 24-25. Prepared by a VRPA Technologies, Inc. and included in Attachment "F" of this document.

<sup>293</sup> Ibid. 25-26.

<sup>294</sup> Ibid. 26.

study intersections and roadway segments will meet Tulare County's and Caltrans' LOS "D" criteria through the year 2042. As a result, the Project will not result in inadequate emergency access. Therefore, no mitigation is needed. As such, the proposed Project would result no impact.<sup>295</sup>

**Cumulative Impact:** The nature of the proposed Project is to accommodate transient tourist/visitors in the area of Three Rivers. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

## 18. TRIBAL CULTURAL RESOURCES

Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Analysis:

The proposed Project will result in Less Than Significant Impacts to Tribal Cultural Resources with mitigation. The "*Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers*" (CRIR or Report) was prepared by ECORP Consulting, Inc. (Consultant) in June 2020 which is included as Attachment "C" of this Initial Study. This Report is used as the basis for determining that, based on the evidence/documentation (including incorporation of recommendations contained in the Report) and the expertise of qualified consultant ECORP Consulting, Inc. (Consultant), the proposed Project will result in a less than significant impact.

**Environmental Setting**

As described in the Report, "The Project Area is located in a rural residential and commercial center in the unincorporated community of Three Rivers along Sierra Drive/Highway 198. This area is in the foothills of the Sierra Nevada at the edge of the San Joaquin Valley. Three Rivers is in the Kaweah River canyon, the gateway to the entrance to Sequoia and Kings Canyon National Parks. The Project Area is along the southern bank of the Kaweah River, which is 200 feet west, and is approximately five miles northwest of Kaweah Lake. Highway 198 separates the Project Area land from the Kaweah River. Elevations range from 755 to 765 feet above mean sea level"<sup>296</sup>

### Records Search Results

Consultant undertook a records search with the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS) at California State University, Bakersfield on May 18, 2020 (SSJVIC, included in the Report). As indicated in the Report, "The purpose of the records search was to determine the extent of previous surveys within

<sup>295</sup> Op. Cit.

<sup>296</sup> "*Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers*" (CRIR or Report). Page 4. June 2020. Prepared by ECORP Consulting, Inc. and included in Attachment "C" of this Initial Study.

a 0.5-mile (800-meter) radius of the proposed Project location, and whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area.”<sup>297</sup>

“In addition to the official records and maps for archaeological sites and surveys in Tulare County, the following historic references were also reviewed: Historic Property Data File for Tulare County (OHP 2012); The National Register Information System (NPS 2020b); Office of Historic Preservation, California Historical Landmarks (OHP 2020); California Historical Landmarks (OHP 1996 and updates); California Points of Historical Interest (OHP 1992 and updates); Directory of Properties in the Historical Resources Inventory (1999); Caltrans Local Bridge Survey (Caltrans 2019); Caltrans State Bridge Survey (Caltrans 2018); and Historic Spots in California (Kyle 2002). Other references examined include a RealQuest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM] 2020).”<sup>298</sup> Historic maps reviewed include: □ 1870 BLM GLO Plat map for Township 17 South Range 28 East; 1885 BLM GLO Plat map for Township 17 South Range 28 East; 1892 Tulare County, California Map (published by Thos. H. Thompson, page 046, Sequoia National Park 3, Kaweah); 1957 USGS Kaweah, California topographic quadrangle map (15-minute scale); 1986 USGS Kaweah, California topographic quadrangle map (1:62,500 scale); and 1986 photo revised 1994 USGS Kaweah, California topographic quadrangle map (1:24,000 scale).<sup>299</sup> Historic aerial photos taken in 1955, 1989, 2005, 2009, 2010, and 2012 were also reviewed for any indications of property usage and built environment.<sup>300</sup>

### Native American Consultation

The Native American Heritage Commission (NAHC) maintains a contact list of Native American Tribes as having traditional lands located within the County’s jurisdiction. A search of the Sacred Lands Inventory on file with the Native American Heritage Commission (NAHC) was also requested by Consultant and resulted in negative results (i.e., no sacred lands were identified in the Project site) in a letter received from the NAHC on May 13, 2020 (see Attachment “C”). Pursuant to AB 52 Tulare County RMA staff contacted seven Native American Tribes (see Attachment “C”) by certified mail on April 11, 2019 regarding the proposed Project. As of the publication date of this Initial Study, the County has not receive any response from any of the Tribes. The Tribes will have an opportunity to comment on the Draft EIR upon its release. Upon written request, any Tribe seeking a confidential copy of the Cultural Resource Inventory Report will be allowed that opportunity. Due to the nature of confidential information contained in the Report, it will not be readily available to the public; however, Tulare County will allow access to the Report within legal limitations.

## **Regulatory Setting**

### ***Federal***

#### The National Historic Preservation Act

“The Advisory Council on Historic Preservation (ACHP) is an independent federal agency with the primary mission to encourage historic preservation in the government and across the nation. The National Historic Preservation Act (NHPA), which established the ACHP in 1966, directs federal agencies to act as responsible stewards when their actions affect historic properties. The ACHP is given the legal responsibility to assist federal agencies in their efforts and to ensure they consider preservation during project planning. The ACHP serves as the federal policy advisor to the President and Congress; recommends administrative and legislative improvements for protecting the nation’s diverse heritage; and reviews federal programs and policies to promote effectiveness, coordination, and consistency with national preservation policies. A key ACHP function is overseeing the federal historic preservation review process established by Section 106 of the NHPA. Section 106 requires federal agencies to consider the effects of projects, carried out by them or subject to their assistance or approval, on historic properties and provide the ACHP an opportunity to comment on these projects prior to a final decision on them.”<sup>301</sup>

### ***State***

#### California State Office of Historic Preservation (OHP)

<sup>297</sup> Ibid. 12-13.

<sup>298</sup> Op. Cit. 13.

<sup>299</sup> Op. Cit.

<sup>300</sup> Op. Cit.

<sup>301</sup> Advisory Council on Historic Preservation. [https://www.achp.gov/sites/default/files/documents/2019-10/AboutTheACHPFactSheet2019\\_100319.pdf](https://www.achp.gov/sites/default/files/documents/2019-10/AboutTheACHPFactSheet2019_100319.pdf)

“The California State Office of Historic Preservation (OHP) is responsible for administering federally and state mandated historic preservation programs to further the identification, evaluation, registration and protection of California's irreplaceable archaeological and historical resources under the direction of the State Historic Preservation Officer (SHPO), a gubernatorial appointee, and the State Historical Resources Commission.”<sup>302</sup>

“OHP's responsibilities include: Identifying, evaluating, and registering historic properties; Ensuring compliance with federal and state regulatory obligations; Encouraging the adoption of economic incentives programs designed to benefit property owners; Encouraging economic revitalization by promoting a historic preservation ethic through preservation education and public awareness and, most significantly, by demonstrating leadership and stewardship for historic preservation in California.”<sup>303</sup>

A historical resource may be eligible for inclusion in the California Register of Historical Resources (CRHR) if it:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important to our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.<sup>304</sup>

As mentioned in the CRIR, the use of both federal and state regulatory requirements apply to the proposed Project. “To meet the regulatory requirements of this Project, this cultural resources investigation was conducted pursuant to the provisions for the treatment of cultural resources contained within Section 106 of the National Historic Preservation Act (NHPA) and in CEQA (Public Resources Code [PRC] § 21000 et seq.) The goal of NHPA and CEQA is to develop and maintain a high-quality environment that serves to identify the significant environmental effects of the actions of a proposed project and to either avoid or mitigate those significant effects where feasible. CEQA pertains to all proposed projects that require State or local government agency approval, including the enactment of zoning ordinances, the issuance of conditional use permits, and the approval of development project maps. The NHPA pertains to projects that entail some degree of federal funding or permit approval.

The NHPA and CEQA (Title 54 U.S. Code [USC] Section 100101 et seq. and Title 14, California Code of Regulations [CCR], Article 5, § 15064.5) apply to cultural resources of the historical and pre-contact periods. Any project with an effect that may cause a substantial adverse change in the significance of a cultural resource, either directly or indirectly, is a project that may have a significant effect on the environment. As a result, such a project would require avoidance or mitigation of impacts to those affected resources. Significant cultural resources must meet at least one of four criteria that define eligibility for listing on either the California Register of Historical Resources (CRHR) (PRC § 5024.1, Title 14 CCR, § 4852) or the National Register of Historic Places (NRHP) (36 Code of Federal Regulations [CFR] 60.4). Cultural resources eligible for listing on the NRHP are considered Historic Properties under 36 CFR Part 800 and are automatically eligible for the CRHR. Resources listed on or eligible for inclusion in the CRHR are considered Historical Resources under CEQA.

Tribal Cultural Resources are defined in Section 21074 of the California PRC as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either included in or determined to be eligible for inclusion in the CRHR, or are included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or are a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. Section 1(b)(4) of Assembly Bill (AB) 52 established that only California Native American tribes, as defined in Section 21073 of the California PRC, are experts in the identification of Tribal Cultural Resources and impacts thereto. Because ECORP does not meet the definition of a California Native American tribe, this report only addresses information for which ECORP is qualified to identify and evaluate, and that which is needed to inform the cultural resources section of CEQA documents. This report, therefore, does not identify or evaluate Tribal Cultural Resources. Should California Native American tribes ascribe additional importance to or interpretation of archaeological resources described herein, or provide information about non-archeological Tribal Cultural Resources, that information is documented separately in the AB 52 tribal consultation record between the tribe(s) and lead agency, and summarized in the Tribal Cultural Resources section of the CEQA document, if applicable.”<sup>305</sup>

<sup>302</sup> State of California. Office of Historic Preservation. Mission and Responsibilities. [http://ohp.parks.ca.gov/?page\\_id=1066](http://ohp.parks.ca.gov/?page_id=1066)

<sup>303</sup> Ibid.

<sup>304</sup> Office of Historic Preservation. California Register of Historic Places. [http://www.ohp.parks.ca.gov/?page\\_id=21238](http://www.ohp.parks.ca.gov/?page_id=21238)

<sup>305</sup> “Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers” (CRIR or Report). Page 3. June 2020. Prepared by ECORP Consulting, Inc. and included in Attachment “C” of this Initial Study.

### Native American Heritage Commission

“The Native American Heritage Commission (NAHC), created in statute in 1976, is a nine-member body, appointed by the Governor, to identify and catalog cultural resources (i.e., places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands) in California. The Commission is charged with the duty of preserving and ensuring accessibility of sacred sites and burials, the disposition of Native American human remains and burial items, maintain an inventory of Native American sacred sites located on public lands, and review current administrative and statutory protections related to these sacred sites.”<sup>306</sup>

### Tribal Consultation Requirements: AB 52 (Gatto, 2014)

The Public Resources Code has established that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. (Pub. Resources Code, § 21080.3.1.) If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact.<sup>307</sup>

### CEQA Guidelines: Archaeological Resources

Section 15064.5(c) of CEQA Guidelines provides specific guidance on the treatment of archaeological resources as noted below.<sup>308</sup>

- (1) When a Project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subdivision (a).
- (2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.
- (3) If an archaeological site does not meet the criteria defined in subdivision (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c–f) do not apply to surveys and site evaluation activities intended to determine whether the Project location contains unique archaeological resources.
- (4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the Project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

### CEQA Guidelines: Human Remains

Public Resources Code Sections 5097.94 and 5097.98 provide guidance on the disposition of Native American burials (human remains), and fall within the jurisdiction of the Native American Heritage Commission:<sup>309</sup>

- (d) When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the Project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any Items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:
  - (3) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).

<sup>306</sup> Native American Heritage Commission. Welcome. <http://nahc.ca.gov/>

<sup>307</sup> Office of Planning and Research. Discussion Draft Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA (May 2015). Page 3. [http://opr.ca.gov/docs/DRAFT\\_AB\\_52\\_Technical\\_Advisory.pdf](http://opr.ca.gov/docs/DRAFT_AB_52_Technical_Advisory.pdf)

<sup>308</sup> California Natural Resources Agency. 15064.5. Determining the Significance of Impacts to Archeological and Historical Resources, Section 15064.5(c). <http://resources.ca.gov/ceqa/guidelines/art5.html>

<sup>309</sup> Ibid.



- (4) The requirements of CEQA and the Coastal Act.
- (e) In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken:
  - (1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
    - (C) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and
    - (D) If the coroner determines the remains to be Native American:
      - 4. The coroner shall contact the Native American Heritage Commission within 24 hours.
      - 5. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.
      - 6. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or
  - (3) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
    - (C) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
    - (D) The descendant identified fails to make a recommendation; or
    - (C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.
- (f) As part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place

## **Local**

### Tulare County General Plan 2030 Update

The General Plan has a number of policies that apply to Projects within Tulare County. General Plan policies that relate to the proposed Project are listed as follows:

The following Tulare County General Plan 2030 Update policies for this resource apply to this Project: *ERM-6.1 Evaluation of Cultural and Archaeological Resources* wherein the County shall participate in and support efforts to identify its significant cultural and archaeological resources using appropriate State and Federal standards; *ERM-6.2 Protection of Resources with Potential State or Federal Designations* wherein the County shall protect cultural and archaeological sites with demonstrated potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources; *ERM-6.3 Alteration of Sites with Identified Cultural Resources* which states that when planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. Development can be permitted in these areas only after a site specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and Mitigation Measures proposed for any impacts the development may have on the resource; *ERM-6.4 Mitigation* which states that if preservation of cultural resources is not feasible, every effort shall be made to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records; *ERM-6.8 Solicit Input from Local Native Americans* wherein the County shall continue to solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance; *ERM-6.9 Confidentiality of Archaeological Sites* wherein the County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts; and *ERM-6.10 Grading Cultural Resources Sites* wherein the County shall ensure all grading activities conform to the County's Grading Ordinance and California Code of Regulations, Title 20, § 2501 et. seq.

**a) and b) Less Than Significant Impact With Mitigation:** Consultant used a variety of accepted methodologies to research/investigate the proposed Project's location in determining presence of Tribal Cultural Resources. As noted in the CRIR,

Consultant provided evidence of its personnel's qualifications<sup>310</sup>; a search of records by the Southern San Joaquin Valley Information Center of the California Historical Resources Information System<sup>311</sup>; RealQuest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM]);<sup>312</sup> aerial photos taken in 1955, 1989, 2005, 2009, 2010, and 2012 were also reviewed for any indications of property usage and built environment;<sup>313</sup> Sacred Lands File Search (SLF) by the California Native America Heritage commission (NAHC)<sup>314</sup>; contacted the Tulare County Historical society<sup>315</sup> and; an intensive pedestrian survey under the guidance of the Secretary of the Interior's Standards for the Identification of Historic Properties (NPS 1983).

To summarize the findings contained in the CRIR, Consultant concluded, "No cultural resources were identified on the property as a result of the records search and field survey. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA will be affected by the proposed Project."<sup>316</sup> However, the CRIR conclusions cannot eliminate the possibility of subsurface cultural resources, to wit; "Due to the presence of alluvium along the Kaweah River, and given the likelihood of pre-contact archaeological sites located along perennial waterways, the potential exists for buried pre-contact archaeological sites in the Project Area. This potential is considered to be high, as the Kaweah River exhibits significant sinuosity that reflects a meandering channel over time, which has the potential to bury archaeological sites that were once along the river's edge."<sup>317</sup> To that end, consultant provides recommendation in the event of post-review discovery (see item 5 cultural Resources).

Therefore, as an abundance of caution, in the unlikely event that subsurface resources are located, **Mitigation Measures CUL-1 subsets (a) through (c)** as specified at Item 5 Cultural Resources would be implemented thereby reducing the potential level of impact to this resource as less than significant for resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or to a resource consider significant to a California Native American tribe. Therefore, the Project would result in a less than significant impact to this resource.

**Cumulative Impact:** As noted above, surface resources are not present on the proposed Project location. In the event subsurface resources are encountered, **Mitigation Measures CUL-1 subsets (a) through (c)** would apply to minimize any impact to less than significant. As there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

## 19. UTILITIES AND SERVICE SYSTEMS

Would the project:			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>310</sup> "Cultural Resources Inventory Report Hampton Inn and Suites Three Rivers" (CRIR or Report). Page 12. June 2020. Prepared by ECORP Consulting, Inc. and included in Attachment "C" of this Initial Study.

<sup>311</sup> Ibid. 12.

<sup>312</sup> Op. Cit. 13.

<sup>313</sup> Op. Cit.

<sup>314</sup> Op. Cit.

<sup>315</sup> Op. Cit. 14.

<sup>316</sup> Op. Cit. 21

<sup>317</sup> Op. Cit. 21.



c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Analysis:

##### Environmental Setting

"Tulare County and special districts provide many important services to County residents and businesses in unincorporated communities and hamlets such as water, wastewater, storm drainage, solid waste removal, utilities, communications, fire protection, law enforcement, and a number of other community facilities and services (schools, community centers, etc.)."<sup>318</sup>

"Water districts supply water to communities and hamlets throughout the County. Most communities and some hamlets have wastewater treatment systems; however, several communities including Three Rivers, Plainview, Alpaugh, and Ducor rely on individual septic systems. Storm drainage facilities are generally constructed and maintained in conjunction with transportation improvements or new subdivisions in communities. Solid waste collection in the County is divided into service areas, as determined by the Board of Supervisors, with one license for each area. Southern California Edison provides electric service to the south and central areas of Tulare County while PG&E provides electric service in the north. The [Southern California] Gas Company is the primary provider of natural gas throughout the County."<sup>319</sup>

##### Regulatory Setting

##### **Federal**

##### U.S. Environmental Protection Agency (U.S. EPA) - Federal Regulation Title 40, Part 503

In 1993, the [U.S. Environmental Protection Agency](#) (U.S. EPA) promulgated Standards for the Use or Disposal of Sewage Sludge (Code of Federal Regulations Title 40, Part 503), which establish pollutant limitations, operational standards for pathogen and vector attraction reduction, management practices, and other provisions intended to protect public health and the environment from any reasonably anticipated adverse conditions from potential waste constituents and pathogenic organisms.

This part establishes standards, which consist of general requirements, pollutant limits, management practices, and operational standards, for the final use or disposal of sewage sludge generated during the treatment of domestic sewage in a treatment works. Standards are included in this part for sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are pathogen and alternative vector attraction reduction requirements for sewage sludge applied to the land or placed on a surface disposal site.

In addition, the standards in this part include the frequency of monitoring and recordkeeping requirements when sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are reporting requirements for Class I sludge management facilities, publicly owned treatment works (POTWs) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more.<sup>320</sup>

<sup>318</sup> Tulare County General Plan Update 2030. Page 14-3.

<sup>319</sup> Ibid. 14-3.

<sup>320</sup> Title 40: Protection of Environment Part 503: Standards for the Use of Disposal of Sewage Sludge, <http://www.ecfr.gov/cgi-bin/text-idx?SID=faac2040ebd49d57ce2786437545c8cf&node=40:30.0.1.2.42.1.13.1&rgn=div8>

## Resource Conservation and Recovery Act (RCRA)<sup>321</sup>

Congress passed RCRA on October 21, 1976 to address the increasing problems the nation faced from our growing volume of municipal and industrial waste. RCRA, which amended the Solid Waste Disposal Act of 1965, set national goals for:

- Protecting human health and the environment from the potential hazards of waste disposal.
- Conserving energy and natural resources.
- Reducing the amount of waste generated.
- Ensuring that wastes are managed in an environmentally-sound manner
- To achieve these goals, RCRA established three distinct, yet interrelated, programs:
  - ✓ The [solid waste program](#), under RCRA Subtitle D, encourages states to develop comprehensive plans to manage nonhazardous industrial solid waste and municipal solid waste, sets criteria for municipal solid waste landfills and other solid waste disposal facilities, and prohibits the open dumping of solid waste.
  - ✓ The [hazardous waste program](#), under RCRA Subtitle C, establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal — in effect, from “cradle to grave.”
  - ✓ The underground storage tank (UST) program, under RCRA Subtitle I, regulates [underground storage tanks](#) containing hazardous substances and petroleum products. RCRA banned all open dumping of waste, encouraged [source reduction](#) and [recycling](#), and promoted the [safe disposal of municipal waste](#). RCRA also mandated strict controls over the [treatment, storage, and disposal of hazardous waste](#).

### *State*

#### The Integrated Waste Management Act (Assembly Bill 939)

In 1989 the California legislature passed the Integrated Waste Management Act of 1989, known as AB 939. The bill mandates a reduction of waste being disposed: jurisdictions were required to meet diversion goals of 25% by 1995 and 50% by the year 2000. AB 939 also established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance.

#### The Regional Water Quality Control Board – Biosolids

In California, the beneficial reuse of treated municipal sewage sludge (*a.k.a.*, biosolids) generally must comply with the California Water Code in addition to meeting the requirements specified in Part 503 in Title 40 of the Code of Federal Regulations.

In July 2004, the State Water Resources Control Board adopted [Water Quality Order No. 2004-12-DWQ](#) (General Order), and certified a supporting statewide [Programmatic Environmental Impact Report](#) (PEIR)

The General Order incorporates the minimum standards established by the Part 503 Rule and expands upon them to fulfill obligations to the California Water Code. However, since California does not have delegated authority to implement the Part 503 Rule, the General Order does not replace the Part 503 Rule. The General Order also does not preempt or supersede the authority of local agencies to prohibit, restrict, or control the use of biosolids subject to their jurisdiction, as allowed by law.

Persons interested in seeking coverage under the General Order should contact the appropriate Regional Water Quality Control Board. Only applicants who submit a complete *Notice of Intent* (NOI), appropriate application fee, and are issued a Notice of Applicability by the executive officer of the appropriate Regional Water Quality Control Board are authorized to land apply biosolids at an agricultural, horticultural, silvicultural, or land reclamation site as a soil amendment under the General Order.

#### State Water Resources Control Board, Divisions of Drinking Water and Clean Water

Recycled water regulations are administered by both Central RWQCB and the California State Water Resources Control Board (SWRCB). The regulations governing recycled water are found in a combination of sources, including the Health and Safety Code, Water Code, and Titles 22 and 17 of the California Code of Regulations (CCR). Issues related to the treatment and distribution of recycled water are generally under the permitting authority of RWQCB and the Clean Water Division of the SWRCB. .

#### CalRecycle

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<sup>321</sup> United States Environmental Protection Agency, <http://www.epa.gov/epawaste/laws-regs/rcrahistory.htm>

CalRecycle (formerly the California Integrated Waste Management Board) governs solid waste regulations on the state level, delegating local permitting, enforcement, and inspection responsibilities to Local Enforcement Agencies (LEA). Regulations authored by CalRecycle (Title 14) were integrated with related regulations adopted by the State Water Resources Control Board (SWRCB) pertaining to landfills (Title 23, Chapter 15) to form CCR Title 27.

#### California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies, in addition to authorizing video franchises. In 1911, the CPUC was established by Constitutional Amendment as the Railroad Commission. In 1912, the Legislature passed the Public Utilities Act, expanding the Commission's regulatory authority to include natural gas, electric, telephone, and water companies as well as railroads and marine transportation companies. In 1946, the Commission was renamed the California Public Utilities Commission. It is tasked with ensuring safe, reliable utility service is available to consumers, setting retail energy rates, and protecting against fraud.

#### **Local**

#### Tulare County General Plan 2030 Update

As the proposed Project will not utilize any new or expanded water, wastewater treatment or storm water drainage, natural gas, or telecommunications facilities, the applicable Tulare County General Plan 2030 Update policies for this resource are limited to the following for this resource item: *PFS-5.3 Solid Waste Reduction* wherein the County shall promote the maximum feasible use of solid waste reduction, recycling, and composting of waste, strive to reduce commercial and industrial waste on an annual basis, and pursue financing mechanisms for solid waste reduction programs; *PFS-5.4 County Usage of Recycled Materials and Products* wherein the County shall encourage all industries and government agencies in the County to use recycled materials and products where economically feasible; *PFS-5.5 Private Use of Recycled Products* wherein the County shall work with recycling contractors to encourage businesses to use recycled products and encourage consumers to purchase recycled products; *PFS-5.6 Ensure Capacity* wherein the County shall require evidence that there is adequate capacity within the solid waste system for the processing, recycling, transmission, and disposal of solid waste prior to approving new development; *PFS-5.7 Provisions for Solid Waste Storage, Handling, and Collection* wherein the County shall ensure all new development adequately provides for solid waste storage, screening, handling, and collection prior to issuing building permits; *PFS-5.8 Hazardous Waste Disposal Capabilities* wherein the County shall require the proper disposal and recycling of hazardous materials in accordance with the County's Hazardous Waste Management Plan; *PFS-9.1 Expansion of Gas and Electricity Facilities* wherein the County shall coordinate with gas and electricity service providers to plan the expansion of gas and electrical facilities to meet the future needs of County residents; *PFS-9.2 Appropriate Siting of Natural Gas and Electric Systems* wherein the County shall coordinate with natural gas and electricity service providers to locate and design gas and electric systems that minimize impacts to existing and future residents; *PFS-9.4 Power Transmission Lines* wherein the County shall work with the Public Utilities Commission and power utilities in the siting of transmission lines to avoid interfering with scenic views, historic resources, and areas designated for future urban development; and *PFS-9.3 Transmission Corridors* wherein the County shall work with the Public Utilities Commission and power utilities so that transmission corridors meet the following minimum requirements:

1. Transmission corridors shall be located to avoid health impacts on residential lands and sensitive receptors, and
2. Transmission corridors shall not impact the economic use of adjacent properties.

**a) through c) No Impact:** The proposed Project will provide both its own water supply and wastewater treatment on site. Please refer to the discussion at Item 10 Hydrology and Water Quality. As such, there will be no impact to these resources.

**d) and e) Less Than Significant Impact:** As such, the Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and it will comply with federal, state, and local management and reduction statutes and regulations related to solid waste as applicable.

## **20. WILDFIRES**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

**SIGNIFICANT  
IMPACT**

**LESS THAN  
SIGNIFICANT  
IMPACT WITH  
MITIGATION**

**LESS THAN  
SIGNIFICANT  
IMPACT**

**NO  
IMPACT**

	a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	d)	Expose people or structures to significant risks, including downslope or downstream flooding, or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Analysis:

#### Environmental Setting

As noted earlier, the proposed Project is a 3-story hotel which will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.) and outdoor swimming pool/cabana building. Consistent with Tulare County parking requirements, the proposed Project includes 108 standard parking stalls, (6 of which will be handicap stalls). Utilities include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration). The proposed Project is anticipated to have 12 employees, 70 customers, 1 delivery, and 1 shipment per day, for a total of 168 daily vehicle trips.

The proposed Project site is located in unincorporated community of Three Rivers in Tulare County (County), California, approximately thirty miles east of Visalia, the County Seat. The nearest city is Woodlake located approximately 15 miles west of the Project site. The community is approximately five miles south of the entrance of Sequoia National Park. It lies in a natural valley area created by the convergence of the North, Middle, and South Forks of the Kaweah River near the western edge of the Sierra Nevada Mountains.<sup>322</sup> “The Project area is located in the Sierra foothills on the western slope of the Sierra Nevada range at elevations between 700 and 3,000 feet. Geophysical factors including elevation, slope, hydrogeology and climate... This area is typified by undulating terrain that varies from relatively flat riparian valleys immediately adjacent to the North, South, and Middle Forks of the Kaweah River...Elevations along the State Highway 198 corridor range from approximately 772 feet at Lake Kaweah to a high elevation of 2400 feet east of the entrance to the Sequoia National Park.”<sup>323</sup>

“The mild climate in Three Rivers is generally characterized as Mediterranean. The area tends to be clear, sunny, warm, dry and free of fog. The mean temperatures range from a low of 35° F in January to a high of 95° F in July. The average yearly rainfall for the area is approximately 18 inches with 90 percent of the precipitation falling between the months of November and April. The winds in the area are considered light, moving up the canyons in the mornings and down the canyons in the evening.”<sup>324</sup>

#### Regulatory Setting

##### Federal

Federal responsibility areas (FRA) include lands administered by the following Federal Agencies: The United States Department of Agriculture Forest Service, The United States Department of the Interior, National Park Service, Fish and Wildlife Service, Bureau

<sup>322</sup> Tulare County. Three Rivers Community Plan 2018 Update. Draft Environmental Impact Report. Page. 3.8-2.

<sup>323</sup> Ibid.

<sup>324</sup> Tulare County. Three Rivers Community Plan 2018 Update. Page 73.

of Indian Affairs, and Bureau of Land Management, State Responsibility Area (SRA), Fire Safe Regulations (Title 14- Natural Resources Division 1.5, Department of Forestry Chapter 7, Fire Protection Subchapter 2, SRA Fire Safe Regulations Articles 1-5).. Although located very near areas of federal jurisdiction, and the fact that the proposed Project will not be funded by any federal sources, no federal wildland fire regulations would apply to the proposed Project.

### ***State***

#### **State Responsibility Area (SRA)**

“Wildland fire protection in California is the responsibility of either the State, local government, or the federal government. The State Responsibility Area (SRA) is the area of the state where the State of California is financially responsible for the prevention and suppression of wildfires. Local responsibility areas (LRA) include incorporated cities, cultivated agriculture lands, and portions of the desert. Local responsibility area fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government.

SRA regulations have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in SRA. These measures provide for emergency access; signing and building numbering; private water supply reserves for emergency fire use; and vegetation modification. These regulations do not apply to existing structures, roads, streets and private lanes or facilities. These regulations apply as appropriate to all construction within the SRA approved after January 1, 1991, (see Figure 10) SRA Zones and SRA regulations in (Attachment A-7).”<sup>325</sup>

### ***Local***

#### **Tulare County General Plan**

The proposed Project is located in state responsibility areas (SRA) or lands classified as very high fire hazard severity zones, would the project: The following Tulare County General Plan 2030 Update policies could apply to this Project as it is located in or near fire hazards areas and/or areas with potential for wildland fires: *HS-1.5 Hazard Awareness and Public Education* wherein the County shall continue to promote awareness and education among residents regarding possible natural hazards, including soil conditions, earthquakes, flooding, fire hazards, and emergency procedures; *HS-6.1 New Building Fire Hazards* wherein the County shall ensure that all building permits in urban areas, as well as areas with potential for wildland fires, are reviewed by the County Fire Chief; *HS-6.2 Development in Fire Hazard Zones* wherein the County shall ensure that development in extreme or high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards; *HS-6.4 Encourage Cluster Development* wherein the County shall encourage cluster developments in areas identified as subject to high or very high fire hazard, to provide for more localized and effective fire protection measures such as consolidations of fuel build-up abatement, firebreak maintenance, firefighting equipment access, and water service provision; *HS-6.5 Fire Risk Recommendations* wherein the County shall encourage the County Fire Chief to make recommendations to property owners regarding hazards associated with the use of materials, types of structures, location of structures and subdivisions, road widths, location of fire hydrants, water supply, and other important considerations regarding fire hazard that may be technically feasible but not included in present ordinances or policies; *HS-6.8 Private Water Supply* wherein the County shall require separately developed dwellings with individual private water supply to provide an acceptable guaranteed minimum supply of water for fire safety, in addition to the amount required for domestic needs.

#### **Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP)**

“The 2011 Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for the Tulare Operational Area (County and all cities and special districts) was developed in accordance with the Disaster Mitigation Act of 2000 (DMA 2000) and followed FEMA’s 2008 Local Hazard Mitigation Plan guidance. The LHMP incorporates a process where hazards are identified and profiled, the people and facilities at risk are analyzed, and mitigation actions are developed to reduce or eliminate hazard risk. The implementation of these mitigation actions, which include both short- and long-term strategies, involve planning, policy changes, programs, projects, and other activities.”<sup>326</sup>

“The Tulare County Emergency Operations Plan (EOP) establishes an emergency management organization and assigns functions and tasks consistent with California’s Standardized Emergency Management System (SEMS) and the National Incident Management

<sup>325</sup> Tulare County. Three Rivers Community Plan 2018 Update. Page 68.

<sup>326</sup> Tulare County. Tulare County General Plan 2030 Update. Draft Environmental Impact Report. 2018. Page 3.8-16.

System (NIMS). The plan provides for the integration and coordination of planning efforts of the County with those of the cities, special districts, and Tule River Tribe comprising the Operational Area, as well as neighboring jurisdictions and the State. The content of this plan is based on guidance provided by the State of California's Governor's Office of Emergency Services, the Federal Emergency Management Agency, and the US Department of Homeland Security. The intent of the EOP is to facilitate coordinated emergency response and post emergency short-term recovery by providing a framework for response to all significant emergencies, regardless of the nature of the event.”<sup>327</sup>

**a) – d) No Impact:** The proposed Project is located in an active area of wildland fire occurrence. The proposed Project site has the potential to expose people or structures to an increased risk of loss, injury or death due to wildland fire events. “The Tulare County 2030 General Plan Update includes Three Rivers within a “very high” fire threat area containing fire hazards based on fuels, terrain, weather, and other relevant factors.”<sup>328</sup>

“Emergency response and/or evacuation plans in the community of Three Rivers allow for the integration and coordinated response among local, state, and federal agencies. Three Rivers is considered a “Gateway” community and borders an international icon, Sequoia Kings Canyon National Park (SEKI). SEKI maintains its own emergency and law enforcement services and maintains mutual aid agreements with the County of Tulare.”<sup>329</sup> “Emergency response and evacuation plans based on threats posed by wildland and structural fire issues in the Three Rivers UDB area benefit from the presence of federal, state, and local fire suppression services. The National Park Service (NPS) maintains fire brigades at Ash Mountain and Hammond Station. The Ash Mountain heliport provides emergency services with Helicopter 552 including search and rescue and fire suppression services. Cal Fire and Tulare County maintain fire stations in Three Rivers and nearby Lemon Cove. An air attack base can provide aerial tanker and air drop support within minutes and is located in nearby Porterville.”<sup>330</sup>

“The County of Tulare and the State of California maintain policies and regulations that seek to minimize the exposure of foothill communities and mountain service centers to wildfire events.

In geographical terms, the Three Rivers UDB largely falls into CalFire’s State Responsibility Area (SRA). CalFire oversight of at-risk locales, such as foothill communities, includes programs and regimens of wildland fire engineering, vegetation management programs, risk analysis, education, enforcement, and land use planning to the end of diminishing and ameliorating the risk posed by wildland fire.

Tulare County, in addition to a comprehensive reactive emergency plan and policy (2013 Emergency Operations Plan; See References Section) also outlines extensive preventative measures to combat the threat of wildland fire as delineated in the Health and Safety Element of the County’s General Plan 2030 Update.

This plan offers a comprehensive approach to preempting wildland fire outbreaks in the Project area. As discussed in Chapter 10, section 10.6 of Health and Safety Element, the County commits to ensuring “[t]hat development in very high or high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards. This shall include promoting the use of fire resistant materials designed to reduce fire vulnerability within high or very high fire hazard areas through use of Article 86-A of the 2001 California Fire Code, SRA Fire Safe Regulations, and other nationally recognized standards, as may be updated periodically. Special consideration shall be given to the use of fire-resistant-materials and fire-resistant-construction in the underside of eaves, balconies, unenclosed roofs and floors, and other similar horizontal surfaces in areas with steep slopes. Ensure new development proposals contain specific fire protection plans, actions, and codes for fire engineering features for structures in Very High Fire Hazard Safety Zones including automatic sprinklers as required by applicable codes.

In its enumeration of fire-safe preventative measures, a summary analysis of the safeguards found in the Health and Safety Element indicates upwards of twenty-five safety policies endorsed by the County’s planning department and enforced by the County’s fire department to the end of minimizing exposure of County residents, visitors, and public and private property to the effects of urban and wildland fires. Included among these safeguards are the encouragement of cluster development, water supply specifications sufficient for fire suppression (public and private), the creation of fire buffers, integration of open space, wildfire risk reduction

<sup>327</sup> Ibid. 3.7-17.

<sup>328</sup> Op. Cit. 3.7-18 and -19.

<sup>329</sup> Op. Cit. 3.7-17.

<sup>330</sup> Op. Cit. 3.7-17.

related to climate change, and fuel breaks.”<sup>331</sup> A complete listing of these policies is available in Chapter 10 of the Health and Safety Element located in the Tulare County General Plan 2030 Update.

Based on overlapping and cumulative regulatory and administrative controls, safety policies and through the implementation of applicable regulations found in both County and State sources, the proposed Project will not substantially impair an adopted emergency response plan or emergency evacuation plan, it will not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; and it will not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. As such, the proposed Project would result in no impacts to this resource Item.

**Cumulative Impact:** As noted earlier, cumulative regulatory and administrative controls, safety policies and through the implementation of applicable regulations found in both County and State sources and the analysis above, and as there are no other hotel (or motel) or other development proposals within the vicinity of Three Rivers, the proposed Project will not significantly contribute to a cumulative impact to this resource.

## 21. MANDATORY FINDINGS OF SIGNIFICANCE

			SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT IMPACT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
	a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal species, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b)	Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Analysis:

The analysis conducted in this Initial Study/Environmental Impact Report results in a preliminary determination that the Project will have a less than significant effect on the local environment. A final determination will be made following conclusion of the EIR process. The proposed Project is a 3-story hotel which will consist of 105 guest rooms with an elevator, managers office, meeting room, in-house food preparation and breakfast area, and other typical hotel facilities (such as in-house and guest laundry, fitness center, various storage closets, etc.) and outdoor swimming pool/cabana building. Consistent with Tulare County parking requirements, the proposed Project includes 108 standard parking stalls, (6 of which will be handicap accessible stalls). Utilities

<sup>331</sup> Op. Cit. 3.8-19 and -20.

include a septic tank with filter and dripline system and new domestic well, and storm drainage will be retained on-site (with an option for biofiltration). The proposed Project is anticipated to have 12 employees, 70 customers, 1 delivery, and 1 shipment per day, for a total of 168 daily vehicle trips.

**a) Less Than Significant Impact With Mitigation:** The analysis conducted in this Initial Study/Environmental Impact Report results in a preliminary determination that the Project will have a less than significant effect on biological and cultural resources from the construction and operation of the proposed Project will be less than significant with the incorporation of the **Mitigation Measures CUL-1 through CUL -5** as contained in Item 5 Cultural Resources. The analysis contained in Item 4 Biological Resources concludes that this resource has the potential to be impacted and has included **Mitigation Measures BIO-1 through BIO-16**. Accordingly, the proposed Project will involve no potential for significant impacts due to degradation of the quality of the environment, substantial reductions in the habitat of a fish or wildlife species, causing a fish or wildlife population to drop below self-sustaining levels, threatening to eliminate a plant or animal community, reduction in the number or restriction of the range of a rare or endangered plant or animal or elimination of important examples of the major periods of California history or prehistory. As such, the impact will be less than significant for biological resources and less than significant with mitigation for cultural and tribal cultural resources.

**b) Less Than Significant Impact:** The analysis conducted in this Initial Study/Environmental Impact Report results in a preliminary determination that the Project will have a less than significant cumulative effect. Projects considered in a cumulative analysis include those that would be constructed concurrently with the Project and those that would be in operation at the same time as the Project. The cumulative projects considered in this analysis are limited to projects that would result in similar impacts to the Project due to their potential to collectively contribute to significant cumulative impacts, as well as other development projects that would be located in the vicinity of the Project. There are no similar projects (i.e., hotel/motel) under consideration or construction located in and around a 10-mile radius of the Project site. As such, its physical distance and location would not contribute to a cumulative impact.

Tulare County staff have preliminarily determined that there are no projects that could have the potential to contribute to cumulative impacts. The Project was preliminarily determined to have no impacts to Aesthetics, Agricultural Resources, Air Quality, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation, Utilities and Service Systems, and Wildfire. The following environmental impacts were determined to be less than significant: Air Quality, Biological Resources, Cultural Resources, Greenhouse Gases, Noise, and Tribal Cultural Resources.

**c) Less Than Significant Impact:** The proposed Project will not result in substantial adverse effect on human beings, either directly or indirectly. Mitigation measures are provided to reduce the Project's potential effects on Biological Resources, Cultural Resources (and Tribal Cultural Resources), Greenhouse Gases, and Noise to less than significant (see **BIO-1** thorough **BIO-16**, **CUL-1** through **CUL-3**, **GHG-1** and **GH-2**, and **NOI-1** through **NOI-5**). No additional mitigation measures will be required. Therefore, implementation of the proposed Project would result in a less than significant impact.



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# Attachment “A”

## Air Quality and Greenhouse Gases

# **Air Quality & Greenhouse Gas Assessment**

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## **Three Rivers Hampton Inn and Suites Project**

Tulare County, California

### **Prepared For:**

Ineffable Hospitality, Inc.

**July 2020**

**(Updated October 2020)**



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS

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Attachment A – CalEEMod Output Files

## **LIST OF ACRONYMS AND ABBREVIATIONS**

°F	Degrees Fahrenheit
µg/m <sup>3</sup>	Micrograms per cubic meter; ppm = parts per million
AB	Assembly Bill
AQMD	Air Quality Management District
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CH <sub>4</sub>	Methane
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
DPM	Diesel particulate matter
EO	Executive Order
GHG	Greenhouse gas
GWP	Global warming potential



## **LIST OF ACRONYMS AND ABBREVIATIONS**

IPCC	Intergovernmental Panel on Climate Change
LOS	Level of service
N <sub>2</sub> O	Nitrous oxide
NAAQS	National Ambient Air Quality Standards
NO <sub>2</sub>	Nitrogen dioxide
NO <sub>x</sub>	Nitric oxides
O <sub>3</sub>	Ozone
OEHHA	California Office of Environmental Health Hazard Assessment
PM	Particulate matter
PM <sub>10</sub>	Coarse particulate matter 10 micrometers or smaller
PM <sub>2.5</sub>	Fine particulate matter 2.5 micrometers or smaller
ppb	Parts per billion
Project	Three Rivers Hampton Inn & Suites Project
RCPG	Regional Comprehensive Plan and Guide
ROGs	Reactive organic gases
SB	Senate Bill
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur dioxide
SO <sub>x</sub>	Sulfur oxides
SR	State Route
SRA	Source receptor area
TACs	Toxic air contaminants
USEPA	U.S. Environmental Protection Agency
VOCs	Volatile organic compounds

## 1.0 INTRODUCTION

This report documents the results of an Air Quality and Greenhouse Gas (GHG) Emissions Assessment completed for the Three Rivers Hampton Inn and Suites Project (Project), which is the construction of a three-story hotel on approximately 2.8 acres in Tulare County. The Project site is currently undeveloped.

This assessment was prepared using methodologies and assumptions recommended by the San Joaquin Valley Air Pollution Control District (SJVAPCD). Regional and local existing conditions are presented, along with pertinent emissions standards and regulations. The purpose of this assessment is to estimate Project-generated criteria air pollutants and GHG emissions attributable to the Project and to determine the level of impact the Project would have on the environment.

### 1.1 Project Location and Description

The Project site is located within Tulare county, in the community of Three Rivers. Three Rivers is located in the northern portion of Tulare County, bordered by Fresno, Inyo, and Kings Counties. The Project site is located on approximately 2.8 acres, just east of State Highway 198 (see Figure 1. *Project Location*). The Project is the development of a Hampton Inn on the currently undeveloped Project site. The Project site is surrounded by a Comfort Inn and Suites hotel and a vacant commercial building to the north, and farmland and rural housing to the east, south, and west.

The Project is the development of a 105-room hotel with 108 parking spaces. The hotel is proposed to be three stories tall. Aside from the 105 guest rooms, the hotel is proposed to contain a meeting room, lobby, breakfast and food preparation areas, laundry, an employee breakroom, and more rooms typical of a moderate to high-end hotel. Other onsite infrastructure would include a swimming pool, two water tanks and wells, and a trash enclosure.

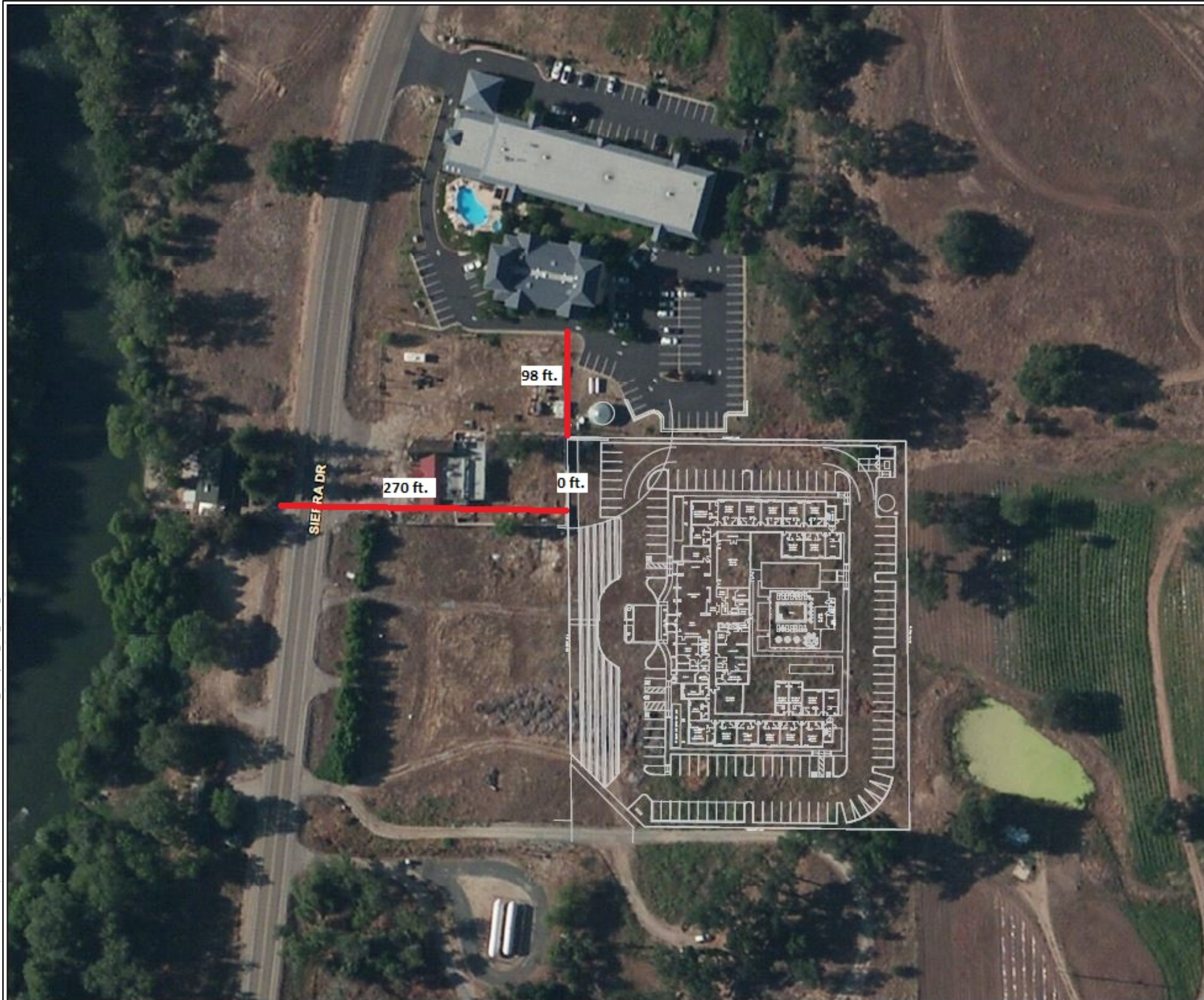
Per the Traffic Study prepared for the Project, the Project is conservatively anticipated to generate 860 additional one-way vehicle trips per day on Saturdays and 625 additional one-way vehicle trips per day on Sundays (VRPA 2020). Based on the CalEEMod defaults for Tulare County for weekday trip generation, the Project is anticipated to generate 858 additional one-way vehicle trips per day on weekdays.

A construction period of approximately one year is anticipated, with construction likely to begin in summer of 2021. Project construction is anticipated to include site preparation, grading, building construction, paving, and painting of buildings and parking space and road lines.

The Proposed Project site is designated for *Urban Development* in the Tulare County General Plan; however, the Project site is located in a generally rural area.



ECORP: N:\2020\2020-090 Hampton Inn and Suites Three Rivers\MAPS\Location\_Vicinity\HIS\_LnV\_CEQA\_20200722.mxd (CCH)-chirkelman 10/12/2020



#### Map Features

— Site Plan

Sources: ESRI, USGS



Map Date: 10/12/2020

**ECORP Consulting, Inc.**  
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**Figure 1. Project Location and Vicinity**

2020-090 Hampton Inn and Suites Three Rivers



## **2.0 AIR QUALITY**

### **2.1 Air Quality Setting**

Ambient air quality is commonly characterized by climate conditions, the meteorological influences on air quality, and the quantity and type of pollutants released. The air basin is subject to a combination of topographical and climatic factors that increase the potential for high levels of regional and local air pollutants. These factors are discussed below, along with the current regulatory structure that applies to the San Joaquin Valley Air Basin (SJVAB), which encompasses the Project site, pursuant to the regulatory authority of the SJVAPCD.

#### **2.1.1 San Joaquin Valley Air Basin**

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The SJVAB occupies the southern two-thirds of the Central Valley and includes the community of Three Rivers. The SJVAB is mostly flat, less than 1,000 feet in elevation, and is surrounded on three sides by the Sierra Nevada, Tehachapi, and Coast Range mountains. This bowl-shaped feature forms a natural barrier to the dispersion (spreading over an area) of air pollutants. As a result, the SJVAB is highly susceptible to pollutant accumulation over time (CARB 2003).

#### **Climate and Meteorology**

The climate in the SJVAB is strongly influenced by the presence of mountain ranges. The mountains create a partial rain shadow over the valley and block the free circulation of air, trapping stable air in the valley for extended periods. The climate is semi-arid and is characterized by long, hot, dry summers and cool, wet, and foggy winters. Based on historical data obtained from Weatherspark, the hot season in Visalia, located approximately 22 miles southwest of Three Rivers, lasts from June 1 to September 22, with an average daily high temperature above 88°F. The hottest day of the year is July 16, with an average high of 96°F and low of 65°F. The cool season lasts from November 20 to February 21, with an average daily high temperature below 64°F. The coldest day of the year is December 22, with an average low of 38°F and high of 56°F. The rainy period of the year lasts for seven months, from October 8 to May 8, with a sliding 31-day rainfall of at least 0.5 inches. The most rain falls during the 31 days centered around January 2, with an average total accumulation of 2.6 inches. The windier part of the year lasts from April 4 to July 23, with average wind speeds of more than 5.1 miles per hour. The windiest day of the year is May 30, with an average hourly wind speed of 5.9 miles per hour. The calmer time lasts from July 23 to April 4. The calmest day of the year is November 11, with an average hourly wind speed of 4.3 miles per hour (Weatherspark 2020).

#### **Atmospheric Stability and Inversions**

Stability describes the relative resistance of the atmosphere to vertical motion, which in turn mixes the air. The stability of the atmosphere is dependent on the vertical distribution of temperature with height. Unstable conditions often occur during daytime hours when solar heating warms the lower atmospheric layers while the upper layers remain cold. In contrast, an inversion is a layer of warmer air over a layer of cooler air. Inversions influence the mixing depth of the atmosphere, which is the vertical depth available

for diluting air pollution near the ground. The SJVAB experiences both surface-based and elevated inversions. The shallow surface-based inversions can be present in the morning but are often broken by daytime heating of the air layers near the ground. The deep, elevated inversions occur less frequently than the surface-based inversions but generally result in more severe air stagnation. The surface-based inversions occur more frequently in the fall, and the stronger elevated inversions usually occur during December and January. These naturally occurring conditions can make local air quality significantly worse than they would be without the inversions and the stagnation created by regional weather and topography.

### 2.1.2 Criteria Air Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O<sub>3</sub>), coarse particulate matter (PM<sub>10</sub>), and fine particulate matter (PM<sub>2.5</sub>) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), and sulfur dioxide (SO<sub>2</sub>) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 2-1.

Table 2-1. Criteria Air Pollutants- Summary of Common Sources and Effects		
Pollutant	Major Manmade Sources	Human Health & Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO <sub>2</sub>	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O <sub>3</sub>	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (N <sub>2</sub> O) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM <sub>10</sub> & PM <sub>2.5</sub>	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
SO <sub>2</sub>	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: California Air Pollution Control Officers Association (CAPCOA 2013)

## Carbon Monoxide

CO in the urban environment is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches, aggravate cardiovascular disease and impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations of CO are typically found near crowded intersections and along heavy roadways with slow moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within relatively short distances of the source. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973.

## Nitrogen Oxides

Nitrogen gas comprises about 80 percent of the air and is naturally occurring. At high temperatures and under certain conditions, nitrogen can combine with oxygen to form several different gaseous compounds collectively called nitric oxides ( $\text{NO}_x$ ). Motor vehicle emissions are the main source of  $\text{NO}_x$  in urban areas.  $\text{NO}_x$  is toxic to animals and humans because of its ability to form nitric acid with water in the eyes, lungs, mucus membrane, and skin. In animals, long-term exposure to  $\text{NO}_x$  increases susceptibility to respiratory infections, and lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high concentrations can suffer from lung irritation or possible lung damage. Precursors of  $\text{NO}_x$ , such as NO and  $\text{NO}_2$ , attribute to the formation of  $\text{O}_3$  and  $\text{PM}_{2.5}$ . Epidemiological studies have also shown associations between  $\text{NO}_2$  concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

## Ozone

$\text{O}_3$  is a secondary pollutant, meaning it is not directly emitted. It is formed when volatile organic compounds (VOCs) or ROGs and  $\text{NO}_x$  undergo photochemical reactions that occur only in the presence of sunlight. The primary source of ROG emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust.  $\text{NO}_x$  forms as a result of the combustion process, most notably due to the operation of motor vehicles. Sunlight and hot weather cause ground-level  $\text{O}_3$  to form. Ground-level  $\text{O}_3$  is the primary constituent of smog. Because  $\text{O}_3$  formation occurs over extended periods of time, both  $\text{O}_3$  and its precursors are transported by wind and high  $\text{O}_3$  concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when  $\text{O}_3$  levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level  $\text{O}_3$  exposure to a variety of problems including lung irritation, difficult breathing, permanent lung damage to those with repeated exposure, and respiratory illnesses.

## Particulate Matter

PM includes both aerosols and solid particulates of a wide range of sizes and composition. Of concern are those particles smaller than or equal to 10 microns in diameter size (PM<sub>10</sub>) and small than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>). Smaller particulates are of greater concern because they can penetrate deeper into the lungs than larger particles. PM<sub>10</sub> is generally emitted directly as a result of mechanical processes that crush or grind larger particles or form the resuspension of dust, typically through construction activities and vehicular travel. PM<sub>10</sub> generally settles out of the atmosphere rapidly and is not readily transported over large distances. PM<sub>2.5</sub> is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants, including NO<sub>x</sub>, sulfur oxides (SO<sub>x</sub>) and VOCs. PM<sub>2.5</sub> can remain suspended in the atmosphere for days and/or weeks and can be transported long distances.

The principal health effects of airborne PM are on the respiratory system. Short-term exposure of high PM<sub>2.5</sub> and PM<sub>10</sub> levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure is associated with premature mortality and chronic respiratory disease. According to the U.S. Environmental Protection Agency (USEPA), some people are much more sensitive than others to breathing PM<sub>10</sub> and PM<sub>2.5</sub>. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM<sub>10</sub> and PM<sub>2.5</sub>. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.

### 2.1.3 Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Additionally, diesel engines emit a complex mixture of air pollutants composed of gaseous and solid material. The solid emissions in diesel exhaust are known as diesel particulate matter (DPM). In 1998, California identified DPM as a TAC based on its potential to cause cancer, premature death, and other health problems (e.g., asthma attacks and other respiratory symptoms). Those most vulnerable are children (whose lungs are still developing) and the elderly (who may have other serious health problems). Overall, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants. Diesel engines also contribute to California's PM<sub>2.5</sub> air quality problems. Public exposure to TACs can result from emissions from normal

operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

### **Diesel Exhaust**

Most recently, CARB identified DPM as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine (USEPA 2002). Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs; due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

#### **2.1.4 Ambient Air Quality**

Ambient air quality at the Project site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains more than 60 monitoring stations throughout California. O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> are the pollutant species most potently affecting the Project region. As described in detail below, the region is designated as a nonattainment area for the federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub> (CARB 2018). The Visalia monitoring station, located at 310 N. Church St., Visalia, CA 93291, located approximately 22 miles southwest of the Project site monitors ambient concentrations of O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered “generally” representative of ambient concentrations in the Project area.

Table 2-2 summarizes the published data concerning O<sub>3</sub>, PM<sub>2.5</sub> and PM<sub>10</sub> since 2016 for each year that the monitoring data is provided.



<b>Table 2-2. Summary of Ambient Air Quality Data</b>			
<b>Pollutant Standards</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>O<sub>3</sub></b>			
Max 1-hour concentration (ppm)	0.098	0.109	0.112
Max 8-hour concentration (ppm) (state/federal)	0.083 / 0.083	0.092 / 0.091	0.095 / 0.094
Number of days above 1-hour standard (state/federal)	1 / 0	9 / 0	8 / 0
Number of days above 8-hour standard (state/federal)	19 / 0	65 / 6	58 / 7
<b>PM<sub>10</sub></b>			
Max 24-hour concentration (µg/m <sup>3</sup> ) (state/federal)	132.5 / 137.1	145.7 / 144.8	159.6 / 153.4
Number of days above 24-hour standard (state/federal)	* / 0	135.9 / 0	164.4 / 0
<b>PM<sub>2.5</sub></b>			
Max 24-hour concentration (µg/m <sup>3</sup> ) (state/federal)	132.5 / 137.1	145.7 / 144.8	159.6 / 153.4
Number of days above federal 24-hour standard	21.3	26.7	42.3

Source: CARB 2019a

µg/m<sup>3</sup> = micrograms per cubic meter; ppm = parts per million

\* = Insufficient data available

The USEPA and CARB designate air basins or portions of air basins and counties as being in “attainment” or “nonattainment” for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the Tulare County portion of the SJVAB, which encompasses the Project site, is included in Table 2-3.

<b>Table 2-3. Attainment Status for the San Joaquin Valley Air Basin</b>		
<b>Pollutant</b>	<b>State Designation</b>	<b>Federal Designation</b>
O <sub>3</sub>	Nonattainment	Nonattainment
PM <sub>10</sub>	Nonattainment	Attainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO <sub>2</sub>	Attainment	Unclassified/Attainment
SO <sub>2</sub>	Attainment	Unclassified/Attainment

Source: CARB 2018

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for

determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as nonattainment area for federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> standards (CARB 2018).

### **2.1.5 Sensitive Receptors**

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The nearest sensitive receptors to the Project site are the Comfort Inn and Suites located approximately 98 feet north of the Project site boundary, the vacant commercial building located approximately zero feet west of the Project site boundary, and a residence located across State Highway 198 from the site, approximately 270 feet to the west. The distance to the Comfort Inn and Suites was measured from the property line of the Proposed Project to the portion of the Comfort Inn and Suites property line which is located adjacent to the nearest hotel building on the property (see Figure 1). The parking lot located in the southeast section of the Comfort Inn and Suites site is not considered to be the nearest point to the sensitive receptor, as visitors to the hotel would spend the majority of their stay in their hotel room, in the nearby community center, and/or in Sequoia and Kings Canyon National Parks, thus remaining in the parking lot for a relatively short duration. In addition, hotel staff would spend relatively little time in the hotel parking lot.

## **2.2 Regulatory Framework**

### **2.2.1 Federal**

#### **Clean Air Act**

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the USEPA to establish the NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that carbon dioxide (CO<sub>2</sub>) is an air pollutant covered by the CAA; however, no NAAQS have been established for CO<sub>2</sub>.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults

can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The USEPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. Table 2-3 lists the federal attainment status of the SJVAB for the criteria pollutants.

### **2.2.2 State**

#### **California Clean Air Act**

The California Clean Air Act (CCAA) allows the state to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

#### **California State Implementation Plan**

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register.

The SJVAPCD is the agency primarily responsible for ensuring that national and state ambient air quality standards are not exceeded and that air quality conditions are maintained in the SJVAB. In an attempt to achieve NAAQS and CAAQS and maintain air quality, the air district has completed the following air quality attainment plans and reports, which together constitute the SIP for the portion of the SJVAB encompassing the Project:

- **2004 Extreme Ozone Attainment Demonstration Plan and 2013 Plan for the Revoked 1-Hour Ozone Standard.** The SJVAPCD initially adopted this plan in 2004 to address EPA's 1-hour ozone standard. Although the EPA approved the SJVAPCD's 2004 plan in 2010, the EPA withdrew this approval as a result of a court ruling in November 2012. The SJVAPCD adopted a new plan for the EPA's revoked 1-hour ozone standard in September 2013 (SJVAPCD 2013).
- **2007 Ozone Plan.** The Ozone Plan, approved in 2007, contains a comprehensive list of regulatory and incentive-based measures to reduce emissions and particulate matter with the goal of addressing the EPA's standards. The 2007 Ozone Plan calls for a 75 percent reduction of ozone-forming NO<sub>x</sub> emissions (SJVAPCD 2007a). These NO<sub>x</sub> reductions are preferred and essential to meeting the new 8-hour ozone and PM<sub>2.5</sub> standards. The plan calls for new and more stringent rules and regulations for stationary sources, new and more stringent tail-pipe emission standards for mobile sources, emission standards for locomotives, local regulations and voluntary measures to reduce and/or mitigate mobile source emissions, incentive-based measures, and alternative compliance programs. This plan also addresses EPA's 8-hour ozone standard of 84 parts per billion (ppb), which was established by EPA in 1997 (SJVAPCD 2007a).
- **2009 Reasonably Available Control Technology Demonstration for Ozone State Implementation Plan.** The SJVAPCD adopted the Reasonably Available Control Technology (RACT) Demonstration for Ozone State Implementation Plan in 2009. The Clean Air Act requires RACT for certain sources in all nonattainment areas. The SJVAPCD is required to ensure the EPA's Control Techniques Guidance (CTG) is being implemented through SJVAPCD regulations. The 42 CTGs were developed to control major sources of emissions (SJVAPCD 2009).
- **2016 Plan for the 2008 8-Hour Ozone Standard.** The Ozone Plan, approved in 2016, contains a comprehensive list of regulatory and incentive-based measures to reduce emissions and particulate matter with the goal of addressing the EPA's standards. The plan calls for new and more stringent rules and regulations for stationary sources, new and more stringent tail-pipe emission standards for mobile sources, emission standards for locomotives, local regulations and voluntary measures to reduce and/or mitigate mobile source emissions, incentive-based measures, and alternative compliance programs. This plan satisfies CAA requirements and ensures expeditious attainment of the 75 parts per billion 8-hour ozone standard (SJVAPCD 2016a).
- **2020 Reasonably Available Control Technology Demonstration Plan.** The SJVAPCD adopted the 2020 Reasonably Available Control Technology (RACT) Demonstration Plan for the 2015 8-Hour Ozone Standard on June 18, 2020. The Plan guides implementation of RACT requirements for sources subject to EPA Control Techniques Guidelines (CTGs) and for major sources of VOCs and NO<sub>x</sub>, to reduce ozone emissions and help attain ozone reduction goals (SJVAPCD 2020a).
- **2007 PM<sub>10</sub> Maintenance Plan and Request for Redesignation.** In 2007, the SJVAPCD adopted the 2007 PM<sub>10</sub> Attainment Plan to ensure the continued attainment of the EPA's PM<sub>10</sub> standard. Since the EPA determined that the air basin had attained the federal PM<sub>10</sub> standards on October 30, 2006, the valley is designated as an attainment area (SJVAPCD 2007b).

- **2016 Moderate Area Plan for the 2012 PM<sub>2.5</sub> Standard.** In 2016, the SJVAPCD adopted the 2016 PM<sub>2.5</sub> Plan to address the EPA's 24-hour standards. The plan utilizes the best available information to develop a strategy to demonstrate attainment of the federal standard for PM<sub>2.5</sub>. A number of local strategies are included in the plan, including regulations to address stationary sources, use of a risk-based approach to prioritize measures to expedite attainment standards, incentive measures, technology advances, policy efforts to shape new legislation, and public outreach (SJVAPCD 2016b).
- **2018 Plan for the 1997, 2006, and 2012 PM<sub>2.5</sub> Standards.** This Plan outlines a strategy to attain the federal health-based 1997, 2006, and 2012 national ambient air quality standards (standards, or NAAQS) for fine particulate matter (PM<sub>2.5</sub>); as expeditiously as considered practical by the SJVAPCD. The EPA 1997 standard for PM<sub>2.5</sub> is an annual average standard of 15 micrograms per cubic meter (µg/m<sup>3</sup>) and a 24-hour average standard of 65 µg/m<sup>3</sup>, the 2006 standard is a 24-hour average standard of 35 µg/m<sup>3</sup>, and the 2012 annual standard is an annual PM<sub>2.5</sub> standard of 12 µg/m<sup>3</sup> (SJVAPCD 2018).

### **Tanner Air Toxics Act & Air Toxics "Hot Spots" Information and Assessment Act**

CARB's Statewide comprehensive air toxics program was established in 1983 with Assembly Bill (AB) 1807, the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

CARB also administers the state's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA) and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the "Hot Spots" Act was amended by Senate Bill (SB) 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

### **2.2.3 Local**

#### **San Joaquin Valley Air Pollution Control District**

The local air quality agency affecting the SJVAB is the San Joaquin Valley Air Pollution Control District (SJVAPCD), which is charged with the responsibility of implementing air quality programs and ensuring that national and state ambient air quality standards are not exceeded and that air quality conditions are maintained in the SJVAB. In an attempt to achieve national and state ambient air quality standards and maintain air quality, the air district has completed several air quality attainment plans and reports, which together constitute the State Implementation Plan (SIP) for the portion of the SJVAB encompassing the Project.

The SJVAPCD has also adopted various rules and regulations for the control of stationary and area sources of emissions. Provisions applicable to the Proposed Project are summarized as follows:

- **Regulation IV (Prohibitions), Rule 4101 Visible Emissions.** The purpose of this rule is to prohibit the emissions of visible air contaminants to the atmosphere.. It prohibits emissions of visible air contaminants into the atmosphere for a period or periods aggregating more than three minutes in any one hour which exceeds opacity or shade standards.
- **Regulation IV (Prohibitions), Rule 4102, Nuisance.** The purpose of this rule is to protect the health and safety of the public. The rule prohibits discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such person or the public or which cause or have a natural tendency to cause injury or damage to business or property.
- **Regulation IV (Prohibitions), Rule 4601, Architectural Coatings.** The rule limits volatile organic compound (VOC) emissions from architectural coatings and specifies practices for proper storage, cleanup, and labeling requirements. Rule 4601 applies to “any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures, blends or repackages any architectural coating for use within the District.” Materials covered by the rule include adhesives, architectural coatings, paints, varnishes, sealers, stains, concrete curing compounds, concrete/masonry sealers, and waterproofing sealers. The rule contains VOC content limits for colorants and coatings with different VOC limits for prior to and after January 1<sup>st</sup>, 2022.
- **Regulation IV (Prohibitions), Rule 4641, Cutback, Slow Curve and Emulsified Asphalt, Paving and Maintenance Operations.** The purpose of this rule is to limit VOC emissions by restricting the application and manufacturing of certain types of asphalt and maintenance operations and applies to the use of these materials. Specifically, certain types of asphalt cannot be used for penetrating prime coat, dust palliative, or other paving: rapid cure and medium cure cutback asphalt, slow cure asphalt that contains more than 0.5 percent of organic compound which evaporates at 500°F or lower, and emulsified asphalt containing VOC in excess of 3 percent which evaporates at 500°F or lower.
- **Regulation VIII (Fugitive PM<sub>10</sub> Prohibitions), Rules 8021–8071, Fugitive PM<sub>10</sub> Prohibitions.** The purpose of these rules is to limit airborne particulate emissions associated with construction, demolition, excavation, extraction, and other earthmoving activities, as well as with open disturbed land and emissions associated with paved and unpaved roads. Accordingly, these rules include specific measures to be employed to prevent and reduce fugitive dust emissions from anthropogenic sources.
- **Regulation IX (Mobile and Indirect Sources), Rule 9510, Indirect Source Review.** This rule is the result of state requirements outlined in California Health and Safety Code Section 40604 and the SIP. The air district’s SIP commitments were originally contained in the SJVAPCD’s 2003 PM<sub>10</sub> Plan and 2004 Extreme Ozone Attainment Demonstration Plan, which presented the SJVAPCD’s strategy to reduce PM<sub>10</sub> and NO<sub>x</sub> in order to reach the ambient air pollution standards on schedule, which had been 2010. The plans quantify the reduction from current SJVAPCD rules and

proposed rules, as well as state and federal regulations, and then model future emissions to determine whether the SJVAPCD may reach attainment for applicable pollutants. This rule is meant to reduce emissions of NO<sub>x</sub> and PM<sub>10</sub> from new development projects that attract or generate motor vehicle trips. In general, new development contributes to the air pollution problem in the SJVAB by increasing the number of vehicles and vehicle miles traveled. Although newer, cleaner technology is reducing per-vehicle pollution, the emissions increase from new development partially offsets emission reductions gained from technology advances.

Per Section 2.1, this rule applies to any applicant that seeks to gain a final discretionary approval for a development project, or any portion thereof that meets certain size and use requirements. Per Section 2.2, this rule also applies to any applicant that seeks to gain approval from a public agency for a large development project that meets certain size and use requirements. Rule 9510 applies to the Project under Section 2.2, as the Project is otherwise permitted by-right and is 10,000 square feet or more of commercial space. In accordance with this rule, developers of larger residential, commercial, and industrial projects are required to reduce smog-forming NO<sub>x</sub> and PM<sub>10</sub> emissions from their projects' baselines as follows (SJVAPCD 2017):

- 20 percent of construction NO<sub>x</sub> exhaust
- 45 percent of construction PM<sub>10</sub> exhaust
- 33 percent of operational NO<sub>x</sub> over 10 years
- 50 percent of operational PM<sub>10</sub> over 10 years

These reductions are intended to be achieved through incorporation of on-site reduction measures. If, after implementation of on-site emissions reduction measures project emissions still exceed the minimum baseline reduction, the Indirect Source Review requires a project applicant to pay an off-site fee to the SJVAPCD, which is then used to fund clean-air projects within the air basin.

## **2.3 Air Quality Emissions Impact Assessment**

### **2.3.1 Thresholds of Significance**

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to air quality if it would do any of the following:

- 1) Conflict with or obstruct implementation of any applicable air quality plan.
- 2) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- 3) Expose sensitive receptors to substantial pollutant concentrations.

- 4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

### **2.3.2 Methodology**

Air quality impacts were assessed in accordance with methodologies recommended by CARB and the SJVAPCD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for Tulare County.

Operational air pollutant emissions were based on the Project site plans and the estimated weekend traffic trip generation rates calculated by VRPA Technologies, Inc. (2020), and the CalEEMod defaults for Tulare County for weekday trip generation.

### **2.3.3 Impact Analysis**

#### **Project Construction-Generated Criteria Air Quality Emissions**

Construction associated with the Proposed Project would generate short-term emissions of criteria air pollutants, including ROG, CO, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The largest amount of ROG, CO, SO<sub>x</sub>, and NO<sub>x</sub> emissions would occur during the earthwork phase. PM<sub>10</sub> and PM<sub>2.5</sub> emissions would occur from fugitive dust (due to earthwork and excavation) and from construction equipment exhaust. Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the Project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to and from the site. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact.

During construction activities, the Project would be required to comply with SJVAPCD Regulation VIII (Fugitive PM<sub>10</sub> Prohibitions). The purpose of this regulation is to limit airborne particulate emissions associated with construction, demolition, excavation, extraction, and other earthmoving activities, as well as with open disturbed land and emissions associated with paved and unpaved roads. Accordingly, these rules include specific measures to be employed to prevent and reduce fugitive dust emissions from anthropogenic sources. For instance, the Project applicant would be required to prepare a dust control plan. Construction activities anywhere within the regulatory jurisdiction of the SJVAPCD, including the Proposed Project site, may not commence until the SJVAPCD has approved or conditionally approved the dust control plan, which must describe all fugitive dust control measures that are to be implemented before, during, and after any dust-generating activity. Regulation VIII specifies the following measures that may be included in the dust control plan to minimize fugitive dust emissions:

- Apply water to unpaved surfaces and areas.
- Use nontoxic chemical or organic dust suppressants on unpaved roads and traffic areas.



- Limit or reduce vehicle speed on unpaved roads and traffic areas to a maximum 15 miles per hour.
- Maintain areas in a stabilized condition by restricting vehicle access.
- Install wind barriers.
- During high winds, cease outdoor activities that disturb the soil.
- Keep bulk materials sufficiently wet when handling.
- Store and handle materials in a three-sided structure.
- When storing bulk materials, apply water to the surface or cover the storage pile with a tarp.
- Don't overload haul trucks. Overloaded trucks are likely to spill bulk materials.
- Cover haul trucks with a tarp or other suitable cover. Or, wet the top of the load enough to limit visible dust emissions.
- Clean the interior of cargo compartments on emptied haul trucks prior to leaving a site.
- Prevent trackout by installing a trackout control device.
- Clean up trackout at least once a day. If along a busy road or highway, clean up trackout immediately.
- Monitor dust-generating activities and implement appropriate measures for maximum dust control.

The SJVAPCD's (2015) Guidance for Assessing and Mitigating Air Quality Impacts identifies significance thresholds for ROG, CO, and NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Construction-generated criteria air pollutant emissions associated with the Proposed Project were calculated using CalEEMod. Predicted maximum annual construction-generated emissions of criteria air pollutants for the Proposed Project are summarized in Table 2-4.

**Table 2-4. Construction-Related Emissions - Fugitive PM<sub>10</sub> Prohibitions Included**

Construction Year	Maximum Pollutants (tons per year)					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Annual (Maximum Tons per Year)</b>						
Year One Construction (2021)	0.71	2.65	2.62	0.00	0.21	0.14
Year Two Construction (2022)	0.20	0.71	0.78	0.00	0.05	0.03
<i>SJVAPCD Potentially Significant Impact Threshold</i>	10	10	100	27	15	15
<b>Exceed SJVAPCD Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SJVAPCD Regulation VIII. The specific regulation applied in CalEEMod was watering unpaved surfaces two times per day.

Emissions account for the site preparation and grading for 2.8 acres.

As shown in Table 2-4, construction-generated emissions would not exceed SJVAPCD significance thresholds.

In addition to the SJVAPCD criteria air pollutant thresholds, SJVAPCD Rule 9510, Indirect Source Review, Section 2.2, aims to fulfill the District's emission reduction commitments in the PM<sub>10</sub> and Ozone Attainment Plans. This rule applies to construction projects within the jurisdiction of the SJVAPCD which upon full build-out will include any one of the following:

- 250 residential units;
- 10,000 square feet of commercial space;
- 125,000 square feet of light industrial space;
- 500,000 square feet of heavy industrial space;
- 100,000 square feet of medical office space;
- 195,000 square feet of general office space;
- 45,000 square feet of educational space;
- 50,000 square feet of government space;
- 100,000 square feet of recreational space; or
- 45,000 square feet of space not identified above..

This rule also applies to any transportation or transit project where construction exhaust emissions equal or exceed two tons of NO<sub>x</sub> or two tons of PM<sub>10</sub>. The project developers are required to reduce concentrations of NO<sub>x</sub> by 20 percent and PM<sub>10</sub> by 45 percent during construction activities. Development projects that have a mitigated baseline below two tons per year of NO<sub>x</sub> and two tons per year of PM<sub>10</sub> shall be exempt from the requirements per Rule 9510 (SJVAPCD 2017).

The Project is proposing the construction of more than 10,000 square feet of commercial space, permitted by-right. Thus, adherence to Rule 9510 is required of the Proposed Project. In accordance with Rule 9510, the Project applicant is required to prepare a detailed air impact assessment (AIA) for submittal to the SJVAPCD, which demonstrates reduction of NO<sub>x</sub> emissions from the Project's baseline by 20 percent and a reduction of PM<sub>10</sub> by 45 percent. Therefore, the following mitigation is required.

#### Mitigation Measures

##### **AQ-1**

In accordance with SJVAPCD Rule 9510, a detailed air impact assessment (AIA) shall be prepared detailing the specific construction requirement (i.e., equipment required, hours of use, etc.). In accordance with this rule, emissions of NO<sub>x</sub> from construction equipment greater than 50 horsepower used or associated with the development Project shall be reduced by 20 percent from baseline (unmitigated) emissions and PM<sub>10</sub> shall be reduced by 45 percent. The Project shall demonstrate compliance with Rule 9510, including payment of all applicable fees, before issuance of the first building permit.

While the specific emission reduction measures will be developed to the satisfaction of the SJVAPCD, the following measures would reduce short-term air quality impacts attributable to the Proposed Project consistent with Rule 9510:

- During all construction activities, all diesel-fueled construction equipment including, but not limited to, rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, and tractors shall be of a certified clean fleet.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. Equipment maintenance records shall be kept on-site and made available upon request by the SJVAPCD or the County.
- The Project applicant shall comply with all applicable SJVAPCD rules and regulations. Copies of any applicable air quality permits and/or monitoring plans shall be provided to the County.

*Timing/Implementation:*                      *During the construction period*

*Monitoring/Enforcement:*                      *Tulare County*

As demonstrated in Table 2-5, implementation of mitigation measure AQ-1 would reduce annual NO<sub>x</sub> emissions by as much as 75 percent during each phase of construction and would reduce annual PM<sub>10</sub> emissions by more than 60 percent, which is far beyond the reduction needed to achieve the SJVAPCD Rule 9510 target. The actual emissions reduction would depend on the construction fleet utilized for construction, as clean fleet vehicles vary in emissions.

<b>Table 2-5. Construction Related NO<sub>x</sub> and PM<sub>10</sub> Emissions- Baseline and Mitigated (tons per year)</b>			
<b>Construction Year</b>	<b>NO<sub>x</sub> Baseline</b>	<b>NO<sub>x</sub> Mitigated</b>	<b>Percent Reduction</b>
Year One Construction (2021)	2.65	0.61	77%
Year Two Construction (2022)	0.71	0.18	75%
<b>SJVAPCD Potentially Significant Impact Threshold</b>			<b>20%</b>
<b>Construction Year</b>	<b>PM<sub>10</sub> Baseline</b>	<b>PM<sub>10</sub> Mitigated</b>	<b>Percent Reduction</b>
Year One Construction (2021)	0.19	0.07	63%
Year Two Construction (2022)	0.05	0.02	60%
<b>SJVAPCD Potentially Significant Impact Threshold</b>			<b>45%</b>

Source: CalEEMod version 2013.2.2. See Attachment A for emission outputs

Notes: Percent reduction calculated using  $((\text{baseline}-\text{mitigated}) / \text{baseline}) = \text{percent reduction}$

As previously stated, construction-generated emissions would not exceed SJVAPCD significance thresholds. However, the Project is the construction of a by-right commercial project over 10,000 square feet, instigating the implementation of Rule 9510. Rule 9510 requires a project to reduce NO<sub>x</sub> emissions from the Project's baseline by 20 percent and reduce annual PM<sub>10</sub> emissions by 45 percent. Mitigation measure AQ-1 would result in a greater than required reduction in NO<sub>x</sub> and PM<sub>10</sub> emissions from baseline for all construction activities. Note that the actual emissions reduction would depend on the construction fleet utilized for construction, as clean fleet vehicles vary in emissions. Since the project's emissions would not exceed SJVAPCD thresholds, no exceedance of the ambient air quality standards would occur, and no health effects from project criteria pollutants would occur.

### Project Operations Criteria Air Quality Emissions

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and SO<sub>2</sub> as well as ozone precursors such as ROG and NO<sub>x</sub>. Project-generated increases in emissions would be predominantly associated with motor vehicle use. Table 2-6 summarizes operational emissions from the Proposed Project.

The SJVAPCD's (2015) Guidance for Assessing and Mitigation Air Quality Impacts identifies significance thresholds for ROG, CO, and NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Operational-generated O<sub>3</sub> precursor emissions associated with the both Proposed Project were calculated using CalEEMod. Predicted maximum annual operational-generated emissions of criteria air pollutants for the Proposed Projects are summarized in Table 2-6.

Table 2-6. Operational Emissions						
Emission Source	Maximum Pollutants (tons per year) – Operations Commencing 2022					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Proposed Project Annual Emissions</b>						
Area	0.33	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.08	0.07	0.00	0.00	0.00
Mobile	0.24	2.05	2.24	0.00	0.60	0.16
<b>Total</b>	<b>0.58</b>	<b>2.14</b>	<b>2.32</b>	<b>0.00</b>	<b>0.60</b>	<b>0.17</b>
<i>SJVAPCD Significance Threshold</i>	<i>10</i>	<i>10</i>	<i>100</i>	<i>27</i>	<i>15</i>	<i>15</i>
<b>Exceed SJVAPCD Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs.

Notes: Emissions projections account for trip generation rates identified by VRPA Technologies, Inc. (2020) for weekend trips and CalEEMod default trips for Tulare County for weekday trips.

As indicated in Table 2-6, operational-generated emissions would not exceed SJVAPCD significance thresholds.

As previously mentioned, SJVAPCD Rule 9510 is intended to fulfill the region's emission reduction commitments in the SJVAPCD PM<sub>10</sub> and Ozone Attainment Plans. The Proposed Project is subject to Rule 9510 and would be required to consult with the SJVAPCD regarding the specific applicability of Rule 9510 in relation to Project operations. In accordance with Rule 9510, the Project applicant would be required to prepare a detailed air impact assessment for submittal to the SJVAPCD demonstrating the reduction from the Project's baseline of NO<sub>x</sub> emissions. The following mitigation is required.

### Mitigation Measures

#### **AQ-2**

In accordance with SJVAPCD Rule 9510, a detailed air impact assessment shall be prepared detailing the operational characteristics associated with the Proposed Project. In accordance with this rule, operational emissions of NO<sub>x</sub> shall be reduced by a minimum of 33.3 percent and operational emissions of PM<sub>10</sub> must be reduced by a minimum of 50 percent over a period of ten years. (Emissions reductions are in comparison to the Project's operational baseline emissions presented in Table 2-6.) The Project would demonstrate compliance with Rule 9510, including payment of all applicable fees, before issuance of the first building permit.

Based on the findings of the air impact assessment, the applicant shall pay the SJVAPCD a monetary sum necessary to offset the required operational emissions that are not reduced by the emission reduction measures contained in the air impact assessment. The quantity of operational emissions that need to be offset will be calculated in accordance with the methodologies identified in Rule 9510, Indirect

Source Review, and approved by the SJVAPCD. Operational emissions reduction methods will be selected under the direction of the SJVAPCD according to the air impact assessment process detailed in, and required by Rule 9510, Indirect Source Review (see Rule 9510, subsection 5).

*Timing/Implementation:*                      *Prior to the issuance of building permits*

*Monitoring/Enforcement:*                      *County of Tulare Planning and Building Department*

Since the project's emissions do not exceed SJVAPCD thresholds, no exceedance of the ambient air quality standards would occur, and no health effects from project criteria pollutants would occur.

As previously identified, the Tulare County portion of the SJVAB is listed as a nonattainment area for the federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>. O<sub>3</sub> is a health threat to persons who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. PM can adversely affect the human respiratory system. As shown in Table 2-6, the Proposed Project would result in increased emissions of the O<sub>3</sub> precursor pollutants ROG and NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>, however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the SJVAB is contained in the SJVAPCD air quality planning documents, previously described. The SJVAPCD air quality attainment plans and reports provide control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines such as the application of available cleaner technologies, best management practices, incentive programs, as well as development and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SJVAPCD are designed to meet the objectives of regional air quality planning efforts and in doing so achieve attainment status with state and federal standards. As noted above, the Project would increase the emission of these pollutants, but would not exceed the thresholds of significance established by the SJVAPCD for purposes of reducing air pollution and its deleterious health effects.

On December 24, 2018, the California Supreme Court issued an opinion identifying the need to provide sufficient information connecting a project's air emissions to health impacts or explain why such information could not be ascertained (*Sierra Club v. County of Fresno [Friant Ranch, L.P.]* [2018] 6 Cal.5<sup>th</sup> 502, Case No. S219783). Pursuant to Rule 8.520(f) of the Rules of the California Court, the SJVAPCD filed an amicus curiae brief in regard to this case. In the brief, SJVAPCD provided technical explanations as to why it may not be feasible for a project to relate the expected adverse air quality impacts to likely health consequences. As summarized below, for the reasons set forth by the SJVAPCD, the Proposed Project's air pollutant contribution currently cannot feasibly be directly related to likely health consequences. The technical demands for feasibly and accurately relating regional air pollutants to likely health consequences are too high for this Proposed Project at this time. The technical challenges are listed below, with the SJVAPCD amicus brief providing support on the findings for the Proposed Project:

- O<sub>3</sub> is not formed at the location of sources/emissions, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time.

"For the so-called criteria pollutants, such as O<sub>3</sub>, it may be more difficult to quantify health impacts. O<sub>3</sub> is formed in the atmosphere from the chemical reaction of NO<sub>x</sub> and VOC [ROG] in the presence of sunlight. It takes time and the influence of meteorological conditions for these reactions to occur, so O<sub>3</sub> may be formed at a distance downwind from the sources." [SJVAPCD p.11]

- O<sub>3</sub> and secondary PM formation is complex, which necessitates the use of more sophisticated modeling that is not reasonably feasible for the Project at this time. The Proposed Project, while much smaller in scale to the Friant Ranch project, similarly includes area wide sources and mobile sources.

"Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of O<sub>3</sub> or PM. This is especially true for a project like Friant Ranch where most of the criteria pollutant emissions derive not from a single 'point source,' but from area wide sources (consumer products, paint, etc.) or mobile sources (cars and trucks) driving to, from and around the site." [SJVAPCD p.9]

- The quantity of precursor emissions is not proportional to local O<sub>3</sub> and secondary PM concentration, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time.

"Ground level O<sub>3</sub> (smog) is not directly emitted into the air but is formed when precursor pollutants such as NO<sub>x</sub> and VOCs [ROG] are emitted into the atmosphere and undergo complex chemical reactions in the process of sunlight. Once formed, O<sub>3</sub> can be transported long distances by wind. Because of the complexity of O<sub>3</sub> formation, a specific tonnage amount of NO<sub>x</sub> or VOCs [ROG] emitted in a particular area does not equate to a particular concentration of O<sub>3</sub> in that area." [SJVAPCD p.4]

"Secondary PM, like O<sub>3</sub>, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO<sub>x</sub> and NO<sub>x</sub>. Because of the complexity of secondary PM formation, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area." [SJVAPCD p.5]

- Emissions do not cause health effects – it is the resulting concentration of criteria pollutants, which is influenced by sunlight, complex reactions, and transport, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time.

"The disconnect between the tonnage of precursor pollutants (NO<sub>x</sub>, SO<sub>x</sub> and VOCs [ROG]) and the concentration of O<sub>3</sub> or PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting O<sub>3</sub> or PM." [SJVAPCD p.5]

- Currently available modeling tools are appropriate for regional evaluations, but not individual projects like the Proposed Project.

"For instance, the computer models used to simulate and predict an attainment date for the O<sub>3</sub> or particulate matter NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NO<sub>x</sub>, SO<sub>x</sub> and VOCs [ROG]) and the atmospheric chemistry and meteorology of the Valley... the models simulate future O<sub>3</sub> or PM levels based on predicted changes in precursor emissions Valley wide... The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the Valley attains the NAAQS. Rather, the Air District's modeling and planning strategy is regional in nature and based on the extent to which all of the emission-generating sources in the Valley (current and future) must be controlled in order to reach attainment." [SJVAPCD p.6-7]

"Thus, the CEQA air quality analysis for criteria pollutants is not really a localized, project-level impact analysis but one of regional, "cumulative impacts."" [SJVAPCD p.8]

"...the currently available modeling tools are equipped to model the impact of all emission sources in the Valley on attainment... Running the photochemical grid model used for predicting O<sub>3</sub> attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO<sub>x</sub> and VOC [ROG] in the Valley) is not likely to yield valid information given the relative scale involved." [SJVAPCD p.9-10]

- The SJVAPCD indicates that it is currently impossible to accurately correlate project level emissions to specific health impacts.

"Finally, even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like O<sub>3</sub> and some particulates, it remains impossible, using today's models, to correlate that increase in concentration to a specific health impact. The reason is the same: such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level." [SJVAPCD p.10]

For the reasons set forth above, it is not currently feasible to relate the Proposed Project's contribution of regional air pollutants to likely health consequences. The SJVAPCD is responsible for assessing air pollutant impacts regionally, and the potential health consequences from those on a regional basis. The current evaluation on the limitations and uncertainties of existing tools is consistent with SJVAPCD findings. Currently available regional modeling tools are not designed to capture changes in pollutant concentrations for this Proposed Project that would be meaningful. This is due in part to a relatively coarse spatial resolution (e.g., greater than 4 x 4 kilometers) which makes it speculative to discern regional Project impacts on air quality.

### **Conflict with the SJVAPCD Air Quality Attainment Plans**

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based



programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the NAAQS and CAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The SJVAPCD prepared the 2004 Extreme Ozone Attainment Demonstration Plan, 2013 Plan for the Revoked 1-Hour Ozone Standard, 2007 Ozone Plan, 2009 Reasonably Available Control Technology Demonstration for Ozone State Implementation Plan, 2016 Plan for the 2008 8-Hour Ozone Standard, 2016 Moderate Area Plan for the 2012 PM<sub>2.5</sub> Standard, 2013 Plan for the Revoked 1-Hour Ozone Standard, 2018 Plan for the 1997, 2006, and 2012 PM<sub>2.5</sub> Standards, 2020 RACT Demonstration, and 2007 PM<sub>10</sub> Maintenance Plan and Request for Re-designation. These plans collectively address the air basin's nonattainment status with the national and state O<sub>3</sub> standards as well as particulate matter by establishing a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. Pollutant control strategies are based on the latest scientific and technical information and planning assumptions, updated emission inventory methodologies for various source categories, and the latest population growth projections and associated vehicle miles traveled projections for the region. SJVAPCD's latest population growth forecasts were defined in consultation with local governments and with reference to local general plans.

The Project site is designated for *Urban Development* by the General Plan. The General Plan identifies the *Urban Development* designation as meant for development generally characterized by low to high density residential development, commercial development, industrial development, and typically supported by public services such as central water and sewer systems. The Project is consistent with this General Plan designation and would not exceed the population or job growth projections used by the SJVAPCD to develop its air quality attainment plans. Additionally, as shown in Table 2-4 and Table 2-6 above, both Project construction and Project operations would not generate emissions that would exceed SJVAPCD significance thresholds. Furthermore, the implementation of AQ-1 would reduce construction-generated emissions below what is required in Rule 9510 and AQ-2 would reduce operational-generated emissions or offset the emissions with payment of a fee, which is then used to fund clean-air projects within the air basin. Note that reductions in construction-generated emissions due to AQ-1 will vary per the fleet used. Regardless, AQ-1 would reduce construction-generated emissions below what is required in Rule 9510. The Project would be consistent with the emission-reduction goals of the SJVAPCD Attainment Plans.

### **Exposure of Sensitive Receptors to Toxic Air Contaminants**

As previously described, sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptors to the Project site are the Comfort Inn and Suites located approximately 98 feet north of the Project site boundary, the vacant commercial building located approximately zero feet west of the Project

site boundary, and a residence located across State Highway 198 from the site, approximately 270 feet to the west. As stated previously, the distance to the Comfort Inn and Suites was measured from the property line of the Proposed Project to the portion of the Comfort Inn and Suites property line which is located adjacent to the nearest hotel building on the property (see Figure 1). The parking lot located in the southeast section of the Comfort Inn and Suites site is not considered to be the nearest point to the sensitive receptor, as visitors to the hotel would spend the majority of their stay in their hotel room, at the nearby community center, and/or in Sequoia and Kings Canyon National Parks, thus remaining in the parking lot for a relatively short duration. In addition, hotel staff would spend relatively little time in the hotel parking lot.

#### Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of diesel particulate matter (DPM), ROG, NO<sub>x</sub>, CO, and PM<sub>10</sub> from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. However, as shown in Tables 2-4, the Project would not exceed the SJVAPCD construction emission thresholds. The portion of the SJVAB which encompasses the Project area is classified nonattainment area for the federal O<sub>3</sub> and PM<sub>2.5</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub> (CARB 2018). Thus, existing O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> levels in the SJVAB are at unhealthy levels during certain periods.

The health effects associated with O<sub>3</sub> are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in O<sub>3</sub> precursor emissions (ROG or NO<sub>x</sub>) in excess of the SJVAPCD thresholds, the Project is not anticipated to substantially contribute to regional O<sub>3</sub> concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the SJVAPCD thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary toxic air contaminant (TAC) of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by the CARB in 1998. The potential cancer risk from the inhalation of DPM outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Based on the emission modeling conducted, the maximum onsite construction-related daily emissions (mitigated) of exhaust PM<sub>2.5</sub>, considered a surrogate for DPM, would be 0.07 pounds/day (see Attachment A). (PM<sub>2.5</sub> exhaust is considered a surrogate for DPM

because more than 90 percent of DPM is less than 1 microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter (i.e., PM<sub>2.5</sub>). Most PM<sub>2.5</sub> derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.) As with O<sub>3</sub> and NO<sub>x</sub>, the Project would not generate emissions of PM<sub>10</sub> or PM<sub>2.5</sub> that would exceed the SJVAPCD's thresholds. Additionally, the Project would be required to comply with Regulation VIII, Rules 8021–8071– Fugitive PM<sub>10</sub> Prohibitions and Rule 9510– Indirect Source Review, as described above, which limit the amount of fugitive dust generated during construction. Accordingly, the Project's PM<sub>10</sub> and PM<sub>2.5</sub> emissions are not expected to cause any increase in related regional health effects for these pollutants. Although health risk due to TACs cannot be accurately quantified, based on quantitative and qualitative analysis of anticipated Project emissions, a significant health risk would not result.

In summary, the Project would not result in a potentially significant contribution to regional or localized concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants.

#### *Naturally Occurring Asbestos*

Another potential air quality issue associated with construction-related activities is the airborne entrainment of asbestos due to the disturbance of naturally-occurring asbestos-containing soils. The Proposed Project is not located within an area designated by the State of California as likely to contain naturally-occurring asbestos (DOC 2011). As a result, construction-related activities would not be anticipated to result in increased exposure of sensitive land uses to asbestos.

#### *Valley Fever*

*Coccidioidomycosis* (CM), often referred to as San Joaquin Valley Fever or Valley Fever, is one of the most studied and oldest known fungal infections. Valley Fever most commonly affects people who live in hot dry areas with alkaline soil and varies with the season. This disease, which affects both humans and animals, is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). CI spores are found in the top few inches of soil and the existence of the fungus in most soil areas is temporary. The cocci fungus (an organism that grows and feeds on dead or decaying organic matter) lives as a saprophyte in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-moving activities and become airborne. Agricultural workers, construction workers, and other people who work outdoors and who are exposed to wind and dust are more likely to contract Valley Fever. Children and adults whose hobbies or sports activities expose them to wind and dust are also more likely to contract Valley Fever. After the fungal spores have settled in the lungs, they change into a multicellular structure called a spherule. Fungal growth in the lungs occurs as the spherule grows and bursts, releasing endospores, which then develop into more spherules.

Valley fever (*Coccidioidomycosis*) is found in California, including Tulare County. In about 50 to 75 percent of people, valley fever causes either no symptoms or mild symptoms and those infected never seek medical care; when symptoms are more pronounced, they usually present as lung problems (cough, shortness of breath, sputum production, fever, and chest pains). The disease can progress to chronic or

progressive lung disease and may even become disseminated to the skin, lining tissue of the brain (meninges), skeleton, and other body areas.

Tulare County is considered a highly endemic area for valley fever. When soil containing this fungus is disturbed by ground-disturbing activities such as digging or grading, by vehicles raising dust, or by the wind, the fungal spores get into the air. When people breathe the spores into their lungs, they may get valley fever. Fungal spores are small particles that can grow and reproduce in the body. The highest infection period for valley fever occurs during the driest months in California, between June and November. Infection from valley fever during ground-disturbing activities can be partially mitigated through the control of Project-generated dust. As noted, Project-generated dust would be controlled by adhering to SJVAPCD dust-reducing measures (Regulation VIII), which includes the preparation of a SJVAPCD-approved dust control plan describing all fugitive dust control measures that are to be implemented before, during, and after any dust-generating activity.

With minimal site grading and conformance with SJVAPCD Regulation VIII, dust from the construction of the Project would not add significantly to the existing exposure level of people to this fungus, including construction workers.

#### Operational Air Contaminants

Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract additional heavy-duty trucks that spend long periods queuing and idling at the site. Onsite Project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. The maximum operation-related emissions of exhaust PM<sub>2.5</sub>, considered a surrogate for DPM, would be 0.09 pounds per day, produced by the estimated 860 additional one-way vehicle trips per day on Saturdays, 625 additional one-way vehicle trips per day on Sundays, and 858 additional one-way vehicle trips per day on weekdays. Therefore, the Project would not be a source of TACs and there would be no impact as a result of the Project during operations. The Project would not have a high carcinogenic or non-carcinogenic risk during operation.

#### *Carbon Monoxide Hot Spots*

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. In 1993, much of the state was designated nonattainment under the CAAQS and NAAQS for CO. Currently, the allowable CO emissions standard in

California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration across the entire state is now designated as attainment. Detailed modeling of Project-specific CO “hot spots” is not necessary and thus this potential impact is addressed qualitatively.

A CO “hot spot” would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. A study conducted in Los Angeles County by the South Coast Air Quality Management District (SCAQMD) is helpful in showing the amount of traffic necessary to result in a CO Hotspot, and can be used to demonstrate the traffic necessary to create a hot spot anywhere in California, including the Central Valley. The SCAQMD analysis prepared for CO attainment in the SCAQMD’s *1992 Federal Attainment Plan for Carbon Monoxide* in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 Air Quality Management Plan can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). To establish a more accurate record of baseline CO concentrations affecting the SoCAB, a CO “hot spot” analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This “hot spot” analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

Furthermore, the SJVAPCD Guidance for Assessing and Mitigating Impacts (2015b) includes the following CO hot spot criteria:

If neither of the following criteria are met at all intersections affected by the developmental project, the project will result in no potential to create a violation of the CO standard:

- A traffic study for the project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F; or
- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at more or more intersections in the project vicinity.

According to the Traffic Study prepared for the Project, LOS at the SR 198 (Sierra Drive) and Project Driveway and SR 198 (Sierra Drive) and Old 3 Rivers Road intersections would not exceed target LOS 'D' for all the study scenarios. In addition, the Project is expected to generate 860 trips generated per day on Saturdays and the estimated 625 trips generated per day on Sundays (VRPA Technologies, Inc. 2020). Using CalEEMod trip generation defaults for Tulare County, 858 trips are anticipated to be generated on weekdays. Thus, based on Project traffic generation and resultant LOS on affected roadways, it can be determined that the Project would not result in CO hotspots.

It is acknowledged that the Project site is located relatively close to the entrance of the Sequoia National Park entrance. Historically, there have been instances when a substantial amount of automobiles are queued for entrance into the park and idling along the road as far out as to Three Rivers. However, such instances are uncommon and very unlikely to result in traffic volumes of over 100,000 vehicles per day. Thus, neither the Proposed Project nor the cumulative park plus Project traffic would not generate traffic volumes of more than 100,000 vehicles per day, there is no likelihood of the Project traffic exceeding CO values.

### **Odors**

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants,

composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not include any uses considered to be associated with odors.

In addition, per the SJVAPCD's Guidance to Conduct Detailed Analysis for Assessing Odor Impacts to Sensitive Receptors, this analysis of potential odor impacts contains a review of odor complaints for "similar facilities". Specifically, a records request for odor complaints submitted within the last three years involving the adjacent Comfort Inn and Suites was submitted on October 12, 2020. The SJVAPCD confirmed no odor complaints were found to be on file for the Three Rivers Comfort Inn and Suites within the last three years (SJVAPCD 2020b). As such, it is also expected that substantial odors would not be generated by the proposed hotel Project.

### **3.0 GREENHOUSE GAS EMISSIONS**

#### **3.1 Greenhouse Gas Setting**

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are CO<sub>2</sub>, methane (CH<sub>4</sub>), and N<sub>2</sub>O. Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together (Intergovernmental Panel on Climate Change [IPCC] 2014).

Table 3-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH<sub>4</sub> traps over 25 times more heat per molecule than CO<sub>2</sub>, and N<sub>2</sub>O absorbs 298 times more heat per molecule than CO<sub>2</sub> (IPCC 2014). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO<sub>2</sub>e), which weight each gas by its global warming potential. Expressing GHG emissions in CO<sub>2</sub>e takes the contribution of all GHG emissions to the greenhouse effect

and converts them to a single unit equivalent to the effect that would occur if only CO<sub>2</sub> were being emitted.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO<sub>2</sub> is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Of the total annual human-caused CO<sub>2</sub> emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO<sub>2</sub> emissions remains stored in the atmosphere (IPCC 2013).

<b>Table 3-1. Greenhouse Gases</b>	
<b>Greenhouse Gas</b>	<b>Description</b>
CO <sub>2</sub>	Carbon dioxide is a colorless, odorless gas. CO <sub>2</sub> is emitted in a number of ways, both naturally and through human activities. The largest source of CO <sub>2</sub> emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO <sub>2</sub> emissions. The atmospheric lifetime of CO <sub>2</sub> is variable because it is so readily exchanged in the atmosphere. <sup>1</sup>
CH <sub>4</sub>	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH <sub>4</sub> to the atmosphere. Natural sources of CH <sub>4</sub> include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH <sub>4</sub> is about 12 years. <sup>2</sup>
N <sub>2</sub> O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N <sub>2</sub> O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N <sub>2</sub> O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N <sub>2</sub> O is approximately 120 years. <sup>3</sup>

Sources: <sup>1</sup>USEPA 2016a, <sup>2</sup>USEPA 2016b, <sup>3</sup>USEPA 2016c

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; it is sufficient to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

### 3.1.1 Sources of Greenhouse Gas Emissions

In 2019, CARB released the 2019 edition of the California GHG inventory covering calendar year 2017 emissions. In 2017, California emitted 424.1 million gross metric tons of CO<sub>2</sub>e including from imported electricity. Combustion of fossil fuel in the transportation sector was the single largest source of



California's GHG emissions in 2017, accounting for approximately 41 percent of total GHG emissions in the state. This sector was followed by the industrial sector (24 percent) and the electric power sector including both in- and out-of-state sources (15 percent) (CARB 2019b). Emissions of CO<sub>2</sub> are by-products of fossil fuel combustion. CH<sub>4</sub>, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. N<sub>2</sub>O is also largely attributable to agricultural practices and soil management. CO<sub>2</sub> sinks, or reservoirs, include vegetation and the ocean, which absorb CO<sub>2</sub> through sequestration and dissolution (CO<sub>2</sub> dissolving into the water), respectively, two of the most common processes for removing CO<sub>2</sub> from the atmosphere.

## **3.2 Regulatory Framework**

### **3.2.1 State**

#### **Executive Order S-3-05**

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

While dated, this EO remains relevant because a more recent California Appellate Court decision, *Cleveland National Forest Foundation v. San Diego Association of Governments* (November 24, 2014) 231 Cal.App.4th 1056, examined whether it should be viewed as having the equivalent force of a legislative mandate for specific emissions reductions. While the California Supreme Court ruled that the San Diego Association of Governments did not abuse its discretion by declining to adopt the 2050 goal as a measure of significance in light of the fact that the EO does not specify any plan or implementation measures to achieve its goal, the decision also recognized that the goal of a 40 percent reduction in 1990 GHG levels by 2030 is "widely acknowledged" as a "necessary interim target to ensure that California meets its longer-range goal of reducing GHG emissions 80 percent below 1990 levels by the year 2050.

#### **Assembly Bill 32 Climate Change Scoping Plan and Updates**

In 2006, the California legislature passed Assembly Bill (AB) 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. CARB has identified a GHG reduction target of 15 percent from current levels for local governments and notes that successful implementation relies on local governments' land use planning and urban growth decisions.

Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which was re-approved by CARB on August 24, 2011, that outlines measures to meet the 2020 GHG reduction goals. To meet these goals,

California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from today's levels. The Scoping Plan recommends measures for further study and possible state implementation, such as new fuel regulations. It estimates that a reduction of 174 million metric tons of CO<sub>2</sub>e (about 191 million U.S. tons) from the transportation, energy, agriculture, and forestry sectors and other sources could be achieved should the State implement all of the measures in the Scoping Plan.

The Scoping Plan is required by AB 32 to be updated at least every five years. The first update to the AB 32 Scoping Plan was approved on May 22, 2014 by CARB. The 2017 Scoping Plan Update was adopted on December 14, 2017. The Scoping Plan Update addresses the 2030 target established by SB 32 as discussed below and establishes a proposed framework of action for California to meet a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels. The key programs that the Scoping Plan Update builds on include: increasing the use of renewable energy in the state, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of methane emissions from agricultural and other wastes.

### **Executive Order B-30-15**

On April 20, 2015 Governor Edmund (Jerry) Brown, Jr., signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's EO aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2°C, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

### **Senate Bill 32 and Assembly Bill 197 of 2016**

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

### **Senate Bill X1-2 of 2011, Senate Bill 350 of 2015, and Senate Bill 100 of 2018**

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met

increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California.

In October 2015, SB 350 was signed by Governor Brown, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable resources by 2030. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

### **2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings**

The Building and Efficiency Standards (Energy Standards) were first adopted and put into effect in 1978 and have been updated periodically in the intervening years. These standards are a unique California asset that have placed the State on the forefront of energy efficiency, sustainability, energy independence and climate change issues. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The 2019 standards are a major step toward meeting Zero Net Energy. According to the California Energy Commission, single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards and nonresidential buildings will use about 30 percent less energy (due mainly to lighting upgrades) (CEC 2018). The most significant efficiency improvement to the residential Standards include the introduction of photovoltaic into the perspective package, improvements for attics, walls, water heating and lighting. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. These new standards apply only to certain nonresidential building types, as specified in the requirements.

### **3.2.2 Local**

#### **San Joaquin Valley Air Pollution Control District Climate Change Climate Action Plan**

The SJVAPCD has adopted guidance and policy for implementation of the Climate Change Climate Action Plan (CCAP). The guidance and policy rely on the use of performance-based standards, otherwise known as Best Performance Standards (BPS) to assess significance of project specific greenhouse gas emissions on global climate change during the environmental review process, as required by CEQA. Use of BPS is a method of streamlining the CEQA process of determining significance and is not a required emission reduction measure. Projects implementing BPS would be determined to have a less than cumulatively significant impact. Otherwise, demonstration of a 29 percent reduction in GHG emissions, from business-as-usual (BAU), is required to determine that a project would have a less than cumulatively significant impact. The guidance does not limit a lead agency's authority in establishing its own process and guidance for determining significance of project related impacts on global climate change.

However, the BAU portion of the tiered approach is problematic based on the 2015 California Supreme Court Newhall Ranch decision, which stated that an GHG-related impact determination based on the BAU approach is "not supported by a reasoned explanation based on substantial evidence."

## **Tulare County Climate Action Plan**

Tulare County adopted the Tulare County Climate Action Plan (CAP) in 2012. Since then, the CAP was updated in 2018 to establish GHG reduction targets which support the SB 32 2030 target signed by Governor Brown in 2016.

The 2018 CAP Update incorporates new baseline and future year inventories to reflect the latest information and updates the County's strategy to address the SB 32 2030 target. The 2030 target requires the State to reduce emissions by 40 percent below 1990 levels from the 2017 Scoping Plan and County data. The CAP identifies the County's fair share of reductions required to maintain consistency with the State target.

The CAP provides a CEQA consistency checklist for project review of projects below a certain size limit. Proposed development projects that are consistent with the emission reduction and adaptation measures included in the CAP and the programs that are developed as a result of the CAP, would be considered to have a less than significant cumulative impact on climate change and emissions consistent with CEQA Guidelines Section 15064(h)(3) (as amended to comply with SB 97).

## **Tulare County 2030 General Plan**

The Tulare County General Plan contains numerous policies aimed at reducing GHG emissions. The 2018 CAP Update incorporates new baseline and future year inventories to reflect the latest information and updates the County's strategy to address the SB 32 2030 target. The 2030 target requires the State to reduce emissions by 40 percent below 1990 levels from the 2017 Scoping Plan and County data. The CAP identifies the County's fair share of reductions required to maintain consistency with the state target.

The CAP references the General Plan policies as tools for reducing GHG emissions. These policies are divided into the categories of Transportation Strategies, Building Energy Efficiency, Water Conservation Energy Savings, Solid Waste Reduction and Recycling, and Agricultural Programs and Incentives. The policies are aimed at County action and do not specifically mandate action at the project level.

## **3.3 Greenhouse Gas Emissions Impact Assessment**

### **3.3.1 Thresholds of Significance**

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to GHG emissions if it would:

- 1) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases or
- 2) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

The Appendix G thresholds for GHG's do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the

appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines § 15064.4(a) states that lead agencies “shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate” GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project’s GHG emissions or rely on a “qualitative analysis or other performance-based standards.” (14 California Code of Regulations [CCR] 15064.4(b)). A lead agency may use a “model or methodology” to estimate GHG emissions and has the discretion to select the model or methodology it considers “most appropriate to enable decision makers to intelligently take into account the project’s incremental contribution to climate change.” (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that “[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence” (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA’s requirements for cumulative impact analysis (see CEQA Guidelines § 15130(f)). As a note, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines § 15064(h)(3), a project’s incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions.” Put another way, CEQA Guidelines § 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines § 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The Tulare County CAP aims to reduce GHG emissions from development projects in Tulare County. The CAP builds on state and regional policies aimed at reducing GHG emissions consistent with the SB 32 2030 GHG reduction target. The CAP relies on policies of the Tulare County General Plan to guide development projects. In addition, the Project provides specific guidelines for determining if new development projects are consistent with the CAP. The CAP includes a progress report with metrics and benchmarks for tracking progress toward meeting the GHG reduction targets. The County's progress is on track for all metrics.

The CAP is utilized to evaluate the significance of the Project GHG emissions.

### **3.3.2 Methodology**

Project GHG emissions were quantified using CalEEMod, version 2016.3.2. Project construction generated GHG emissions were primarily calculated using CalEEMod model defaults for Tulare County and the Project site plans. Operational GHG emissions were calculated based on the Project site plans, the estimated weekend traffic trip generation rates from VRPA Technologies, Inc. (2020), and the CalEEMod default traffic trips for Tulare County for weekday traffic trips. The Project is anticipated to generate 860 additional one-way vehicle trips per day on Saturdays, 625 additional one-way vehicle trips per day on Sundays, and 858 additional one-way vehicle trips per day on weekdays.

The traffic fleet mix defaults contained in the CalEEMod model are based on the average fleet mix of Tulare County.

### **3.3.3 Impact Analysis**

#### **Contribution of Greenhouse Gas Emissions at a Level that would Conflict with an Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases**

Project GHG emissions were quantified for disclosure purposes. The Tulare County CAP does not require quantification of emissions for projects less intense than a 500-unit subdivision or 100,000 square feet of retail or equivalent intensity for other uses. The Proposed Project would include approximately 72,000 square feet of commercial hotel space, and this is less intense than the threshold requiring GHG emissions quantification. However, the anticipated GHG emissions for the Project are quantified for disclosure purposes. The GHG emissions represent Project emissions prior to implementation of mitigation measures GHG-1 and GHG-2 (explained below), as the specific energy use offset from these measures cannot be determined until the scale and specifications of the renewable energy generation and electric vehicle (EV) charging are known.

### Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 3-2 illustrates the specific construction generated GHG emissions that would result from construction of the Project.

<b>Table 3-2. Construction-Related Greenhouse Gas Emissions</b>	
<b>Emissions Source</b>	<b>CO<sub>2</sub>e (Metric Tons/ Year)</b>
Year One Construction (2021)	420
Year Two Construction (2022)	126
<b>Total Emissions</b>	<b>546</b>

Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs.

As shown in Table 3-2, Project construction would result in the generation of approximately 546 metric tons of CO<sub>2</sub>e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. The amortized construction emissions are added to the annual average operational emissions.

### Operations

Operation of the Project would result in GHG emissions predominantly associated with motor vehicle use. Long-term operational GHG emissions attributable to the Project are identified in Table 3-3.

<b>Table 3-3. Operational-Related GHG Emissions</b>	
<b>Emissions Source</b>	<b>CO<sub>2</sub>e (Metric Tons/ Year)</b>
Construction Emissions (amortized over the 30-year life of the Project)	18
Area Source Emissions	0
Energy Source Emissions	295
Mobile Source Emissions	842
Solid Waste Emissions	31
Water Emissions	6
<b>Total Emissions</b>	<b>1,175</b>

Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs.

As shown in Table 3-3, Project operations would result in the generation of approximately 1,175 metric tons of CO<sub>2</sub>e annually.

The Tulare County CAP (2018) is a strategic planning document that identifies sources of GHG emissions within the County, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic policies and actions to reduce emissions from the development

project subject to CEQA. The GHG-reduction strategies in the Plan build key opportunities prioritized by County staff and members of the public.

To be consistent with the CAP, development projects less intense than a 500-unit subdivision or 100,000 square feet of retail or equivalent intensity for other uses can use the CAP consistency checklist. The checklist contains design features and measures that are used to determine consistency. The overarching CAP consistency requirements for all projects are outlined in Table 3-4.

<b>Table 3-4. CEQA Project Requirements for Consistency with CAP</b>	
<b>Item</b>	<b>Project Compliance?</b>
Project helps to meet the density goals from the Tulare Blueprint	Yes
Consistency with General Plan policies	Yes
Consistency with Rural Valley Land Plans or Foothill Growth Management Plan development criteria	Yes
Consistency with Urban Growth Boundary expansion criteria	Yes
Consistency for development within Rural Community Urban Development Boundaries (UDB) and Hamlet Development Boundaries HDB, and Legacy Development Boundaries (LDB)	Yes

Source: Tulare County 2018

Note: Criteria as identified in the General Plan Planning Framework

The Project would comply with all applicable General Plan policies intended to reduce GHG emissions. The Project site in the community of Three Rivers and is covered by the Foothill Growth Management Plan of the 2030 General Plan (County of Tulare 2012). The Project would not conflict with the applicable policies of the Foothill Growth Management Plan. Furthermore, the Project would comply with the Land Use and Urban Policies of the 2030 General Plan. Finally, for the Project to be approved for development by the County of Tulare they would require the Project to meet the development requirements as they pertain to Rural Community Urban Development Boundaries and/or Hamlet Development Boundaries. The Project site is located within the Three Rivers Urban Development Boundary depicted within the 2030 General Plan. In addition, the Project is consistent with the 2009 Tulare County Regional Blueprint goals and objectives.

Furthermore, both the existing and the projected GHG inventories in the CAP were derived based on the land use designations and associated densities defined in the County's General Plan. The Proposed Project is consistent with the land use designation and development density presented in the General Plan. As previously stated, the Project site is designated by the 2030 General Plan as *Urban Development Boundaries* (zoned for commercial use). Since the Project is consistent with the General Plan, it is consistent with the urban development types, intensity, and patterns of land use envisioned for the site vicinity in the General Plan. As a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by the County to develop the CAP.

A more detailed review for compliance with CAP measures is required to ensure that a project is doing its part in reducing emissions. Table 3-5 provides a checklist containing all applicable measures that will provide reductions necessary to achieve CAP consistency.



<b>Table 3-5. CAP Consistency Checklist (Applicable to the Project)</b>		
<b>CAP Measure</b>	<b>Compliance</b>	<b>Project Compliant Prior to Mitigation?</b>
<b>Land Use:</b> Project is consistent with the Tulare County General Plan policies listed in the CAP applicable to GHG emissions and sustainability.	Review for compliance during project review process.	Yes
<b>Energy Efficiency:</b> Project complies with current version of Title 24	Provide copy of the Title 24 Report demonstrating compliance with the applicable standards with Building Permit application.	Yes
<b>Renewable Energy:</b> Project includes solar panels or other alternative energy source meeting County Solar Ordinance or new Title 24 standards whichever is more stringent.	Include solar on building plans and provide Title 24 compliance reports with Building Permit applications.	No
<b>EV Charging:</b> Project meets charging installation/charging ready requirements of the CalGreen Code.	Include charging in building plans.	No
<b>CalGreen Building Code Water:</b> Project complies with indoor and outdoor water conservation measures.	Provide copy of report showing code compliance.	Yes
<b>Water Conservation Landscaping:</b>	Project complies with County water conservation ordinance requirements for landscaping.	Yes
<b>Solid Waste:</b> Project has access to recycling service for homes and businesses meeting CalRecycle requirements.	County verify that providers are in compliance with CalRecycle regulations regarding recycling and diversion of solid waste.	Yes

Source: Tulare County 2018

As shown in Table 3-4, the Project is consistent with the applicable General Plan Policies. In addition, the Project is required by California state law to meet the Title 24 energy efficiency requirements, comply with the CALGreen Building Water Code (California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations), and meet the California Model Water Efficient Landscape Ordinance (MWELO) requirements. Furthermore, the County mandates that applicable codified County standards are met by the Project and will enforce the implementation of these standards as a condition of approval. During the design review process, the County will mandate that the Project not only meets state MWELO standards, but complies with the specific requirements of the County water conservation ordinance requirements for landscaping. The County will also review the trash enclosure design to ensure solid waste pick-up is feasible and will ensure the Project meets the CalRecycle requirements. Further, the County must verify the Project is consistent with the General Plan policies, and the County requires all feasible GHG-reducing strategies of the CAP are incorporated into projects and their permits through development review and application of conditions of approval as applicable.

As shown in Table 3-5, the Project Preliminary Concept Design does not specify that the Project design includes EV charging and a renewable energy source. As such, mitigation measures GHG-1 and GHG-2 are required to for the Project to be consistent with the CAP.

#### Mitigation Measures

**GHG-1** The Project must provide an onsite renewable energy system(s). The Project shall include solar panels or other alternative energy source meeting the County Solar Ordinance or new Title 24 standards, whichever is more stringent. The onsite renewable

energy system(s) must be installed as part of the construction process and be functional upon commencement of Project operation. The Project Proponent must include solar on building plans and provide Title 24 compliance reports with Building Permit applications to the County.

*Timing/Implementation:*                      *During the construction period*

*Monitoring/Enforcement:*                      *County of Tulare Planning and Building Department*

**GHG-2**

The Project shall meet the charging installation/charging ready requirements of the CALGreen Code. The Project Proponent shall include EV charging accommodations as specified in the CALGreen Code in building plans for review and approval by the County, prior to commencement of Project construction.

*Timing/Implementation:*                      *During the construction period*

*Monitoring/Enforcement:*                      *County of Tulare Planning and Building Department*

Following implementation of mitigation measures GHG-1 and GHG-2, the Project would be consistent with the Tulare County CAP for the purpose of meeting 2030 GHG emission reduction targets in compliance with SB 32.

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## **LIST OF ATTACHMENTS**

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Attachment A – CalEEMod Output Files

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**ATTACHMENT A**

CalEEMod Output Files

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

## Three Rivers Hampton Inn & Suites

### Tulare County, Annual

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	108.00	Space	0.97	43,200.00	0
Hotel	105.00	Room	1.81	72,364.00	0
Recreational Swimming Pool	0.80	1000sqft	0.02	800.00	0

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	51
Climate Zone	7			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	549	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

Project Characteristics - Southern California Edison improved their CO2 emissions to 549 lb/MWh in 2017.

Land Use - Project information is derived from the project feasibility study (HVS Consulting & Valuation 2020) , preliminary design (DVB Architecture 2020), and traffic study (VRPA Technologies, Inc. 2020).

Construction Phase - Building construction, paving, and painting will occur simultaneously.

Vehicle Trips - All trips attributed to hotel use. Traffic Impact Study Report (VRPA Technologies, Inc. 2020).

Energy Use -

Construction Off-road Equipment Mitigation - SJVAPCD Rule VII Fugitive PM10 prohibitions, rules 8021-8071. Required clean fleet is a MM aimed to reduce NOx and comply with Rule 9510.

Energy Mitigation - Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018).

Water Mitigation - CA water efficient appliance requirements.

Fleet Mix -

Table Name	Column Name	Default Value	New Value
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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	220.00
tblConstructionPhase	NumDays	10.00	220.00
tblLandUse	LandUseSquareFeet	152,460.00	72,364.00
tblLandUse	LotAcreage	3.50	1.81
tblProjectCharacteristics	CO2IntensityFactor	702.44	549
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	33.82	0.00

## 2.0 Emissions Summary

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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.7116	2.6512	2.6238	4.8500e-003	0.0824	0.1301	0.2126	0.0267	0.1231	0.1498	0.0000	418.6831	418.6831	0.0829	0.0000	420.7563
2022	0.2086	0.7157	0.7842	1.4600e-003	0.0186	0.0333	0.0519	5.0200e-003	0.0316	0.0366	0.0000	126.2786	126.2786	0.0245	0.0000	126.8915
Maximum	0.7116	2.6512	2.6238	4.8500e-003	0.0824	0.1301	0.2126	0.0267	0.1231	0.1498	0.0000	418.6831	418.6831	0.0829	0.0000	420.7563

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.4734	0.6119	2.7621	4.8500e-003	0.0690	6.6600e-003	0.0757	0.0203	6.6100e-003	0.0270	0.0000	418.6827	418.6827	0.0829	0.0000	420.7559
2022	0.1453	0.1844	0.8330	1.4600e-003	0.0186	1.9900e-003	0.0206	5.0200e-003	1.9700e-003	6.9900e-003	0.0000	126.2785	126.2785	0.0245	0.0000	126.8914
Maximum	0.4734	0.6119	2.7621	4.8500e-003	0.0690	6.6600e-003	0.0757	0.0203	6.6100e-003	0.0270	0.0000	418.6827	418.6827	0.0829	0.0000	420.7559

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	32.76	76.35	-5.49	0.00	13.31	94.71	63.61	19.95	94.45	81.79	0.00	0.00	0.00	0.00	0.00	0.00

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2021	6-30-2021	0.7932	0.2364
2	7-1-2021	9-30-2021	1.2779	0.4220
3	10-1-2021	12-31-2021	1.2789	0.4230
4	1-1-2022	3-31-2022	0.9403	0.3360
		Highest	1.2789	0.4230

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3368	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8200e-003	3.8200e-003	1.0000e-005	0.0000	4.0700e-003
Energy	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	356.8381	356.8381	0.0143	4.9100e-003	358.6578
Mobile	0.2432	2.0511	2.2490	9.0900e-003	0.5924	7.8000e-003	0.6002	0.1592	7.3500e-003	0.1665	0.0000	841.8615	841.8615	0.0420	0.0000	842.9121
Waste						0.0000	0.0000		0.0000	0.0000	12.5956	0.0000	12.5956	0.7444	0.0000	31.2050
Water						0.0000	0.0000		0.0000	0.0000	0.8600	3.9359	4.7960	0.0885	2.1300e-003	7.6438
<b>Total</b>	<b>0.5938</b>	<b>2.1764</b>	<b>2.3562</b>	<b>9.8400e-003</b>	<b>0.5924</b>	<b>0.0173</b>	<b>0.6098</b>	<b>0.1592</b>	<b>0.0169</b>	<b>0.1761</b>	<b>13.4556</b>	<b>1,202.6394</b>	<b>1,216.0950</b>	<b>0.8892</b>	<b>7.0400e-003</b>	<b>1,240.4229</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3368	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8200e-003	3.8200e-003	1.0000e-005	0.0000	4.0700e-003
Energy	9.8900e-003	0.0899	0.0755	5.4000e-004		6.8300e-003	6.8300e-003		6.8300e-003	6.8300e-003	0.0000	293.7170	293.7170	0.0122	3.9300e-003	295.1951
Mobile	0.2432	2.0511	2.2490	9.0900e-003	0.5924	7.8000e-003	0.6002	0.1592	7.3500e-003	0.1665	0.0000	841.8615	841.8615	0.0420	0.0000	842.9121
Waste						0.0000	0.0000		0.0000	0.0000	12.5956	0.0000	12.5956	0.7444	0.0000	31.2050
Water						0.0000	0.0000		0.0000	0.0000	0.6880	3.2054	3.8934	0.0708	1.7000e-003	6.1720
<b>Total</b>	<b>0.5899</b>	<b>2.1410</b>	<b>2.3265</b>	<b>9.6300e-003</b>	<b>0.5924</b>	<b>0.0146</b>	<b>0.6071</b>	<b>0.1592</b>	<b>0.0142</b>	<b>0.1734</b>	<b>13.2836</b>	<b>1,138.7877</b>	<b>1,152.0713</b>	<b>0.8695</b>	<b>5.6300e-003</b>	<b>1,175.4883</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.66</b>	<b>1.63</b>	<b>1.26</b>	<b>2.13</b>	<b>0.00</b>	<b>15.57</b>	<b>0.44</b>	<b>0.00</b>	<b>15.99</b>	<b>1.53</b>	<b>1.28</b>	<b>5.31</b>	<b>5.26</b>	<b>2.22</b>	<b>20.03</b>	<b>5.23</b>

**3.0 Construction Detail****Construction Phase**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2021	5/3/2021	5	3	
2	Grading	Grading	5/4/2021	5/11/2021	5	6	
3	Building Construction	Building Construction	5/12/2021	3/15/2022	5	220	
4	Paving	Paving	5/12/2021	3/15/2022	5	220	
5	Architectural Coating	Architectural Coating	5/12/2021	3/15/2022	5	220	

**Acres of Grading (Site Preparation Phase): 4.5**

**Acres of Grading (Grading Phase): 3**

**Acres of Paving: 0.97**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 108,546; Non-Residential Outdoor: 36,182; Striped Parking Area: 2,592 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	49.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3200e-003	0.0274	0.0161	4.0000e-005		1.0500e-003	1.0500e-003		9.7000e-004	9.7000e-004	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
<b>Total</b>	<b>2.3200e-003</b>	<b>0.0274</b>	<b>0.0161</b>	<b>4.0000e-005</b>	<b>2.3900e-003</b>	<b>1.0500e-003</b>	<b>3.4400e-003</b>	<b>2.6000e-004</b>	<b>9.7000e-004</b>	<b>1.2300e-003</b>	<b>0.0000</b>	<b>3.2290</b>	<b>3.2290</b>	<b>1.0400e-003</b>	<b>0.0000</b>	<b>3.2551</b>



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.2 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0796	0.0796	0.0000	0.0000	0.0796
<b>Total</b>	<b>5.0000e-005</b>	<b>3.0000e-005</b>	<b>3.4000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0796</b>	<b>0.0796</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0796</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.3000e-004	0.0000	9.3000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	1.9600e-003	0.0178	4.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	3.2290	3.2290	1.0400e-003	0.0000	3.2551
<b>Total</b>	<b>4.5000e-004</b>	<b>1.9600e-003</b>	<b>0.0178</b>	<b>4.0000e-005</b>	<b>9.3000e-004</b>	<b>6.0000e-005</b>	<b>9.9000e-004</b>	<b>1.0000e-004</b>	<b>6.0000e-005</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>3.2290</b>	<b>3.2290</b>	<b>1.0400e-003</b>	<b>0.0000</b>	<b>3.2551</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.2 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0796	0.0796	0.0000	0.0000	0.0796
<b>Total</b>	<b>5.0000e-005</b>	<b>3.0000e-005</b>	<b>3.4000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0796</b>	<b>0.0796</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0796</b>

**3.3 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4800e-003	0.0606	0.0293	6.0000e-005		2.7500e-003	2.7500e-003		2.5300e-003	2.5300e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
<b>Total</b>	<b>5.4800e-003</b>	<b>0.0606</b>	<b>0.0293</b>	<b>6.0000e-005</b>	<b>0.0197</b>	<b>2.7500e-003</b>	<b>0.0224</b>	<b>0.0101</b>	<b>2.5300e-003</b>	<b>0.0126</b>	<b>0.0000</b>	<b>5.4312</b>	<b>5.4312</b>	<b>1.7600e-003</b>	<b>0.0000</b>	<b>5.4751</b>

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**3.3 Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	8.6000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.1989	0.1989	1.0000e-005	0.0000	0.1990
<b>Total</b>	<b>1.3000e-004</b>	<b>8.0000e-005</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.1989</b>	<b>0.1989</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1990</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.6700e-003	0.0000	7.6700e-003	3.9400e-003	0.0000	3.9400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6000e-004	3.2800e-003	0.0327	6.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
<b>Total</b>	<b>7.6000e-004</b>	<b>3.2800e-003</b>	<b>0.0327</b>	<b>6.0000e-005</b>	<b>7.6700e-003</b>	<b>1.0000e-004</b>	<b>7.7700e-003</b>	<b>3.9400e-003</b>	<b>1.0000e-004</b>	<b>4.0400e-003</b>	<b>0.0000</b>	<b>5.4312</b>	<b>5.4312</b>	<b>1.7600e-003</b>	<b>0.0000</b>	<b>5.4751</b>

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**3.3 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	8.6000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.1989	0.1989	1.0000e-005	0.0000	0.1990
<b>Total</b>	<b>1.3000e-004</b>	<b>8.0000e-005</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.1989</b>	<b>0.1989</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1990</b>

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1718	1.3463	1.2233	2.1000e-003		0.0687	0.0687		0.0658	0.0658	0.0000	174.4249	174.4249	0.0343	0.0000	175.2828
<b>Total</b>	<b>0.1718</b>	<b>1.3463</b>	<b>1.2233</b>	<b>2.1000e-003</b>		<b>0.0687</b>	<b>0.0687</b>		<b>0.0658</b>	<b>0.0658</b>	<b>0.0000</b>	<b>174.4249</b>	<b>174.4249</b>	<b>0.0343</b>	<b>0.0000</b>	<b>175.2828</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1300e-003	0.1767	0.0337	4.5000e-004	0.0106	5.2000e-004	0.0111	3.0500e-003	4.9000e-004	3.5400e-003	0.0000	42.4268	42.4268	1.8800e-003	0.0000	42.4737
Worker	0.0178	0.0115	0.1181	3.0000e-004	0.0328	2.2000e-004	0.0330	8.7200e-003	2.0000e-004	8.9200e-003	0.0000	27.2845	27.2845	7.8000e-004	0.0000	27.3040
<b>Total</b>	<b>0.0230</b>	<b>0.1882</b>	<b>0.1518</b>	<b>7.5000e-004</b>	<b>0.0433</b>	<b>7.4000e-004</b>	<b>0.0441</b>	<b>0.0118</b>	<b>6.9000e-004</b>	<b>0.0125</b>	<b>0.0000</b>	<b>69.7113</b>	<b>69.7113</b>	<b>2.6600e-003</b>	<b>0.0000</b>	<b>69.7777</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0277	0.3251	1.2546	2.1000e-003		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	174.4247	174.4247	0.0343	0.0000	175.2826
<b>Total</b>	<b>0.0277</b>	<b>0.3251</b>	<b>1.2546</b>	<b>2.1000e-003</b>		<b>2.9500e-003</b>	<b>2.9500e-003</b>		<b>2.9500e-003</b>	<b>2.9500e-003</b>	<b>0.0000</b>	<b>174.4247</b>	<b>174.4247</b>	<b>0.0343</b>	<b>0.0000</b>	<b>175.2826</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1300e-003	0.1767	0.0337	4.5000e-004	0.0106	5.2000e-004	0.0111	3.0500e-003	4.9000e-004	3.5400e-003	0.0000	42.4268	42.4268	1.8800e-003	0.0000	42.4737
Worker	0.0178	0.0115	0.1181	3.0000e-004	0.0328	2.2000e-004	0.0330	8.7200e-003	2.0000e-004	8.9200e-003	0.0000	27.2845	27.2845	7.8000e-004	0.0000	27.3040
<b>Total</b>	<b>0.0230</b>	<b>0.1882</b>	<b>0.1518</b>	<b>7.5000e-004</b>	<b>0.0433</b>	<b>7.4000e-004</b>	<b>0.0441</b>	<b>0.0118</b>	<b>6.9000e-004</b>	<b>0.0125</b>	<b>0.0000</b>	<b>69.7113</b>	<b>69.7113</b>	<b>2.6600e-003</b>	<b>0.0000</b>	<b>69.7777</b>

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0482	0.3797	0.3732	6.5000e-004		0.0183	0.0183		0.0175	0.0175	0.0000	53.9968	53.9968	0.0104	0.0000	54.2573
<b>Total</b>	<b>0.0482</b>	<b>0.3797</b>	<b>0.3732</b>	<b>6.5000e-004</b>		<b>0.0183</b>	<b>0.0183</b>		<b>0.0175</b>	<b>0.0175</b>	<b>0.0000</b>	<b>53.9968</b>	<b>53.9968</b>	<b>0.0104</b>	<b>0.0000</b>	<b>54.2573</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4700e-003	0.0519	9.6300e-003	1.4000e-004	3.2700e-003	1.4000e-004	3.4000e-003	9.4000e-004	1.3000e-004	1.0800e-003	0.0000	13.0155	13.0155	5.6000e-004	0.0000	13.0294
Worker	5.1000e-003	3.1600e-003	0.0332	9.0000e-005	0.0102	7.0000e-005	0.0102	2.7000e-003	6.0000e-005	2.7600e-003	0.0000	8.1458	8.1458	2.1000e-004	0.0000	8.1512
<b>Total</b>	<b>6.5700e-003</b>	<b>0.0551</b>	<b>0.0428</b>	<b>2.3000e-004</b>	<b>0.0134</b>	<b>2.1000e-004</b>	<b>0.0136</b>	<b>3.6400e-003</b>	<b>1.9000e-004</b>	<b>3.8400e-003</b>	<b>0.0000</b>	<b>21.1612</b>	<b>21.1612</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>21.1806</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.5700e-003	0.1006	0.3883	6.5000e-004		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	53.9968	53.9968	0.0104	0.0000	54.2572
<b>Total</b>	<b>8.5700e-003</b>	<b>0.1006</b>	<b>0.3883</b>	<b>6.5000e-004</b>		<b>9.1000e-004</b>	<b>9.1000e-004</b>		<b>9.1000e-004</b>	<b>9.1000e-004</b>	<b>0.0000</b>	<b>53.9968</b>	<b>53.9968</b>	<b>0.0104</b>	<b>0.0000</b>	<b>54.2572</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4700e-003	0.0519	9.6300e-003	1.4000e-004	3.2700e-003	1.4000e-004	3.4000e-003	9.4000e-004	1.3000e-004	1.0800e-003	0.0000	13.0155	13.0155	5.6000e-004	0.0000	13.0294
Worker	5.1000e-003	3.1600e-003	0.0332	9.0000e-005	0.0102	7.0000e-005	0.0102	2.7000e-003	6.0000e-005	2.7600e-003	0.0000	8.1458	8.1458	2.1000e-004	0.0000	8.1512
<b>Total</b>	<b>6.5700e-003</b>	<b>0.0551</b>	<b>0.0428</b>	<b>2.3000e-004</b>	<b>0.0134</b>	<b>2.1000e-004</b>	<b>0.0136</b>	<b>3.6400e-003</b>	<b>1.9000e-004</b>	<b>3.8400e-003</b>	<b>0.0000</b>	<b>21.1612</b>	<b>21.1612</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>21.1806</b>

**3.5 Paving - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0893	0.8944	0.9892	1.5000e-003		0.0489	0.0489		0.0451	0.0451	0.0000	130.2403	130.2403	0.0413	0.0000	131.2722
Paving	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0903</b>	<b>0.8944</b>	<b>0.9892</b>	<b>1.5000e-003</b>		<b>0.0489</b>	<b>0.0489</b>		<b>0.0451</b>	<b>0.0451</b>	<b>0.0000</b>	<b>130.2403</b>	<b>130.2403</b>	<b>0.0413</b>	<b>0.0000</b>	<b>131.2722</b>



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.5 Paving - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4600e-003	3.5100e-003	0.0362	9.0000e-005	0.0100	7.0000e-005	0.0101	2.6700e-003	6.0000e-005	2.7300e-003	0.0000	8.3524	8.3524	2.4000e-004	0.0000	8.3584
<b>Total</b>	<b>5.4600e-003</b>	<b>3.5100e-003</b>	<b>0.0362</b>	<b>9.0000e-005</b>	<b>0.0100</b>	<b>7.0000e-005</b>	<b>0.0101</b>	<b>2.6700e-003</b>	<b>6.0000e-005</b>	<b>2.7300e-003</b>	<b>0.0000</b>	<b>8.3524</b>	<b>8.3524</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>8.3584</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0177	0.0766	1.0898	1.5000e-003		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	130.2401	130.2401	0.0413	0.0000	131.2720
Paving	9.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0186</b>	<b>0.0766</b>	<b>1.0898</b>	<b>1.5000e-003</b>		<b>2.3600e-003</b>	<b>2.3600e-003</b>		<b>2.3600e-003</b>	<b>2.3600e-003</b>	<b>0.0000</b>	<b>130.2401</b>	<b>130.2401</b>	<b>0.0413</b>	<b>0.0000</b>	<b>131.2720</b>

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**3.5 Paving - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4600e-003	3.5100e-003	0.0362	9.0000e-005	0.0100	7.0000e-005	0.0101	2.6700e-003	6.0000e-005	2.7300e-003	0.0000	8.3524	8.3524	2.4000e-004	0.0000	8.3584
<b>Total</b>	<b>5.4600e-003</b>	<b>3.5100e-003</b>	<b>0.0362</b>	<b>9.0000e-005</b>	<b>0.0100</b>	<b>7.0000e-005</b>	<b>0.0101</b>	<b>2.6700e-003</b>	<b>6.0000e-005</b>	<b>2.7300e-003</b>	<b>0.0000</b>	<b>8.3524</b>	<b>8.3524</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>8.3584</b>

**3.5 Paving - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0245	0.2426	0.3041	4.6000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	40.3261	40.3261	0.0128	0.0000	40.6456
Paving	3.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0248</b>	<b>0.2426</b>	<b>0.3041</b>	<b>4.6000e-004</b>		<b>0.0127</b>	<b>0.0127</b>		<b>0.0117</b>	<b>0.0117</b>	<b>0.0000</b>	<b>40.3261</b>	<b>40.3261</b>	<b>0.0128</b>	<b>0.0000</b>	<b>40.6456</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.5 Paving - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5600e-003	9.7000e-004	0.0102	3.0000e-005	3.1100e-003	2.0000e-005	3.1300e-003	8.3000e-004	2.0000e-005	8.4000e-004	0.0000	2.4936	2.4936	7.0000e-005	0.0000	2.4953
<b>Total</b>	<b>1.5600e-003</b>	<b>9.7000e-004</b>	<b>0.0102</b>	<b>3.0000e-005</b>	<b>3.1100e-003</b>	<b>2.0000e-005</b>	<b>3.1300e-003</b>	<b>8.3000e-004</b>	<b>2.0000e-005</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>2.4936</b>	<b>2.4936</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>2.4953</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.4700e-003	0.0237	0.3373	4.6000e-004		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	40.3261	40.3261	0.0128	0.0000	40.6456
Paving	3.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.7700e-003</b>	<b>0.0237</b>	<b>0.3373</b>	<b>4.6000e-004</b>		<b>7.3000e-004</b>	<b>7.3000e-004</b>		<b>7.3000e-004</b>	<b>7.3000e-004</b>	<b>0.0000</b>	<b>40.3261</b>	<b>40.3261</b>	<b>0.0128</b>	<b>0.0000</b>	<b>40.6456</b>

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**3.5 Paving - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5600e-003	9.7000e-004	0.0102	3.0000e-005	3.1100e-003	2.0000e-005	3.1300e-003	8.3000e-004	2.0000e-005	8.4000e-004	0.0000	2.4936	2.4936	7.0000e-005	0.0000	2.4953
<b>Total</b>	<b>1.5600e-003</b>	<b>9.7000e-004</b>	<b>0.0102</b>	<b>3.0000e-005</b>	<b>3.1100e-003</b>	<b>2.0000e-005</b>	<b>3.1300e-003</b>	<b>8.3000e-004</b>	<b>2.0000e-005</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>2.4936</b>	<b>2.4936</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>2.4953</b>

**3.6 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3911					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0184	0.1283	0.1527	2.5000e-004		7.9000e-003	7.9000e-003		7.9000e-003	7.9000e-003	0.0000	21.4473	21.4473	1.4700e-003	0.0000	21.4841
<b>Total</b>	<b>0.4095</b>	<b>0.1283</b>	<b>0.1527</b>	<b>2.5000e-004</b>		<b>7.9000e-003</b>	<b>7.9000e-003</b>		<b>7.9000e-003</b>	<b>7.9000e-003</b>	<b>0.0000</b>	<b>21.4473</b>	<b>21.4473</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>21.4841</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.6 Architectural Coating - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6400e-003	2.3400e-003	0.0241	6.0000e-005	6.6900e-003	5.0000e-005	6.7400e-003	1.7800e-003	4.0000e-005	1.8200e-003	0.0000	5.5683	5.5683	1.6000e-004	0.0000	5.5723
<b>Total</b>	<b>3.6400e-003</b>	<b>2.3400e-003</b>	<b>0.0241</b>	<b>6.0000e-005</b>	<b>6.6900e-003</b>	<b>5.0000e-005</b>	<b>6.7400e-003</b>	<b>1.7800e-003</b>	<b>4.0000e-005</b>	<b>1.8200e-003</b>	<b>0.0000</b>	<b>5.5683</b>	<b>5.5683</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>5.5723</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3911					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5000e-003	0.0108	0.1539	2.5000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	21.4473	21.4473	1.4700e-003	0.0000	21.4841
<b>Total</b>	<b>0.3936</b>	<b>0.0108</b>	<b>0.1539</b>	<b>2.5000e-004</b>		<b>3.3000e-004</b>	<b>3.3000e-004</b>		<b>3.3000e-004</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>21.4473</b>	<b>21.4473</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>21.4841</b>

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**3.6 Architectural Coating - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6400e-003	2.3400e-003	0.0241	6.0000e-005	6.6900e-003	5.0000e-005	6.7400e-003	1.7800e-003	4.0000e-005	1.8200e-003	0.0000	5.5683	5.5683	1.6000e-004	0.0000	5.5723
<b>Total</b>	<b>3.6400e-003</b>	<b>2.3400e-003</b>	<b>0.0241</b>	<b>6.0000e-005</b>	<b>6.6900e-003</b>	<b>5.0000e-005</b>	<b>6.7400e-003</b>	<b>1.7800e-003</b>	<b>4.0000e-005</b>	<b>1.8200e-003</b>	<b>0.0000</b>	<b>5.5683</b>	<b>5.5683</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>5.5723</b>

**3.6 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1211					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3200e-003	0.0366	0.0472	8.0000e-005		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003	0.0000	6.6385	6.6385	4.3000e-004	0.0000	6.6493
<b>Total</b>	<b>0.1264</b>	<b>0.0366</b>	<b>0.0472</b>	<b>8.0000e-005</b>		<b>2.1200e-003</b>	<b>2.1200e-003</b>		<b>2.1200e-003</b>	<b>2.1200e-003</b>	<b>0.0000</b>	<b>6.6385</b>	<b>6.6385</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>6.6493</b>

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**3.6 Architectural Coating - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	6.5000e-004	6.7700e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6624	1.6624	4.0000e-005	0.0000	1.6635
<b>Total</b>	<b>1.0400e-003</b>	<b>6.5000e-004</b>	<b>6.7700e-003</b>	<b>2.0000e-005</b>	<b>2.0700e-003</b>	<b>1.0000e-005</b>	<b>2.0800e-003</b>	<b>5.5000e-004</b>	<b>1.0000e-005</b>	<b>5.6000e-004</b>	<b>0.0000</b>	<b>1.6624</b>	<b>1.6624</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.6635</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1211					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7000e-004	3.3500e-003	0.0476	8.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	6.6385	6.6385	4.3000e-004	0.0000	6.6493
<b>Total</b>	<b>0.1218</b>	<b>3.3500e-003</b>	<b>0.0476</b>	<b>8.0000e-005</b>		<b>1.0000e-004</b>	<b>1.0000e-004</b>		<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>6.6385</b>	<b>6.6385</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>6.6493</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**3.6 Architectural Coating - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	6.5000e-004	6.7700e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6624	1.6624	4.0000e-005	0.0000	1.6635
<b>Total</b>	<b>1.0400e-003</b>	<b>6.5000e-004</b>	<b>6.7700e-003</b>	<b>2.0000e-005</b>	<b>2.0700e-003</b>	<b>1.0000e-005</b>	<b>2.0800e-003</b>	<b>5.5000e-004</b>	<b>1.0000e-005</b>	<b>5.6000e-004</b>	<b>0.0000</b>	<b>1.6624</b>	<b>1.6624</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.6635</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2432	2.0511	2.2490	9.0900e-003	0.5924	7.8000e-003	0.6002	0.1592	7.3500e-003	0.1665	0.0000	841.8615	841.8615	0.0420	0.0000	842.9121
Unmitigated	0.2432	2.0511	2.2490	9.0900e-003	0.5924	7.8000e-003	0.6002	0.1592	7.3500e-003	0.1665	0.0000	841.8615	841.8615	0.0420	0.0000	842.9121

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	857.85	859.95	624.75	1,567,158	1,567,158
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	857.85	859.95	624.75	1,567,158	1,567,158

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

## 4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710
Parking Lot	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710
Recreational Swimming Pool	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	195.8250	195.8250	0.0103	2.1400e-003	196.7213
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	220.3685	220.3685	0.0116	2.4100e-003	221.3773
NaturalGas Mitigated	9.8900e-003	0.0899	0.0755	5.4000e-004		6.8300e-003	6.8300e-003		6.8300e-003	6.8300e-003	0.0000	97.8920	97.8920	1.8800e-003	1.7900e-003	98.4738
NaturalGas Unmitigated	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	136.4696	136.4696	2.6200e-003	2.5000e-003	137.2806

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**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	2.55734e+006	0.0138	0.1254	0.1053	7.5000e-004		9.5300e-003	9.5300e-003		9.5300e-003	9.5300e-003	0.0000	136.4696	136.4696	2.6200e-003	2.5000e-003	137.2806
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0138</b>	<b>0.1254</b>	<b>0.1053</b>	<b>7.5000e-004</b>		<b>9.5300e-003</b>	<b>9.5300e-003</b>		<b>9.5300e-003</b>	<b>9.5300e-003</b>	<b>0.0000</b>	<b>136.4696</b>	<b>136.4696</b>	<b>2.6200e-003</b>	<b>2.5000e-003</b>	<b>137.2806</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	1.83443e+006	9.8900e-003	0.0899	0.0755	5.4000e-004		6.8300e-003	6.8300e-003		6.8300e-003	6.8300e-003	0.0000	97.8920	97.8920	1.8800e-003	1.7900e-003	98.4738
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>9.8900e-003</b>	<b>0.0899</b>	<b>0.0755</b>	<b>5.4000e-004</b>		<b>6.8300e-003</b>	<b>6.8300e-003</b>		<b>6.8300e-003</b>	<b>6.8300e-003</b>	<b>0.0000</b>	<b>97.8920</b>	<b>97.8920</b>	<b>1.8800e-003</b>	<b>1.7900e-003</b>	<b>98.4738</b>

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**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	869815	216.6033	0.0114	2.3700e-003	217.5948
Parking Lot	15120	3.7652	2.0000e-004	4.0000e-005	3.7825
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>220.3685</b>	<b>0.0116</b>	<b>2.4100e-003</b>	<b>221.3773</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	771256	192.0598	0.0102	2.1000e-003	192.9389
Parking Lot	15120	3.7652	2.0000e-004	4.0000e-005	3.7825
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>195.8250</b>	<b>0.0104</b>	<b>2.1400e-003</b>	<b>196.7213</b>

**6.0 Area Detail**

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**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3368	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8200e-003	3.8200e-003	1.0000e-005	0.0000	4.0700e-003
Unmitigated	0.3368	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8200e-003	3.8200e-003	1.0000e-005	0.0000	4.0700e-003

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0512					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2854					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8200e-003	3.8200e-003	1.0000e-005	0.0000	4.0700e-003
<b>Total</b>	<b>0.3368</b>	<b>2.0000e-005</b>	<b>1.9700e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>3.8200e-003</b>	<b>3.8200e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.0700e-003</b>

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**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0512					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2854					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8200e-003	3.8200e-003	1.0000e-005	0.0000	4.0700e-003
<b>Total</b>	<b>0.3368</b>	<b>2.0000e-005</b>	<b>1.9700e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>3.8200e-003</b>	<b>3.8200e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.0700e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.8934	0.0708	1.7000e-003	6.1720
Unmitigated	4.7960	0.0885	2.1300e-003	7.6438

## 7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.66351 / 0.295946	4.6919	0.0870	2.0900e-003	7.4900
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.0473145 / 0.0289992	0.1040	1.5500e-003	4.0000e-005	0.1538
<b>Total</b>		<b>4.7960</b>	<b>0.0885</b>	<b>2.1300e-003</b>	<b>7.6438</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.13081 / 0.295946	3.8051	0.0696	1.6700e-003	6.0438
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.0378516 / 0.0289992	0.0883	1.2400e-003	3.0000e-005	0.1282
<b>Total</b>		<b>3.8934</b>	<b>0.0708</b>	<b>1.7000e-003</b>	<b>6.1720</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	12.5956	0.7444	0.0000	31.2050
Unmitigated	12.5956	0.7444	0.0000	31.2050

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	57.49	11.6700	0.6897	0.0000	28.9118
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	4.56	0.9256	0.0547	0.0000	2.2932
<b>Total</b>		<b>12.5956</b>	<b>0.7444</b>	<b>0.0000</b>	<b>31.2050</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	57.49	11.6700	0.6897	0.0000	28.9118
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	4.56	0.9256	0.0547	0.0000	2.2932
<b>Total</b>		<b>12.5956</b>	<b>0.7444</b>	<b>0.0000</b>	<b>31.2050</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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Three Rivers Hampton Inn & Suites - Tulare County, Annual

## **11.0 Vegetation**

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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

### Three Rivers Hampton Inn & Suites Tulare County, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	108.00	Space	0.97	43,200.00	0
Hotel	105.00	Room	1.81	72,364.00	0
Recreational Swimming Pool	0.80	1000sqft	0.02	800.00	0

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	51
Climate Zone	7			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	549	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

Project Characteristics - Southern California Edison improved their CO2 emissions to 549 lb/MWh in 2017.

Land Use - Project information is derived from the project feasibility study (HVS Consulting & Valuation 2020) , preliminary design (DVB Architecture 2020), and traffic study (VRPA Technologies, Inc. 2020).

Construction Phase - Building construction, paving, and painting will occur simultaneously.

Vehicle Trips - All trips attributed to hotel use. Traffic Impact Study Report (VRPA Technologies, Inc. 2020).

Energy Use -

Construction Off-road Equipment Mitigation - SJVAPCD Rule VII Fugitive PM10 prohibitions, rules 8021-8071. Required clean fleet is a MM aimed to reduce NOx and comply with Rule 9510.

Energy Mitigation - Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018).

Water Mitigation - CA water efficient appliance requirements.

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	220.00
tblConstructionPhase	NumDays	10.00	220.00
tblLandUse	LandUseSquareFeet	152,460.00	72,364.00
tblLandUse	LotAcreage	3.50	1.81
tblProjectCharacteristics	CO2IntensityFactor	702.44	549
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	33.82	0.00

## 2.0 Emissions Summary

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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	8.4211	30.4703	30.9998	0.0572	6.6345	1.5040	7.5508	3.3893	1.4237	4.2323	0.0000	5,436.713 3	5,436.713 3	1.0519	0.0000	5,463.011 8
2022	8.0626	27.4889	30.4532	0.0569	0.7367	1.2808	2.0175	0.1983	1.2133	1.4117	0.0000	5,411.634 8	5,411.634 8	1.0397	0.0000	5,437.627 0
Maximum	8.4211	30.4703	30.9998	0.0572	6.6345	1.5040	7.5508	3.3893	1.4237	4.2323	0.0000	5,436.713 3	5,436.713 3	1.0519	0.0000	5,463.011 8

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	5.6634	7.1791	32.5854	0.0572	2.6376	0.0772	2.6717	1.3351	0.0766	1.3692	0.0000	5,436.713 3	5,436.713 3	1.0519	0.0000	5,463.011 8
2022	5.6310	7.0552	32.3310	0.0569	0.7367	0.0763	0.8130	0.1983	0.0757	0.2741	0.0000	5,411.634 8	5,411.634 8	1.0397	0.0000	5,437.627 0
Maximum	5.6634	7.1791	32.5854	0.0572	2.6376	0.0772	2.6717	1.3351	0.0766	1.3692	0.0000	5,436.713 3	5,436.713 3	1.0519	0.0000	5,463.011 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	31.48	75.44	-5.64	0.00	54.22	94.49	63.58	57.26	94.22	70.88	0.00	0.00	0.00	0.00	0.00	0.00

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
Energy	0.0756	0.6869	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.2849	824.2849	0.0158	0.0151	829.1832
Mobile	1.7186	11.6150	13.9082	0.0552	3.4972	0.0442	3.5414	0.9372	0.0416	0.9788		5,633.7136	5,633.7136	0.2628		5,640.2830
<b>Total</b>	<b>3.6407</b>	<b>12.3021</b>	<b>14.5071</b>	<b>0.0594</b>	<b>3.4972</b>	<b>0.0965</b>	<b>3.5937</b>	<b>0.9372</b>	<b>0.0939</b>	<b>1.0311</b>		<b>6,458.0452</b>	<b>6,458.0452</b>	<b>0.2787</b>	<b>0.0151</b>	<b>6,469.5161</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
Energy	0.0542	0.4927	0.4139	2.9600e-003		0.0375	0.0375		0.0375	0.0375		591.2739	591.2739	0.0113	0.0108	594.7876
Mobile	1.7186	11.6150	13.9082	0.0552	3.4972	0.0442	3.5414	0.9372	0.0416	0.9788		5,633.7136	5,633.7136	0.2628		5,640.2830
<b>Total</b>	<b>3.6194</b>	<b>12.1079</b>	<b>14.3440</b>	<b>0.0582</b>	<b>3.4972</b>	<b>0.0817</b>	<b>3.5789</b>	<b>0.9372</b>	<b>0.0791</b>	<b>1.0163</b>		<b>6,225.0343</b>	<b>6,225.0343</b>	<b>0.2742</b>	<b>0.0108</b>	<b>6,235.1205</b>



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.59	1.58	1.12	1.95	0.00	15.29	0.41	0.00	15.71	1.43	0.00	3.61	3.61	1.60	28.26	3.62

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2021	5/3/2021	5	3	
2	Grading	Grading	5/4/2021	5/11/2021	5	6	
3	Building Construction	Building Construction	5/12/2021	3/15/2022	5	220	
4	Paving	Paving	5/12/2021	3/15/2022	5	220	
5	Architectural Coating	Architectural Coating	5/12/2021	3/15/2022	5	220	

**Acres of Grading (Site Preparation Phase): 4.5****Acres of Grading (Grading Phase): 3****Acres of Paving: 0.97****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 108,546; Non-Residential Outdoor: 36,182; Striped Parking Area: 2,592 (Architectural Coating – sqft)****OffRoad Equipment**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	49.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.883 2	2,372.883 2	0.7674		2,392.069 2
<b>Total</b>	<b>1.5463</b>	<b>18.2862</b>	<b>10.7496</b>	<b>0.0245</b>	<b>1.5908</b>	<b>0.7019</b>	<b>2.2926</b>	<b>0.1718</b>	<b>0.6457</b>	<b>0.8175</b>		<b>2,372.883 2</b>	<b>2,372.883 2</b>	<b>0.7674</b>		<b>2,392.069 2</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.2 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0396	0.0208	0.2671	6.4000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		64.1367	64.1367	1.8600e-003		64.1833
<b>Total</b>	<b>0.0396</b>	<b>0.0208</b>	<b>0.2671</b>	<b>6.4000e-004</b>	<b>0.0657</b>	<b>4.3000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>64.1367</b>	<b>64.1367</b>	<b>1.8600e-003</b>		<b>64.1833</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	0.3008	1.3034	11.8595	0.0245		0.0401	0.0401		0.0401	0.0401	0.0000	2,372.883 2	2,372.883 2	0.7674		2,392.069 2
<b>Total</b>	<b>0.3008</b>	<b>1.3034</b>	<b>11.8595</b>	<b>0.0245</b>	<b>0.6204</b>	<b>0.0401</b>	<b>0.6605</b>	<b>0.0670</b>	<b>0.0401</b>	<b>0.1071</b>	<b>0.0000</b>	<b>2,372.883 2</b>	<b>2,372.883 2</b>	<b>0.7674</b>		<b>2,392.069 2</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.2 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0396	0.0208	0.2671	6.4000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		64.1367	64.1367	1.8600e-003		64.1833
<b>Total</b>	<b>0.0396</b>	<b>0.0208</b>	<b>0.2671</b>	<b>6.4000e-004</b>	<b>0.0657</b>	<b>4.3000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>64.1367</b>	<b>64.1367</b>	<b>1.8600e-003</b>		<b>64.1833</b>

**3.3 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
<b>Total</b>	<b>1.8271</b>	<b>20.2135</b>	<b>9.7604</b>	<b>0.0206</b>	<b>6.5523</b>	<b>0.9158</b>	<b>7.4681</b>	<b>3.3675</b>	<b>0.8425</b>	<b>4.2100</b>		<b>1,995.6114</b>	<b>1,995.6114</b>	<b>0.6454</b>		<b>2,011.7470</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.3 Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0495	0.0260	0.3339	8.1000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		80.1709	80.1709	2.3300e-003		80.2291
<b>Total</b>	<b>0.0495</b>	<b>0.0260</b>	<b>0.3339</b>	<b>8.1000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>80.1709</b>	<b>80.1709</b>	<b>2.3300e-003</b>		<b>80.2291</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	0.2522	1.0927	10.9071	0.0206		0.0336	0.0336		0.0336	0.0336	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
<b>Total</b>	<b>0.2522</b>	<b>1.0927</b>	<b>10.9071</b>	<b>0.0206</b>	<b>2.5554</b>	<b>0.0336</b>	<b>2.5890</b>	<b>1.3133</b>	<b>0.0336</b>	<b>1.3469</b>	<b>0.0000</b>	<b>1,995.6114</b>	<b>1,995.6114</b>	<b>0.6454</b>		<b>2,011.7470</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.3 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0495	0.0260	0.3339	8.1000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		80.1709	80.1709	2.3300e-003		80.2291
<b>Total</b>	<b>0.0495</b>	<b>0.0260</b>	<b>0.3339</b>	<b>8.1000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>80.1709</b>	<b>80.1709</b>	<b>2.3300e-003</b>		<b>80.2291</b>

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
<b>Total</b>	<b>2.0451</b>	<b>16.0275</b>	<b>14.5629</b>	<b>0.0250</b>		<b>0.8173</b>	<b>0.8173</b>		<b>0.7831</b>	<b>0.7831</b>		<b>2,288.9355</b>	<b>2,288.9355</b>	<b>0.4503</b>		<b>2,300.1935</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0600	2.0760	0.3728	5.3800e-003	0.1288	6.0500e-003	0.1348	0.0371	5.7800e-003	0.0429		563.9543	563.9543	0.0234		564.5399
Worker	0.2427	0.1272	1.6361	3.9500e-003	0.4025	2.6300e-003	0.4052	0.1068	2.4300e-003	0.1092		392.8375	392.8375	0.0114		393.1224
<b>Total</b>	<b>0.3028</b>	<b>2.2033</b>	<b>2.0090</b>	<b>9.3300e-003</b>	<b>0.5313</b>	<b>8.6800e-003</b>	<b>0.5400</b>	<b>0.1439</b>	<b>8.2100e-003</b>	<b>0.1521</b>		<b>956.7918</b>	<b>956.7918</b>	<b>0.0348</b>		<b>957.6623</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	3.8705	14.9355	0.0250		0.0352	0.0352		0.0352	0.0352	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
<b>Total</b>	<b>0.3296</b>	<b>3.8705</b>	<b>14.9355</b>	<b>0.0250</b>		<b>0.0352</b>	<b>0.0352</b>		<b>0.0352</b>	<b>0.0352</b>	<b>0.0000</b>	<b>2,288.9355</b>	<b>2,288.9355</b>	<b>0.4503</b>		<b>2,300.1935</b>



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0600	2.0760	0.3728	5.3800e-003	0.1288	6.0500e-003	0.1348	0.0371	5.7800e-003	0.0429		563.9543	563.9543	0.0234		564.5399
Worker	0.2427	0.1272	1.6361	3.9500e-003	0.4025	2.6300e-003	0.4052	0.1068	2.4300e-003	0.1092		392.8375	392.8375	0.0114		393.1224
<b>Total</b>	<b>0.3028</b>	<b>2.2033</b>	<b>2.0090</b>	<b>9.3300e-003</b>	<b>0.5313</b>	<b>8.6800e-003</b>	<b>0.5400</b>	<b>0.1439</b>	<b>8.2100e-003</b>	<b>0.1521</b>		<b>956.7918</b>	<b>956.7918</b>	<b>0.0348</b>		<b>957.6623</b>

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230
<b>Total</b>	<b>1.8555</b>	<b>14.6040</b>	<b>14.3533</b>	<b>0.0250</b>		<b>0.7022</b>	<b>0.7022</b>		<b>0.6731</b>	<b>0.6731</b>		<b>2,289.2813</b>	<b>2,289.2813</b>	<b>0.4417</b>		<b>2,300.3230</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0557	1.9731	0.3437	5.3300e-003	0.1288	5.2500e-003	0.1340	0.0371	5.0300e-003	0.0421		559.0002	559.0002	0.0226		559.5638
Worker	0.2241	0.1133	1.4870	3.8100e-003	0.4025	2.5300e-003	0.4051	0.1068	2.3300e-003	0.1091		378.8999	378.8999	0.0101		379.1530
<b>Total</b>	<b>0.2799</b>	<b>2.0865</b>	<b>1.8307</b>	<b>9.1400e-003</b>	<b>0.5313</b>	<b>7.7800e-003</b>	<b>0.5391</b>	<b>0.1439</b>	<b>7.3600e-003</b>	<b>0.1512</b>		<b>937.9000</b>	<b>937.9000</b>	<b>0.0327</b>		<b>938.7168</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	3.8705	14.9355	0.0250		0.0352	0.0352		0.0352	0.0352	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230
<b>Total</b>	<b>0.3296</b>	<b>3.8705</b>	<b>14.9355</b>	<b>0.0250</b>		<b>0.0352</b>	<b>0.0352</b>		<b>0.0352</b>	<b>0.0352</b>	<b>0.0000</b>	<b>2,289.2813</b>	<b>2,289.2813</b>	<b>0.4417</b>		<b>2,300.3230</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0557	1.9731	0.3437	5.3300e-003	0.1288	5.2500e-003	0.1340	0.0371	5.0300e-003	0.0421		559.0002	559.0002	0.0226		559.5638
Worker	0.2241	0.1133	1.4870	3.8100e-003	0.4025	2.5300e-003	0.4051	0.1068	2.3300e-003	0.1091		378.8999	378.8999	0.0101		379.1530
<b>Total</b>	<b>0.2799</b>	<b>2.0865</b>	<b>1.8307</b>	<b>9.1400e-003</b>	<b>0.5313</b>	<b>7.7800e-003</b>	<b>0.5391</b>	<b>0.1439</b>	<b>7.3600e-003</b>	<b>0.1512</b>		<b>937.9000</b>	<b>937.9000</b>	<b>0.0327</b>		<b>938.7168</b>

**3.5 Paving - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0749</b>	<b>10.6478</b>	<b>11.7756</b>	<b>0.0178</b>		<b>0.5826</b>	<b>0.5826</b>		<b>0.5371</b>	<b>0.5371</b>		<b>1,709.1107</b>	<b>1,709.1107</b>	<b>0.5417</b>		<b>1,722.6524</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.5 Paving - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0743	0.0390	0.5009	1.2100e-003	0.1232	8.1000e-004	0.1240	0.0327	7.4000e-004	0.0334		120.2564	120.2564	3.4900e-003		120.3436
<b>Total</b>	<b>0.0743</b>	<b>0.0390</b>	<b>0.5009</b>	<b>1.2100e-003</b>	<b>0.1232</b>	<b>8.1000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.4000e-004</b>	<b>0.0334</b>		<b>120.2564</b>	<b>120.2564</b>	<b>3.4900e-003</b>		<b>120.3436</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2104	0.9117	12.9737	0.0178		0.0281	0.0281		0.0281	0.0281	0.0000	1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2219</b>	<b>0.9117</b>	<b>12.9737</b>	<b>0.0178</b>		<b>0.0281</b>	<b>0.0281</b>		<b>0.0281</b>	<b>0.0281</b>	<b>0.0000</b>	<b>1,709.1107</b>	<b>1,709.1107</b>	<b>0.5417</b>		<b>1,722.6524</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.5 Paving - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0743	0.0390	0.5009	1.2100e-003	0.1232	8.1000e-004	0.1240	0.0327	7.4000e-004	0.0334		120.2564	120.2564	3.4900e-003		120.3436
<b>Total</b>	<b>0.0743</b>	<b>0.0390</b>	<b>0.5009</b>	<b>1.2100e-003</b>	<b>0.1232</b>	<b>8.1000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.4000e-004</b>	<b>0.0334</b>		<b>120.2564</b>	<b>120.2564</b>	<b>3.4900e-003</b>		<b>120.3436</b>

**3.5 Paving - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9527</b>	<b>9.3322</b>	<b>11.6970</b>	<b>0.0179</b>		<b>0.4879</b>	<b>0.4879</b>		<b>0.4500</b>	<b>0.4500</b>		<b>1,709.6892</b>	<b>1,709.6892</b>	<b>0.5419</b>		<b>1,723.2356</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.5 Paving - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0686	0.0347	0.4552	1.1700e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		115.9898	115.9898	3.1000e-003		116.0673
<b>Total</b>	<b>0.0686</b>	<b>0.0347</b>	<b>0.4552</b>	<b>1.1700e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>115.9898</b>	<b>115.9898</b>	<b>3.1000e-003</b>		<b>116.0673</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2104	0.9117	12.9737	0.0179		0.0281	0.0281		0.0281	0.0281	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2219</b>	<b>0.9117</b>	<b>12.9737</b>	<b>0.0179</b>		<b>0.0281</b>	<b>0.0281</b>		<b>0.0281</b>	<b>0.0281</b>	<b>0.0000</b>	<b>1,709.6892</b>	<b>1,709.6892</b>	<b>0.5419</b>		<b>1,723.2356</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.5 Paving - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0686	0.0347	0.4552	1.1700e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		115.9898	115.9898	3.1000e-003		116.0673
<b>Total</b>	<b>0.0686</b>	<b>0.0347</b>	<b>0.4552</b>	<b>1.1700e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>115.9898</b>	<b>115.9898</b>	<b>3.1000e-003</b>		<b>116.0673</b>

**3.6 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>4.8746</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.6 Architectural Coating - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0495	0.0260	0.3339	8.1000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		80.1709	80.1709	2.3300e-003		80.2291
<b>Total</b>	<b>0.0495</b>	<b>0.0260</b>	<b>0.3339</b>	<b>8.1000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>80.1709</b>	<b>80.1709</b>	<b>2.3300e-003</b>		<b>80.2291</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>4.6854</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.6 Architectural Coating - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0495	0.0260	0.3339	8.1000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		80.1709	80.1709	2.3300e-003		80.2291
<b>Total</b>	<b>0.0495</b>	<b>0.0260</b>	<b>0.3339</b>	<b>8.1000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>80.1709</b>	<b>80.1709</b>	<b>2.3300e-003</b>		<b>80.2291</b>

**3.6 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>4.8602</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.6 Architectural Coating - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0457	0.0231	0.3035	7.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		77.3265	77.3265	2.0700e-003		77.3782
<b>Total</b>	<b>0.0457</b>	<b>0.0231</b>	<b>0.3035</b>	<b>7.8000e-004</b>	<b>0.0822</b>	<b>5.2000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.8000e-004</b>	<b>0.0223</b>		<b>77.3265</b>	<b>77.3265</b>	<b>2.0700e-003</b>		<b>77.3782</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>4.6854</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**3.6 Architectural Coating - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0457	0.0231	0.3035	7.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		77.3265	77.3265	2.0700e-003		77.3782
<b>Total</b>	<b>0.0457</b>	<b>0.0231</b>	<b>0.3035</b>	<b>7.8000e-004</b>	<b>0.0822</b>	<b>5.2000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.8000e-004</b>	<b>0.0223</b>		<b>77.3265</b>	<b>77.3265</b>	<b>2.0700e-003</b>		<b>77.3782</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7186	11.6150	13.9082	0.0552	3.4972	0.0442	3.5414	0.9372	0.0416	0.9788		5,633.7136	5,633.7136	0.2628		5,640.2830
Unmitigated	1.7186	11.6150	13.9082	0.0552	3.4972	0.0442	3.5414	0.9372	0.0416	0.9788		5,633.7136	5,633.7136	0.2628		5,640.2830

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	857.85	859.95	624.75	1,567,158	1,567,158
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	857.85	859.95	624.75	1,567,158	1,567,158

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

## 4.4 Fleet Mix

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710
Parking Lot	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710
Recreational Swimming Pool	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710

## 5.0 Energy Detail

---

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0542	0.4927	0.4139	2.9600e-003		0.0375	0.0375		0.0375	0.0375		591.2739	591.2739	0.0113	0.0108	594.7876
NaturalGas Unmitigated	0.0756	0.6869	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.2849	824.2849	0.0158	0.0151	829.1832

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	7006.42	0.0756	0.6869	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.2849	824.2849	0.0158	0.0151	829.1832
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0756</b>	<b>0.6869</b>	<b>0.5770</b>	<b>4.1200e-003</b>		<b>0.0522</b>	<b>0.0522</b>		<b>0.0522</b>	<b>0.0522</b>		<b>824.2849</b>	<b>824.2849</b>	<b>0.0158</b>	<b>0.0151</b>	<b>829.1832</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	5.02583	0.0542	0.4927	0.4139	2.9600e-003		0.0375	0.0375		0.0375	0.0375		591.2739	591.2739	0.0113	0.0108	594.7876
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0542</b>	<b>0.4927</b>	<b>0.4139</b>	<b>2.9600e-003</b>		<b>0.0375</b>	<b>0.0375</b>		<b>0.0375</b>	<b>0.0375</b>		<b>591.2739</b>	<b>591.2739</b>	<b>0.0113</b>	<b>0.0108</b>	<b>594.7876</b>

**6.0 Area Detail**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
Unmitigated	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0300e-003	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
<b>Total</b>	<b>1.8465</b>	<b>2.0000e-004</b>	<b>0.0219</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>0.0468</b>	<b>0.0468</b>	<b>1.2000e-004</b>		<b>0.0499</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0300e-003	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
<b>Total</b>	<b>1.8465</b>	<b>2.0000e-004</b>	<b>0.0219</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>0.0468</b>	<b>0.0468</b>	<b>1.2000e-004</b>		<b>0.0499</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Summer

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

## Three Rivers Hampton Inn & Suites

### Tulare County, Winter

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	108.00	Space	0.97	43,200.00	0
Hotel	105.00	Room	1.81	72,364.00	0
Recreational Swimming Pool	0.80	1000sqft	0.02	800.00	0

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	51
Climate Zone	7			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	549	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

Project Characteristics - Southern California Edison improved their CO2 emissions to 549 lb/MWh in 2017.

Land Use - Project information is derived from the project feasibility study (HVS Consulting & Valuation 2020) , preliminary design (DVB Architecture 2020), and traffic study (VRPA Technologies, Inc. 2020).

Construction Phase - Building construction, paving, and painting will occur simultaneously.

Vehicle Trips - All trips attributed to hotel use. Traffic Impact Study Report (VRPA Technologies, Inc. 2020).

Energy Use -

Construction Off-road Equipment Mitigation - SJVAPCD Rule VII Fugitive PM10 prohibitions, rules 8021-8071. Required clean fleet is a MM aimed to reduce NOx and comply with Rule 9510.

Energy Mitigation - Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018).

Water Mitigation - CA water efficient appliance requirements.

Fleet Mix -

Table Name	Column Name	Default Value	New Value
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	220.00
tblConstructionPhase	NumDays	10.00	220.00
tblLandUse	LandUseSquareFeet	152,460.00	72,364.00
tblLandUse	LotAcreage	3.50	1.81
tblProjectCharacteristics	CO2IntensityFactor	702.44	549
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	33.82	0.00

## 2.0 Emissions Summary

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## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	8.3962	30.5264	30.6734	0.0563	6.6345	1.5042	7.5508	3.3893	1.4240	4.2323	0.0000	5,345.568 2	5,345.568 2	1.0526	0.0000	5,371.882 5
2022	8.0401	27.5373	30.1507	0.0560	0.7367	1.2811	2.0178	0.1983	1.2135	1.4119	0.0000	5,323.153 9	5,323.153 9	1.0405	0.0000	5,349.166 2
Maximum	8.3962	30.5264	30.6734	0.0563	6.6345	1.5042	7.5508	3.3893	1.4240	4.2323	0.0000	5,345.568 2	5,345.568 2	1.0526	0.0000	5,371.882 5

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	5.6386	7.2351	32.2590	0.0563	2.6376	0.0775	2.6717	1.3351	0.0769	1.3692	0.0000	5,345.568 2	5,345.568 2	1.0526	0.0000	5,371.882 5
2022	5.6086	7.1036	32.0285	0.0560	0.7367	0.0765	0.8132	0.1983	0.0760	0.2743	0.0000	5,323.153 9	5,323.153 9	1.0405	0.0000	5,349.166 2
Maximum	5.6386	7.2351	32.2590	0.0563	2.6376	0.0775	2.6717	1.3351	0.0769	1.3692	0.0000	5,345.568 2	5,345.568 2	1.0526	0.0000	5,371.882 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	31.57	75.31	-5.69	0.00	54.22	94.47	63.58	57.26	94.21	70.88	0.00	0.00	0.00	0.00	0.00	0.00

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
Energy	0.0756	0.6869	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.2849	824.2849	0.0158	0.0151	829.1832
Mobile	1.3017	11.7853	13.3078	0.0504	3.4972	0.0455	3.5427	0.9372	0.0429	0.9801		5,146.001 1	5,146.001 1	0.2768		5,152.921 7
<b>Total</b>	<b>3.2238</b>	<b>12.4724</b>	<b>13.9067</b>	<b>0.0545</b>	<b>3.4972</b>	<b>0.0978</b>	<b>3.5950</b>	<b>0.9372</b>	<b>0.0952</b>	<b>1.0324</b>		<b>5,970.332 7</b>	<b>5,970.332 7</b>	<b>0.2927</b>	<b>0.0151</b>	<b>5,982.154 7</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
Energy	0.0542	0.4927	0.4139	2.9600e-003		0.0375	0.0375		0.0375	0.0375		591.2739	591.2739	0.0113	0.0108	594.7876
Mobile	1.3017	11.7853	13.3078	0.0504	3.4972	0.0455	3.5427	0.9372	0.0429	0.9801		5,146.001 1	5,146.001 1	0.2768		5,152.921 7
<b>Total</b>	<b>3.2024</b>	<b>12.2782</b>	<b>13.7436</b>	<b>0.0534</b>	<b>3.4972</b>	<b>0.0830</b>	<b>3.5803</b>	<b>0.9372</b>	<b>0.0804</b>	<b>1.0176</b>		<b>5,737.321 8</b>	<b>5,737.321 8</b>	<b>0.2883</b>	<b>0.0108</b>	<b>5,747.759 2</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.66	1.56	1.17	2.13	0.00	15.08	0.41	0.00	15.50	1.43	0.00	3.90	3.90	1.53	28.26	3.92

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2021	5/3/2021	5	3	
2	Grading	Grading	5/4/2021	5/11/2021	5	6	
3	Building Construction	Building Construction	5/12/2021	3/15/2022	5	220	
4	Paving	Paving	5/12/2021	3/15/2022	5	220	
5	Architectural Coating	Architectural Coating	5/12/2021	3/15/2022	5	220	

**Acres of Grading (Site Preparation Phase): 4.5****Acres of Grading (Grading Phase): 3****Acres of Paving: 0.97****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 108,546; Non-Residential Outdoor: 36,182; Striped Parking Area: 2,592 (Architectural Coating – sqft)****OffRoad Equipment**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	49.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.883 2	2,372.883 2	0.7674		2,392.069 2
<b>Total</b>	<b>1.5463</b>	<b>18.2862</b>	<b>10.7496</b>	<b>0.0245</b>	<b>1.5908</b>	<b>0.7019</b>	<b>2.2926</b>	<b>0.1718</b>	<b>0.6457</b>	<b>0.8175</b>		<b>2,372.883 2</b>	<b>2,372.883 2</b>	<b>0.7674</b>		<b>2,392.069 2</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.2 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0366	0.0244	0.2247	5.6000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		56.1353	56.1353	1.6300e-003		56.1761
<b>Total</b>	<b>0.0366</b>	<b>0.0244</b>	<b>0.2247</b>	<b>5.6000e-004</b>	<b>0.0657</b>	<b>4.3000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>56.1353</b>	<b>56.1353</b>	<b>1.6300e-003</b>		<b>56.1761</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	0.3008	1.3034	11.8595	0.0245		0.0401	0.0401		0.0401	0.0401	0.0000	2,372.883 2	2,372.883 2	0.7674		2,392.069 2
<b>Total</b>	<b>0.3008</b>	<b>1.3034</b>	<b>11.8595</b>	<b>0.0245</b>	<b>0.6204</b>	<b>0.0401</b>	<b>0.6605</b>	<b>0.0670</b>	<b>0.0401</b>	<b>0.1071</b>	<b>0.0000</b>	<b>2,372.883 2</b>	<b>2,372.883 2</b>	<b>0.7674</b>		<b>2,392.069 2</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.2 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0366	0.0244	0.2247	5.6000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		56.1353	56.1353	1.6300e-003		56.1761
<b>Total</b>	<b>0.0366</b>	<b>0.0244</b>	<b>0.2247</b>	<b>5.6000e-004</b>	<b>0.0657</b>	<b>4.3000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>4.0000e-004</b>	<b>0.0178</b>		<b>56.1353</b>	<b>56.1353</b>	<b>1.6300e-003</b>		<b>56.1761</b>

**3.3 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
<b>Total</b>	<b>1.8271</b>	<b>20.2135</b>	<b>9.7604</b>	<b>0.0206</b>	<b>6.5523</b>	<b>0.9158</b>	<b>7.4681</b>	<b>3.3675</b>	<b>0.8425</b>	<b>4.2100</b>		<b>1,995.6114</b>	<b>1,995.6114</b>	<b>0.6454</b>		<b>2,011.7470</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.3 Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0458	0.0305	0.2809	7.0000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		70.1692	70.1692	2.0400e-003		70.2201
<b>Total</b>	<b>0.0458</b>	<b>0.0305</b>	<b>0.2809</b>	<b>7.0000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>70.1692</b>	<b>70.1692</b>	<b>2.0400e-003</b>		<b>70.2201</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	0.2522	1.0927	10.9071	0.0206		0.0336	0.0336		0.0336	0.0336	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
<b>Total</b>	<b>0.2522</b>	<b>1.0927</b>	<b>10.9071</b>	<b>0.0206</b>	<b>2.5554</b>	<b>0.0336</b>	<b>2.5890</b>	<b>1.3133</b>	<b>0.0336</b>	<b>1.3469</b>	<b>0.0000</b>	<b>1,995.6114</b>	<b>1,995.6114</b>	<b>0.6454</b>		<b>2,011.7470</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.3 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0458	0.0305	0.2809	7.0000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		70.1692	70.1692	2.0400e-003		70.2201
<b>Total</b>	<b>0.0458</b>	<b>0.0305</b>	<b>0.2809</b>	<b>7.0000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>70.1692</b>	<b>70.1692</b>	<b>2.0400e-003</b>		<b>70.2201</b>

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.9355	2,288.9355	0.4503		2,300.1935
<b>Total</b>	<b>2.0451</b>	<b>16.0275</b>	<b>14.5629</b>	<b>0.0250</b>		<b>0.8173</b>	<b>0.8173</b>		<b>0.7831</b>	<b>0.7831</b>		<b>2,288.9355</b>	<b>2,288.9355</b>	<b>0.4503</b>		<b>2,300.1935</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0631	2.0985	0.4390	5.2200e-003	0.1288	6.2800e-003	0.1351	0.0371	6.0100e-003	0.0431		546.8221	546.8221	0.0262		547.4772
Worker	0.2242	0.1495	1.3762	3.4500e-003	0.4025	2.6300e-003	0.4052	0.1068	2.4300e-003	0.1092		343.8289	343.8289	9.9700e-003		344.0783
<b>Total</b>	<b>0.2873</b>	<b>2.2480</b>	<b>1.8152</b>	<b>8.6700e-003</b>	<b>0.5313</b>	<b>8.9100e-003</b>	<b>0.5402</b>	<b>0.1439</b>	<b>8.4400e-003</b>	<b>0.1523</b>		<b>890.6510</b>	<b>890.6510</b>	<b>0.0362</b>		<b>891.5555</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	3.8705	14.9355	0.0250		0.0352	0.0352		0.0352	0.0352	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
<b>Total</b>	<b>0.3296</b>	<b>3.8705</b>	<b>14.9355</b>	<b>0.0250</b>		<b>0.0352</b>	<b>0.0352</b>		<b>0.0352</b>	<b>0.0352</b>	<b>0.0000</b>	<b>2,288.9355</b>	<b>2,288.9355</b>	<b>0.4503</b>		<b>2,300.1935</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0631	2.0985	0.4390	5.2200e-003	0.1288	6.2800e-003	0.1351	0.0371	6.0100e-003	0.0431		546.8221	546.8221	0.0262		547.4772
Worker	0.2242	0.1495	1.3762	3.4500e-003	0.4025	2.6300e-003	0.4052	0.1068	2.4300e-003	0.1092		343.8289	343.8289	9.9700e-003		344.0783
<b>Total</b>	<b>0.2873</b>	<b>2.2480</b>	<b>1.8152</b>	<b>8.6700e-003</b>	<b>0.5313</b>	<b>8.9100e-003</b>	<b>0.5402</b>	<b>0.1439</b>	<b>8.4400e-003</b>	<b>0.1523</b>		<b>890.6510</b>	<b>890.6510</b>	<b>0.0362</b>		<b>891.5555</b>

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.2813	2,289.2813	0.4417		2,300.3230
<b>Total</b>	<b>1.8555</b>	<b>14.6040</b>	<b>14.3533</b>	<b>0.0250</b>		<b>0.7022</b>	<b>0.7022</b>		<b>0.6731</b>	<b>0.6731</b>		<b>2,289.2813</b>	<b>2,289.2813</b>	<b>0.4417</b>		<b>2,300.3230</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0586	1.9917	0.4055	5.1700e-003	0.1288	5.4800e-003	0.1343	0.0371	5.2400e-003	0.0423		541.8875	541.8875	0.0253		542.5195
Worker	0.2073	0.1331	1.2458	3.3300e-003	0.4025	2.5300e-003	0.4051	0.1068	2.3300e-003	0.1091		331.6425	331.6425	8.8500e-003		331.8638
<b>Total</b>	<b>0.2660</b>	<b>2.1248</b>	<b>1.6513</b>	<b>8.5000e-003</b>	<b>0.5313</b>	<b>8.0100e-003</b>	<b>0.5393</b>	<b>0.1439</b>	<b>7.5700e-003</b>	<b>0.1514</b>		<b>873.5300</b>	<b>873.5300</b>	<b>0.0341</b>		<b>874.3833</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3296	3.8705	14.9355	0.0250		0.0352	0.0352		0.0352	0.0352	0.0000	2,289.2813	2,289.2813	0.4417		2,300.3230
<b>Total</b>	<b>0.3296</b>	<b>3.8705</b>	<b>14.9355</b>	<b>0.0250</b>		<b>0.0352</b>	<b>0.0352</b>		<b>0.0352</b>	<b>0.0352</b>	<b>0.0000</b>	<b>2,289.2813</b>	<b>2,289.2813</b>	<b>0.4417</b>		<b>2,300.3230</b>



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0586	1.9917	0.4055	5.1700e-003	0.1288	5.4800e-003	0.1343	0.0371	5.2400e-003	0.0423		541.8875	541.8875	0.0253		542.5195
Worker	0.2073	0.1331	1.2458	3.3300e-003	0.4025	2.5300e-003	0.4051	0.1068	2.3300e-003	0.1091		331.6425	331.6425	8.8500e-003		331.8638
<b>Total</b>	<b>0.2660</b>	<b>2.1248</b>	<b>1.6513</b>	<b>8.5000e-003</b>	<b>0.5313</b>	<b>8.0100e-003</b>	<b>0.5393</b>	<b>0.1439</b>	<b>7.5700e-003</b>	<b>0.1514</b>		<b>873.5300</b>	<b>873.5300</b>	<b>0.0341</b>		<b>874.3833</b>

**3.5 Paving - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.0749</b>	<b>10.6478</b>	<b>11.7756</b>	<b>0.0178</b>		<b>0.5826</b>	<b>0.5826</b>		<b>0.5371</b>	<b>0.5371</b>		<b>1,709.1107</b>	<b>1,709.1107</b>	<b>0.5417</b>		<b>1,722.6524</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.5 Paving - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0686	0.0458	0.4213	1.0600e-003	0.1232	8.1000e-004	0.1240	0.0327	7.4000e-004	0.0334		105.2538	105.2538	3.0500e-003		105.3301
<b>Total</b>	<b>0.0686</b>	<b>0.0458</b>	<b>0.4213</b>	<b>1.0600e-003</b>	<b>0.1232</b>	<b>8.1000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.4000e-004</b>	<b>0.0334</b>		<b>105.2538</b>	<b>105.2538</b>	<b>3.0500e-003</b>		<b>105.3301</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2104	0.9117	12.9737	0.0178		0.0281	0.0281		0.0281	0.0281	0.0000	1,709.1107	1,709.1107	0.5417		1,722.6524
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2219</b>	<b>0.9117</b>	<b>12.9737</b>	<b>0.0178</b>		<b>0.0281</b>	<b>0.0281</b>		<b>0.0281</b>	<b>0.0281</b>	<b>0.0000</b>	<b>1,709.1107</b>	<b>1,709.1107</b>	<b>0.5417</b>		<b>1,722.6524</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.5 Paving - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0686	0.0458	0.4213	1.0600e-003	0.1232	8.1000e-004	0.1240	0.0327	7.4000e-004	0.0334		105.2538	105.2538	3.0500e-003		105.3301
<b>Total</b>	<b>0.0686</b>	<b>0.0458</b>	<b>0.4213</b>	<b>1.0600e-003</b>	<b>0.1232</b>	<b>8.1000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.4000e-004</b>	<b>0.0334</b>		<b>105.2538</b>	<b>105.2538</b>	<b>3.0500e-003</b>		<b>105.3301</b>

**3.5 Paving - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9527</b>	<b>9.3322</b>	<b>11.6970</b>	<b>0.0179</b>		<b>0.4879</b>	<b>0.4879</b>		<b>0.4500</b>	<b>0.4500</b>		<b>1,709.6892</b>	<b>1,709.6892</b>	<b>0.5419</b>		<b>1,723.2356</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.5 Paving - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0635	0.0407	0.3814	1.0200e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		101.5232	101.5232	2.7100e-003		101.5910
<b>Total</b>	<b>0.0635</b>	<b>0.0407</b>	<b>0.3814</b>	<b>1.0200e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>101.5232</b>	<b>101.5232</b>	<b>2.7100e-003</b>		<b>101.5910</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2104	0.9117	12.9737	0.0179		0.0281	0.0281		0.0281	0.0281	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2219</b>	<b>0.9117</b>	<b>12.9737</b>	<b>0.0179</b>		<b>0.0281</b>	<b>0.0281</b>		<b>0.0281</b>	<b>0.0281</b>	<b>0.0000</b>	<b>1,709.6892</b>	<b>1,709.6892</b>	<b>0.5419</b>		<b>1,723.2356</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.5 Paving - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0635	0.0407	0.3814	1.0200e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		101.5232	101.5232	2.7100e-003		101.5910
<b>Total</b>	<b>0.0635</b>	<b>0.0407</b>	<b>0.3814</b>	<b>1.0200e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>101.5232</b>	<b>101.5232</b>	<b>2.7100e-003</b>		<b>101.5910</b>

**3.6 Architectural Coating - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>4.8746</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.6 Architectural Coating - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0458	0.0305	0.2809	7.0000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		70.1692	70.1692	2.0400e-003		70.2201
<b>Total</b>	<b>0.0458</b>	<b>0.0305</b>	<b>0.2809</b>	<b>7.0000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>70.1692</b>	<b>70.1692</b>	<b>2.0400e-003</b>		<b>70.2201</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>4.6854</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.6 Architectural Coating - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0458	0.0305	0.2809	7.0000e-004	0.0822	5.4000e-004	0.0827	0.0218	4.9000e-004	0.0223		70.1692	70.1692	2.0400e-003		70.2201
<b>Total</b>	<b>0.0458</b>	<b>0.0305</b>	<b>0.2809</b>	<b>7.0000e-004</b>	<b>0.0822</b>	<b>5.4000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.9000e-004</b>	<b>0.0223</b>		<b>70.1692</b>	<b>70.1692</b>	<b>2.0400e-003</b>		<b>70.2201</b>

**3.6 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>4.8602</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.6 Architectural Coating - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0423	0.0272	0.2542	6.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		67.6822	67.6822	1.8100e-003		67.7273
<b>Total</b>	<b>0.0423</b>	<b>0.0272</b>	<b>0.2542</b>	<b>6.8000e-004</b>	<b>0.0822</b>	<b>5.2000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.8000e-004</b>	<b>0.0223</b>		<b>67.6822</b>	<b>67.6822</b>	<b>1.8100e-003</b>		<b>67.7273</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>4.6854</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>



## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**3.6 Architectural Coating - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0423	0.0272	0.2542	6.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		67.6822	67.6822	1.8100e-003		67.7273
<b>Total</b>	<b>0.0423</b>	<b>0.0272</b>	<b>0.2542</b>	<b>6.8000e-004</b>	<b>0.0822</b>	<b>5.2000e-004</b>	<b>0.0827</b>	<b>0.0218</b>	<b>4.8000e-004</b>	<b>0.0223</b>		<b>67.6822</b>	<b>67.6822</b>	<b>1.8100e-003</b>		<b>67.7273</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3017	11.7853	13.3078	0.0504	3.4972	0.0455	3.5427	0.9372	0.0429	0.9801		5,146.001 1	5,146.001 1	0.2768		5,152.921 7
Unmitigated	1.3017	11.7853	13.3078	0.0504	3.4972	0.0455	3.5427	0.9372	0.0429	0.9801		5,146.001 1	5,146.001 1	0.2768		5,152.921 7

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	857.85	859.95	624.75	1,567,158	1,567,158
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	857.85	859.95	624.75	1,567,158	1,567,158

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	9.50	7.30	7.30	33.00	48.00	19.00	52	39	9

## 4.4 Fleet Mix

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710
Parking Lot	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710
Recreational Swimming Pool	0.525564	0.032657	0.173666	0.133675	0.020482	0.005111	0.020758	0.078919	0.001825	0.001263	0.004259	0.001112	0.000710

## 5.0 Energy Detail

---

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Exceed Title 24

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0542	0.4927	0.4139	2.9600e-003		0.0375	0.0375		0.0375	0.0375		591.2739	591.2739	0.0113	0.0108	594.7876
NaturalGas Unmitigated	0.0756	0.6869	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.2849	824.2849	0.0158	0.0151	829.1832

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	7006.42	0.0756	0.6869	0.5770	4.1200e-003		0.0522	0.0522		0.0522	0.0522		824.2849	824.2849	0.0158	0.0151	829.1832
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0756</b>	<b>0.6869</b>	<b>0.5770</b>	<b>4.1200e-003</b>		<b>0.0522</b>	<b>0.0522</b>		<b>0.0522</b>	<b>0.0522</b>		<b>824.2849</b>	<b>824.2849</b>	<b>0.0158</b>	<b>0.0151</b>	<b>829.1832</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	5.02583	0.0542	0.4927	0.4139	2.9600e-003		0.0375	0.0375		0.0375	0.0375		591.2739	591.2739	0.0113	0.0108	594.7876
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0542</b>	<b>0.4927</b>	<b>0.4139</b>	<b>2.9600e-003</b>		<b>0.0375</b>	<b>0.0375</b>		<b>0.0375</b>	<b>0.0375</b>		<b>591.2739</b>	<b>591.2739</b>	<b>0.0113</b>	<b>0.0108</b>	<b>594.7876</b>

**6.0 Area Detail**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
Unmitigated	1.8465	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0300e-003	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
<b>Total</b>	<b>1.8465</b>	<b>2.0000e-004</b>	<b>0.0219</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>0.0468</b>	<b>0.0468</b>	<b>1.2000e-004</b>		<b>0.0499</b>

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0300e-003	2.0000e-004	0.0219	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0468	0.0468	1.2000e-004		0.0499
<b>Total</b>	<b>1.8465</b>	<b>2.0000e-004</b>	<b>0.0219</b>	<b>0.0000</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>0.0468</b>	<b>0.0468</b>	<b>1.2000e-004</b>		<b>0.0499</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Three Rivers Hampton Inn &amp; Suites - Tulare County, Winter

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

**10.0 Stationary Equipment**

---

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**11.0 Vegetation**

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# Attachment “B”

## Biological Resources



# **Biological Resources Assessment**

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## **Hampton Inn and Suites Three Rivers**

Tulare County, California

### **Prepared for:**

Ineffable Hospitality, Inc

**August 19, 2020**



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS

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## **LIST OF ATTACHMENTS**

Attachment A – Special-Status Species Searches (9-Quad CNPS Search, CNNDDB Search, and Study Area IPaC Search)

Attachment B – Representative Site Photographs

Attachment C – Aquatic Resources Delineation Data Sheets

## **LIST OF ACRONYMS AND ABBREVIATIONS**

BA	Biological assessment
BCC	Birds of conservation concern
BIOS	Biogeographic Information and Observation System
BO	Biological opinion
BRA	Biological resources assessment
CARI	California Aquatic Resources Inventory
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Community Plan	Three Rivers Community Plan
CRPR	California Rare Plant Rank
CWA	Clean Water Act
ESA	Endangered Species Act
MBTA	Migratory Bird Treaty Act
MSL	Mean sea level
NAD	North American Datum
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
Project	Hampton Inn and Suites Three Rivers Project
RMA	Resource Management Agency
RWQCB	Regional Water Quality Control Board
SFEI	San Francisco Estuary Institute
SSC	CDFW Species of Special Concern
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group

## 1.0 INTRODUCTION

On behalf of Ineffable Hospitality, Inc., ECorp Consulting, Inc. conducted a biological resources assessment (BRA) for the approximately 4.57-acre Hampton Inn and Suites Three Rivers Project (Project) located in the community of Three Rivers in Tulare County, California. The purpose of the BRA was to collect information on the biological resources present or with the potential to occur in the Project Study Area, assess potential biological impacts related to Project activities, and identify potential mitigation measures to inform and support the Project's California Environmental Quality Act (CEQA) documentation for biological resources.

### 1.1 Project Location

The Project is located in the community of Three Rivers, California east of State Highway 198 (Sierra Drive), approximately 1,000 feet north of the Old Three Rivers Road intersection, and immediately south of the Comfort Inn and Suites (Figure 1. *Project Location and Vicinity*). The site corresponds to a portion of Section 26, Township 17 south, Range 28 (Mount Diablo Base and Meridian) east of the "Kaweah, California" 7.5-minute quadrangles (North American Datum [NAD]27) (U.S. Geological Survey [USGS] 1993). The approximate center of the site is located at latitude 36.424827° (NAD83) and longitude -118.914718° (NAD83) within the Upper Kaweah Watershed (Hydrologic Unit Code #180300007) Watershed (Natural Resources Conservation Service [NRCS] et al. 2019).

### 1.2 Project Description

The proposed Project entails the development of a 105-room hotel to be located off State Route 198 (Sierra Drive), approximately 1,100 feet north of Old Three Rivers Road.

### 1.3 Purpose of this Biological Resources Assessment

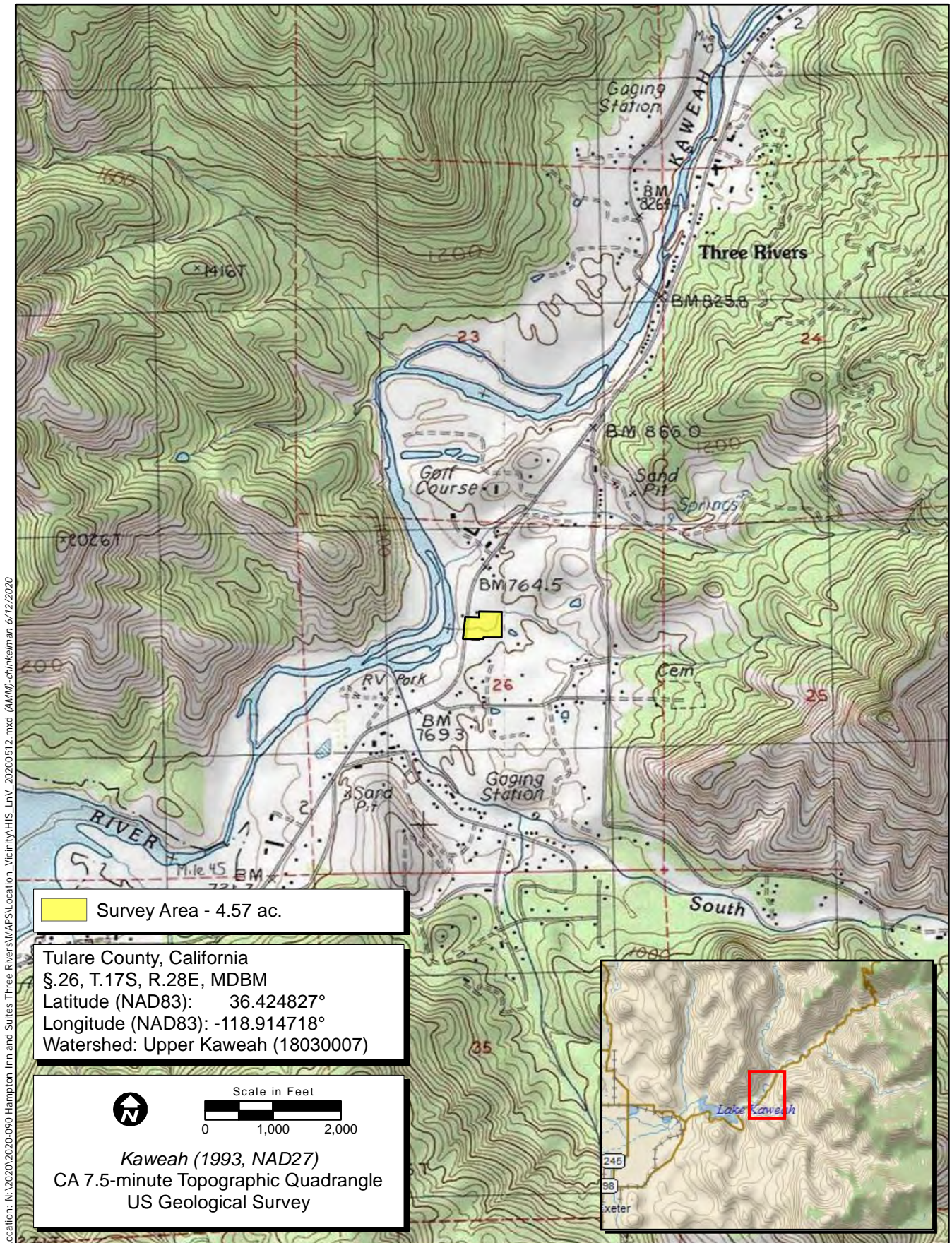
The purpose of this BRA is to assess the potential for occurrence of special-status plant and animal species and their habitats, and sensitive habitats such as wetlands and riparian communities within the Project Study Area. This assessment includes information generated from the reconnaissance-level site assessment and does not include a wetland delineation performed according to U.S. Army Corps of Engineers' (USACE's) standards, nor does it include determinate field surveys for special-status plant and animal species.

This assessment includes a preliminary analysis of impacts on biological resources anticipated to result from the Project as presently defined. The mitigation recommendations presented in this assessment are based on a preliminary impact analysis, a review of existing literature, and the results of the site reconnaissance survey.

For the purposes of this assessment, special-status species are defined as plants or animals that:

- are listed, proposed for listing, or candidates for future listing as threatened or endangered under the federal Endangered Species Act (ESA);





Location: N:\2020\2020-090 Hampton Inn and Suites Three Rivers\MAPS\Location\_Vicinity\HIS\_LnV\_20200512.mxd (AMM)-chinkelman 6/12/2020

Map Date: 6/12/2020  
 iService Layer Credits: Copyright© 2013 National Geographic Society, i-cubed  
 Copyright:(c) 2018 Garmin



**Figure 1. Project Location and Vicinity**

*2020-090 Hampton Inn and Suites in Three Rivers*



- are listed or candidates for future listing as threatened or endangered under the California ESA;
- meet the definitions of endangered or rare under § 15380 of the CEQA Guidelines;
- are identified as a species of special concern (SSC) by the California Department of Fish and Wildlife (CDFW);
- are birds identified as birds of conservation concern (BCC) by the U.S. Fish and Wildlife Service (USFWS);
- are considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered in California," "plants about which more information is needed," or "plants of limited distribution – a watch list" (i.e., species with a California Rare Plant Rank [CRPR] of 1B, 2, 3, or 4);
- are plants listed as rare under the California Native Plant Protection Act (NPPA) (California Fish and Game Code, § 1900 et seq.); or
- are fully protected in California in accordance with the California Fish and Game Code, § 3511 (birds), § 4700 (mammals), § 5050 (amphibians and reptiles), and § 5515 (fishes).

## **2.0 REGULATORY SETTING**

### **2.1 Federal Regulations**

#### **2.1.1 Endangered Species Act**

The ESA protects plants and animals that are listed as endangered or threatened by USFWS and the National Marine Fisheries Service (NMFS). Section 9 of the ESA prohibits, without authorization, the taking of listed wildlife, where take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant under federal jurisdiction and removing, cutting, digging up, damaging, or destroying any listed plant in any other area in knowing violation of state law (16 U.S. Code [USC] 1538).

Under Section 7 of the ESA, federal agencies are required to consult with USFWS and/or NMFS if their actions, including permit approvals and funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion (BO), USFWS and NMFS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of the ESA provides for the issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

#### **Section 7 Consultation**

Section 7 of the ESA mandates that all federal agencies consult with USFWS and/or NMFS to ensure that federal agencies' actions do not jeopardize the continued existence of a listed species or adversely modify

critical habitat for listed species. If direct and/or indirect effects will occur to critical habitat that appreciably diminish the value of critical habitat for both the survival and recovery of a species, the adverse modifications will require formal consultation with USFWS or NMFS. If adverse effects are likely, the federal lead agency must prepare a biological assessment (BA) for the purpose of analyzing the potential effects of the proposed Project on listed species and critical habitat to establish and justify an "effect determination." Often a third-party, non-federal applicant drafts the BA for the lead federal agencies. The USFWS/NMFS reviews the BA; if it concludes that the Project may adversely affect a listed species or its habitat, it prepares a BO. The BO may recommend "reasonable and prudent alternatives" to the Project to avoid jeopardizing or adversely modifying habitat.

### **Critical Habitat**

Critical Habitat is defined in Section 3 of the ESA as:

1. the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the ESA, on which are found those physical or biological features essential to the conservation of the species and that may require special management considerations or protection; and
2. specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

For inclusion in a Critical Habitat designation, habitat within the geographical area occupied by the species at the time it was listed must first have features essential to the conservation of the species (16 USC 1533). Critical Habitat designations identify, to the extent known and using the best scientific data available, habitat areas that provide essential life cycle needs of the species (areas on which are found the primary constituent elements). Primary constituent elements are the physical and biological features that are essential to the conservation of the species and that may require special management considerations or protection. These include but are not limited to the following:

1. Space for individual and population growth and for normal behavior.
2. Food, water, air, light, minerals, or other nutritional or physiological requirements.
3. Cover or shelter.
4. Sites for breeding, reproduction, or rearing (or development) of offspring.
5. Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

#### **2.1.2 Migratory Bird Treaty Act**

The Migratory Bird Treaty Act (MBTA) implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations



or by permit. As authorized under the MBTA, USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of nongame birds in § 3800, migratory birds in § 3513, and birds of prey in § 3503.5 of the California Fish and Game Code.

### **2.1.3 Clean Water Act**

The purpose of the federal Clean Water Act (CWA) is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Section 404 of the CWA prohibits the discharge of dredged or fill material into “Waters of the United States” without a permit from the USACE. The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas “that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (USEPA) also has authority over wetlands, including the authority to veto permits issued by USACE under CWA Section 404(c).

Projects involving activities that have no more than minimal individual and cumulative adverse environmental effects may meet the conditions of one of the Nationwide Permits already issued by USACE (Federal Register 82:1860, January 6, 2017). If impacts on wetlands could be substantial, an individual permit is required. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

## **2.2 State and Local Regulations**

### **2.2.1 California Endangered Species Act**

The California ESA (California Fish and Game Code §§ 2050-2116) protects species of fish, wildlife, and plants listed by the State as endangered or threatened. Species identified as candidates for listing may also receive protection. Section 2080 of the California ESA prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit. Take is defined in Section 86 of the California Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The California ESA allows for take incidental to otherwise lawful projects under permits issued by the CDFW.

### **2.2.2 Fully Protected Species**

The State of California first began to designate species as “fully protected” prior to the creation of the federal and the California ESAs. Lists of fully protected species were initially developed to provide

protection to those animals that were rare or faced possible extinction and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESAs. Fully protected species are identified in the California Fish and Game Code § 4700 for mammals, § 3511 for birds, § 5050 for reptiles and amphibians, and § 5515 for fish.

These sections of the California Fish and Game Code provide that fully protected species may not be taken or possessed at any time, including prohibition of the CDFW from issuing incidental take permits for fully protected species under the California ESA. The CDFW will issue licenses or permits for take of these species for necessary scientific research or live capture and relocation pursuant to the permit, and may allow incidental take for lawful activities carried out under an approved Natural Community Conservation Plan within which such species are covered.

### **2.2.3 Native Plant Protection Act**

The NPPA of 1977 (California Fish and Game Code §§ 1900-1913) was established with the intent to “preserve, protect and enhance rare and endangered plants in this state.” The NPPA is administered by CDFW. The Fish and Game Commission has the authority to designate native plants as “endangered” or “rare.” The NPPA prohibits the take of plants listed under the NPPA, but the NPPA contains a number of exemptions to this prohibition that have not been clarified by regulation or judicial rule. In 1984, the California ESA brought under its protection all plants previously listed as endangered under the NPPA. Plants listed as rare under the NPPA are not protected under the California ESA, but are still protected under the provisions of NPPA. The Fish and Game Commission no longer lists plants under the NPPA, referring all listings to the California ESA.

### **2.2.4 California Fish and Game Code Special Protections for Birds**

In addition to protections contained within the California ESA and California Fish and Game Code § 3511 described above, the California Fish and Game Code includes a number of sections that specifically protect certain birds.

Section 3800 states that it is unlawful to take nongame birds, such as those occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds, except when in accordance with regulations of the California Fish and Game Commission or a mitigation plan approved by CDFW for mining operations.

Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird.

Section 3503.5 protects birds of prey (which includes eagles, hawks, falcons, kites, ospreys, and owls) and prohibits the take, possession, or destruction of any birds and their nests

Section 3505 makes it unlawful to take, sell, or purchase egrets, ospreys, and several exotic non-native species, or any part of these birds.

Section 3513 specifically prohibits the take or possession of any migratory nongame bird as designated in the MBTA.

### **2.2.5 Lake or Streambed Alteration Agreements**

Section 1602 of the California Fish and Game Code requires individuals or agencies to provide a Notification of Lake or Streambed Alteration to the CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.” The CDFW reviews the proposed actions and, if necessary, proposed measures to protect affected fish and wildlife resources. The final proposal mutually agreed upon by the CDFW and the applicant is the Lake or Streambed Alteration Agreement.

### **2.2.6 Porter-Cologne Water Quality Act**

The RWQCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of stormwater runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Storm Water Pollution Prevention Plan. Under the Porter-Cologne Water Quality Act, the RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, with any region that could affect the water of the state” [Water Code 13260(a)]. Waters of the State are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” [Water Code 13050 (e)]. The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State, that are not regulated by USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of a Waste Discharge Requirements for these activities.

### **2.2.7 California Environmental Quality Act**

In accordance with CEQA Guidelines § 15380, a species or subspecies not specifically protected under the federal or California ESAs or NPPA may be considered endangered, rare, or threatened for CEQA review purposes if the species meets certain criteria specified in the Guidelines. These criteria include definitions similar to definitions used in the ESA, the California ESA, and the NPPA. Section 15380 was included in the CEQA Guidelines primarily to address situations in which a project under review may have a significant effect on a species that has not been listed under the ESA, the California ESA, or the NPPA, but that may meet the definition of endangered, rare, or threatened. Animal species identified as SSC by CDFW and plants identified by the CNPS as rare, threatened, or endangered may meet the CEQA definition of rare or endangered.

## Species of Special Concern

SSC are defined by the CDFW as a species, subspecies, or distinct population of an animal native to California that are not legally protected under the federal ESA, California ESA, or California Fish and Game Code, but currently satisfies one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role.
- The species is listed as federally (but not State) threatened or endangered, or meets the State definition of threatened or endangered but has not formally been listed.
- The species has or is experiencing serious (nonscyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status.
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for State threatened or endangered status.
- SSC are typically associated with habitats that are threatened.

Depending on the policy of the lead agency, projects that result in substantial impacts to SSC may be considered significant under CEQA.

## U.S. Fish and Wildlife Service Birds of Conservation Concern

The 1988 amendment to the Fish and Wildlife Conservation Act mandates USFWS “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under ESA.” To meet this requirement, USFWS published a list of BCC for the U.S. (USFWS 2008) The list identifies the migratory and nonmigratory bird species (beyond those already designated as federally threatened or endangered) that represent USFWS’ highest conservation priorities. Depending on the policy of the lead agency, projects that result in substantial impacts to BCC may be considered significant under CEQA.

## California Rare Plant Ranks

The CNPS maintains the Inventory of Rare and Endangered Plants of California (CNPS 2020), which provides a list of plant species native to California that are threatened with extinction, have limited distributions, and/or low populations. Plant species meeting one of these criteria are assigned to one of six CRPRs. The rank system was developed in collaboration with government, academia, non-governmental organizations, and private sector botanists, and is jointly managed by CDFW and the CNPS. The CRPRs are currently recognized in the California Natural Diversity Database (CNDDDB). The following are definitions of the CNPS CRPRs:

- Rare Plant Rank 1A – presumed extirpated in California and either rare or extinct elsewhere.

- Rare Plant Rank 1B – rare, threatened, or endangered in California and elsewhere.
- Rare Plant Rank 2A – presumed extirpated in California, but more common elsewhere.
- Rare Plant Rank 2B – rare, threatened, or endangered in California but more common elsewhere.
- Rare Plant Rank 3 – a review list of plants about which more information is needed.
- Rare Plant Rank 4 – a watch list of plants of limited distribution.

Additionally, CNPS has defined Threat Ranks that are added to the CRPR as an extension. Threat Ranks designate the level of threat on a scale of 1 through 3, with 1 being the most threatened and 3 being the least threatened. Threat Ranks are generally present for all plants ranked 1B, 2B, or 4, and for the majority of plants ranked 3. Plant species ranked 1A and 2A (presumed extirpated in California), and some species ranked 3, which lack threat information, do not typically have a Threat Rank extension. The following are definitions of the CNPS Threat Ranks:

- Threat Rank 0.1 – Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat).
- Threat Rank 0.2 – Moderately threatened in California (20-80 percent of occurrences threatened/moderate degree and immediacy of threat).
- Threat Rank 0.3 – Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known).

Factors such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Rank; and differences in Threat Ranks do not constitute additional or different protection (CNPS 2018).

Depending on the policy of the lead agency, substantial impacts to plants ranked 1A, 1B, or 2, and 3 are typically considered significant under CEQA Guidelines § 15380. Significance under CEQA is typically evaluated on a case-by-case basis for plants ranked 4 and at the discretion of the CEQA lead agency.

### **California Environmental Quality Act Significance Criteria**

Sections 15063-15065 of the CEQA Guidelines address how an impact is identified as significant. Generally, impacts to listed (rare, threatened, or endangered) species are considered significant. Assessment of "impact significance" to populations of non-listed species (e.g., SSC) usually considers the proportion of the species' range that will be affected by a project, impacts to habitat, and the regional and population level effects.

Specifically, § 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant under CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.

### **2.2.8 Tulare County General Plan/Three Rivers Community Plan**

In 2012, the Tulare County General Plan 2030 Update (Tulare County 2012) was approved. The General Plan provides guidance for the protection of natural and cultural resources and the protection of the health and safety of county residents with an emphasis on enhancing scenic landscapes, reducing pollutants, minimizing the threat of manmade natural hazards, and maintaining adequate water supplies.

The Biological Resources section of the Environmental Resource Management Element of the Tulare County General Plan includes the following goals that are pertinent to development of the Survey Area:

- ERM-1.1            Protection of Rare and Endangered Species, and
- ERM- 1.12        Management of Oak Woodland Communities.

Since 2013, the Tulare County Resource Management Agency (RMA) has intensified outreach efforts and reached out to the Three Rivers community by holding public meetings. Through various meetings, RMA staff has discussed various County policies, programs, processes, and procedures with its residents to further define the Three Rivers Community Plan (Community Plan; Tulare County 2018a). The vision for the Community Plan comprises the multitude of viewpoints from and throughout the community. The vision includes 22 key statements, as included below, which will provide appropriate direction to help guide public and private decisions affecting the community, including provisions for the overall direction, density, type of growth and protection of the natural environment that are consistent with the needs and desires of the Three Rivers community to maintain its rural character. These vision statements intensify what is already recognized throughout the state, that Three Rivers is a unique destination among Tulare County's rural foothill communities.

The purpose of the Community Plan (Tulare County 2018a) is to preserve and protect the values, character and assets of the community, including preservation of its historical rural character and valuable natural resources, while ensuring that economic growth remains vibrant and sustainable, consistent with the desired character of the community. Vision Statement 7 effectuates the desire of the community to "protect and preserve oak, sycamore and cottonwood woodlands." Goal 4 (Protection and Conservation of the Environment) of the Community Plan includes objectives that are pertinent to biological resources, including:

- 4.1.1 Preserving the Natural Environment
- 4.1.2 CEQA Compliance

As part of the Community Plan, a Voluntary Oak Woodlands Management Plan (Tulare County 2018b) has been adopted. If the County determines that a project will result in a significant effect to oak woodlands, the County shall require one or more oak woodland mitigation alternatives to mitigate for the significant effect associated with the conservation of oak woodlands.

### 3.0 METHODS

For the purposes of this assessment, special-status species are defined as plants or animals that:

- are listed, proposed for listing, or candidates for future listing as threatened or endangered under the ESA;
- are listed or candidates for future listing as threatened or endangered under the California ESA;
- meet the definitions of endangered or rare under Section 15380 of the CEQA Guidelines;
- are identified as an SSC by the CDFW;
- are plants considered by the California CNPS to be "rare, threatened, or endangered in California" (CRPR 1 and 2);
- are plants listed by CNPS as species about which more information is needed to determine their status (CRPR 3), and plants of limited distribution (CRPR 4);
- are plants listed as rare under the California NPPA, California Fish and Game Code, § 1900 et seq.; or
- are fully protected in California in accordance with the California Fish and Game Code, §§ 3511 (birds), 4700 (mammals), 5050 (amphibians and reptiles), and 5515 (fishes).

Only species that fall into one of the above-listed groups were considered for this assessment. Other species tracked by the CNDDDB but having no other special status were not considered to be special status and were not included within this analysis.

### 3.1 Literature Review

The following resources were reviewed to determine the special-status species that have been documented within or in the vicinity of the Study Area. Results of the species searches are included as Attachment A.

- CDFW CNDDDB data for the "Kaweah, California" 7.5-minute quadrangle as well as the eight surrounding USGS quadrangles (CDFW 2020a);
- USFWS Information, Planning, and Consultation System Resource Report List for the Project site (USFWS 2020a);

- CNPS' electronic Inventory of Rare and Endangered Plants of California was queried for the "Kaweah, California" 7.5-minute quadrangles and the eight surrounding quadrangles (CNPS 2020);
- CDFW Biogeographic Information and Observation System (BIOS) query of range maps for potentially occurring special-status species (CDFW 2020b); and
- USFWS Threatened & Endangered Species Active Critical Habitat Report (USFWS 2020b).

Additional background information was reviewed regarding the documented or potential occurrence of special-status species within or near the Project site from the following sources:

- The Status of Rare, Threatened, and Endangered Plants and Animals of California 2000-2004 (California Department of Fish and Game [CDFG] 2005);
- California Bird SSC (Shuford and Gardali 2008);
- Amphibian and Reptile SSC in California (Thompson et al. 2016);
- Mammalian SSC in California (Williams 1986);
- California's Wildlife, Volumes I-III (Zeiner, et al. 1988, 1990a, 1990b); and
- A Guide to Wildlife Habitats of California (Mayer and Laudenslayer Jr., eds. 1988).

### **3.2 Site Reconnaissance**

ECORP biologist Hannah Stone conducted a site assessment on May 15, 2020. During the field assessment, meandering transects were walked through the Study Area searching for aquatic resources, potential Waters of the U.S./State, and special-status species or their habitat. The findings of this site assessment have been incorporated into this BRA.

During the field survey, biological communities occurring onsite were characterized and the following biological resource information was collected:

- Vegetation communities within the Project site,
- Plant and animal species directly observed,
- Animal evidence (e.g., scat, tracks),
- Existing active raptor nest locations, and
- Burrows and any other special habitat features.

In addition, soil types were identified using the NRCS Web Soil Survey (NRCS 2020a).

An aquatic resources delineation was conducted within the Study Area on August 13, 2020 to identify any potential waters of the U.S./State. The field delineation was conducted by ECORP biologist Keith Kwan according to the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and



the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Arid West Manual) (USACE 2008).

### 3.3 Special-Status Species Considered for the Project

Special-status plant and animal species that resulted from database searches were evaluated for their potential to occur onsite. Species that are tracked in the CNDDDB but do not have any other special status, as defined above, were not included in this assessment. Species' potential to occur within the Project site was assessed based on the following criteria:

- **Present** - Species was observed during the site visit or is known to occur within the Project site based on documented occurrences within the CNDDDB or other literature.
- **Potential to Occur** - Habitat (including soils and elevation requirements) for the species occurs within the Project site.
- **Low Potential to Occur** - Marginal or limited amounts of habitat occur, and/or the species is not known to occur within the vicinity of the Project site based on CNDDDB records and other available documentation.
- **Absent** - No suitable habitat (including soils and elevation requirements) and/or the species is not known to occur within the vicinity of the Project site based on CNDDDB records and other documentation.

## 4.0 RESULTS

### 4.1 Site Characteristics and Land Use

The Study Area is currently undeveloped and is situated at an elevation range of approximately 750 to 775 feet above mean sea level (MSL) in the southern Sierra Nevada foothills subregion of the Sierra Nevada region of the California floristic province (Baldwin et. al. 2012). The Study Area appears to have been historically disturbed as remnant vehicles tracks are found throughout the site. According to Google Earth aerial photographs, an area of oak woodland was present in the eastern portion of the site through 2005 but had been cut down and removed by 2009. Remnants of the root balls can be found onsite in the form of shallow basins.

Representative photographs of the Study Area are provided in Attachment B.



The surrounding lands include undeveloped lands, the Comfort Inn and Suites, and rural residences.

### 4.2 Vegetation Communities and Land Cover Types


The Project is currently comprised primarily of annual grassland with remnant oak woodland and ruderal roadside areas along the boundaries (Figure 2. *Vegetation Communities and Land Cover Types/Aquatic Resources Delineation*).



### Map Features

-  Survey Area - 4.57 ac.
-  Reference Coordinates

### ARD Sample Points

-  Upland Sample Point

### Vegetation Communities and Land Cover Types




-  Annual Grassland
-  Oak Woodland
-  Ruderal/Developed

Photo Source: NAIP (2018)

Boundary Source: Cooper Aerial Surveys

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet

<sup>1</sup> Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.



**Figure 2. Vegetation Communities and Land Cover Types / Aquatic Resources Delineation**

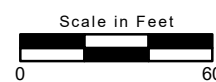
2020-090 Hampton Inn and Suites in Three Rivers

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Map Date: 8/17/2020

**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS



#### **4.2.1 Annual Grassland**

The annual grassland is dominated by ripgut brome (non-native, *Bromus diandrus*), rancher's fireweed (native, *Amsinckia menziesii*), white-stemmed filaree (non-native, *Erodium brachycarpum*), and yellow star-thistle (non-native, *Centaurea solstitialis*). Other plants found in the annual grassland include contorted primrose (native, *Camissonia strigulosa*), pink spineflower (native, *Chorizanthe membranacea*), cat's ear (non-native, *Hypochaeris* species), and ragweed (native, *Ambrosia* species). Scattered interior live oak (native, *Quercus wislizenii*) and elderberry (native, *Sambucus* sp.) are found within the annual grassland.

#### **Oak Woodland**

A small area of oak woodland is located in the southeastern corner of the Study Area. The oak woodland is largely situated on the adjacent property to the south but the dripline of the trees overlaps into the Study Area. The trees within the oak woodland include Valley oak (native, *Quercus lobata*) and interior live oak.

#### **Ruderal/Roadside**

The ruderal areas found at the property boundaries include weedy annual grassland species. The roadside along Sierra Drive includes a number of planted cottonwoods (non-native, *Populus* sp. cultivar) trees that have been topped.

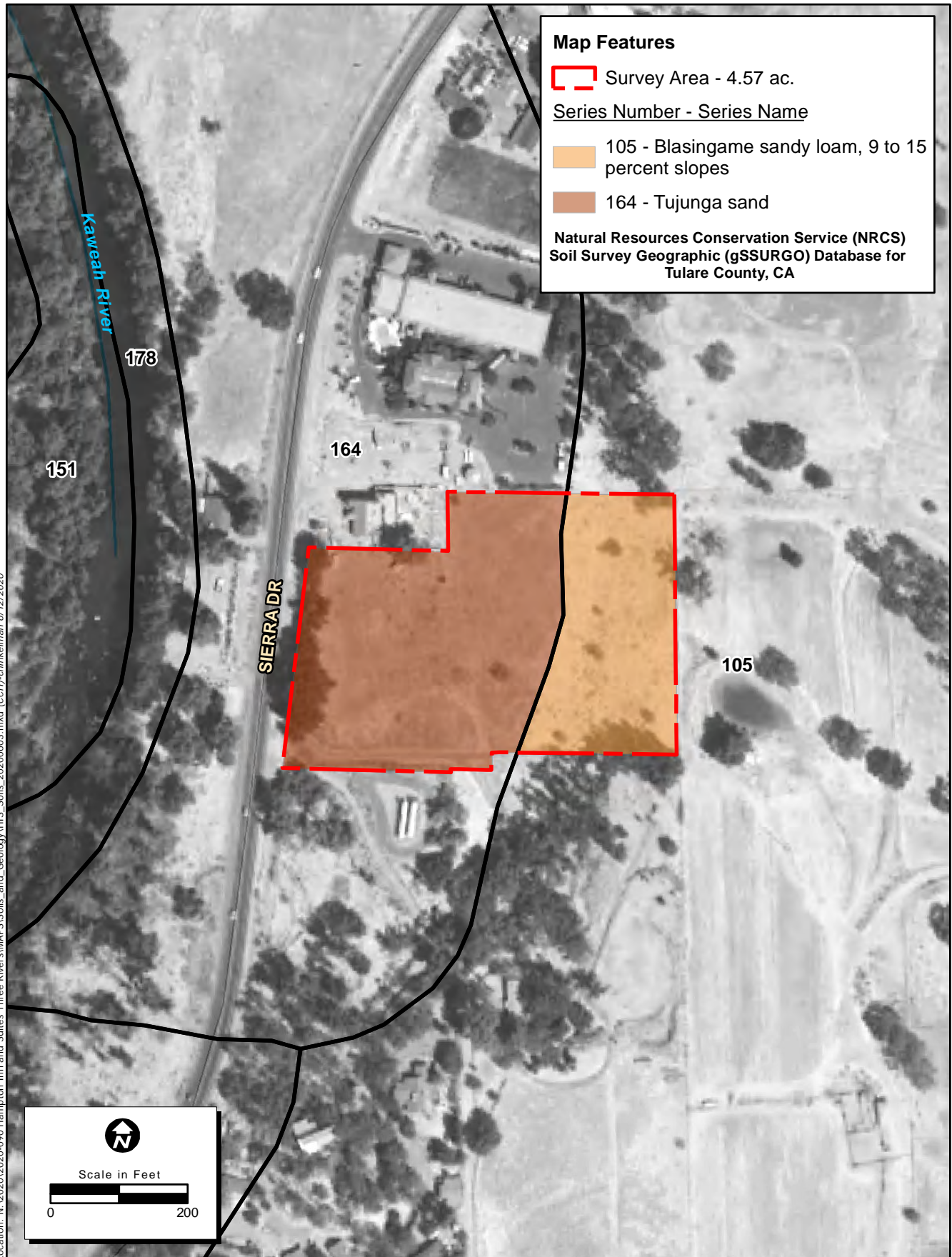
### **4.3 Soils**

According to the *Web Soil Survey* (NRCS 2020a), there are two soil units mapped within the Study Area: (105) Blasingame sandy loam, 9 to 15 percent slopes and (164) Tujunga sand (Figure 3. *Natural Resources Conservation Service Soil Types*). Neither of these soil units are considered hydric (NRCS 2020b).

#### **4.3.1 Potential Aquatic Resources**

There are no aquatic features present onsite. An aquatic resources delineation was conducted on August 13, 2020. Three-parameter sample points were collected in the field according to USACE protocol, which confirmed the absence of hydrophytic vegetation, hydric soils, and wetland hydrology (Figure 2) (Attachment C). The sample points documented conditions in low-lying or suspect areas based on aerial photographs.

According to the California Aquatic Resources Inventory (CARI), there is one previously mapped aquatic resource for the Study Area (Figure 4. *California Aquatic Resources Inventory*). A "fluvial natural" linear feature was mapped from the northeastern corner to the southern central portion of the Study Area (San Francisco Estuary Institute [SFEI] 2017). It is worth noting that some CARI data contain "varying levels of detail, vintages, coverage, and classification" (SFEI 2020). Much of these data have not been ground-truthed. During the delineation, this area was dominated by weedy upland plants including ripgut brome and rancher's fireweed with no evidence of wetland soils or wetland hydrology, as documented by Sample Point 2 (Attachment C).



**Figure 3. Natural Resources Conservation Service Soil Types**





**Figure 4. California Aquatic Resources Inventory**

#### 4.4 Wildlife

Wildlife use onsite is expected to be minimal due to the close proximity of the Comfort Inn and Suites to the north, the highway to the west, surrounding rural residences and businesses, and the absence of significant onsite woodland or aquatic habitats. Several California ground squirrels (*Otospermophilus beecheyi*) and their burrows were found in scattered locations within the Study Area. Birds observed onsite during the May 2020 site visit included turkey vulture (*Cathartes aura*), acorn woodpecker (*Melanerpes formicivorus*), American crow (*Corvus brachyrhynchos*), tree swallow (*Tachycineta bicolor*), American robin (*Turdus migratorius*), and Brewer's blackbird (*Euphagus cyanocephalus*).

#### 4.5 Evaluation of Special-Status Species Identified in the Literature Search

A list of all special-status plant and wildlife species identified in the literature search as potentially occurring within the Project site is provided in Table 1. This table includes the listing status for each species, a brief habitat description, and a determination on the potential to occur in the Project site. The potential to occur is based upon species' known distribution, the vegetation communities and habitats present onsite, and the site elevation. Following the table is a brief description of each species with potential to occur. One special-status reptile, Blainville's horned lizard (*Phrynosoma blainvillii*), is included in this assessment even though it did not come up on the database searches because the Study Area is located within the known range of this species.

Species that were considered "Absent" included those not known to occur in the region and/or elevation of the Study Area or an absence of suitable habitat. These species are not discussed further in this assessment. The species identified through the database queries that are only tracked by the CNDDDB and possess no special status are not included in this assessment. Sensitive habitats that were identified through the database queries that are not located within the Study Area are not discussed in this assessment.

There are no special-status species previously documented within the Study Area, but several special-status species are known to occur within an approximate five-mile radius of the Project (see Attachment A).

Table 1. Potentially Occurring Special-Status Species						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Plants						
Abrams' onion <i>(Allium abramsii)</i>	–	–	1B.2	Lower montane coniferous forest, upper montane coniferous forest, on sandy soils derived from disintegrated granite (4,593'–6,562').	May–July	Absent-Suitable habitat is absent.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Call's angelica ( <i>Angelica callii</i> )	–	–	4.3	Mesic soils in cismontane woodland and lower montane coniferous forest (3,609'–6,562').	June–July	Absent-Suitable habitat is absent.
Kaweah brodiaea ( <i>Brodiaea insignis</i> )	–	CE	1B.2	Granitic or clay soils in cismontane woodland, meadows and seeps, and valley and foothill grassland (492'–4,594').	April–June	Potential-suitable habitat is present.
Shirley Meadows star-tulip ( <i>Calochortus westonii</i> )	–	–	1B.2	Granitic soils in broadleaved upland forest, lower montane coniferous forest, and meadows and seeps (4,921'–6,906').	May–June	Absent-Suitable habitat is absent.
Berry's morning-glory ( <i>Calystegia malacophylla</i> var. <i>berryi</i> )	–	–	3.3	Chaparral and lower montane coniferous forest (2,001'–8,005').	July–August	Absent-Suitable habitat is absent.
Bolander's woodreed ( <i>Cinna bolanderi</i> )	–	–	1B.2	Mesic soils and streamsides within meadows and seeps and upper montane coniferous forests (5,479'–8,005').	July–September	Absent-Suitable habitat is absent.
Springville clarkia ( <i>Clarkia springvillensis</i> )	FT	CE	1B.2	Granitic soils in chaparral, cismontane woodland, and valley and foothill grassland (803'–4003').	March–July	Potential-suitable habitat is present.
Marsh claytonia ( <i>Claytonia palustris</i> )	–	–	4.3	Meadows and seeps (mesic), marshes and swamps, and upper montane coniferous forest (3,280'–8,202').	May–October	Absent-Suitable habitat is absent.
Streambank spring beauty ( <i>Claytonia parviflora</i> ssp. <i>grandiflora</i> )	–	–	4.2	Occurs in rocky cismontane woodland (820'–3,937').	February–May	Low Potential-marginally suitable habitat is present.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Jepson's dodder ( <i>Cuscuta jepsonii</i> )	–	–	1B.2	Upper montane coniferous forest; lower montane coniferous forest; broadleaved upland forest; primary host species are <i>Ceanothus diversifolius</i> and <i>Ceanothus prostratus</i> (3,937'–7,546').	July–September	Absent-Suitable habitat is absent.
Rose-flowered larkspur ( <i>Delphinium purpusii</i> )	–	–	1B.3	Rocky, often carbonate soils in chaparral, cismontane woodland, pinyon and juniper woodland (984'–4,396').	April–May	Absent-Suitable habitat is absent.
Recurved larkspur ( <i>Delphinium recurvatum</i> )	–	–	1B.2	Chenopod scrub, cismontane woodland, and valley and foothill grasslands (10'–2,592').	March–June	Potential-suitable habitat is present.
Calico monkeyflower ( <i>Diplacus pictus</i> )	–	–	1B.2	Granitic, disturbed areas in broadleaf upland forest and cismontane woodland (328'–4,692').	March–May	Potential-suitable habitat is present.
Pierpoint Springs dudleya ( <i>Dudleya cymosa</i> ssp. <i>costatifolia</i> )	–	–	1B.2	Carbonate soils in chaparral and cismontane woodland (4,708'–5,249').	May–July	Absent-Suitable habitat is absent.
Mouse Buckwheat ( <i>Eriogonum nudum</i> var. <i>murinum</i> )	–	–	1B.2	Sandy soils in chaparral, cismontane woodland, and valley and foothill grassland (1,197'–3,707').	June–November	Potential-suitable habitat is present.
Spiny-sepaled button-celery ( <i>Eryngium spinosepalum</i> )	–	–	1B.2	Vernal pools and valley and foothill grassland (262'–3,199').	April–June	Absent-Suitable habitat is absent.
Kaweah monkeyflower ( <i>Erythranthe norrisii</i> )	–	–	1B.3	Carbonate, rocky soils in chaparral and cismontane woodland (1,197'–4,265').	March–May	Absent-Suitable habitat is absent.
Sierra Nevada monkeyflower ( <i>Erythranthe sierrae</i> )	–	–	4.2	Openings of cismontane woodland and lower montane coniferous forest or dry meadows and seeps (607'–7,497').	March–July	Low Potential-marginally suitable habitat is present.



**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Striped adobe-lily ( <i>Fritillaria striata</i> )	–	CT	1B.1	Cismontane woodland, valley and foothill grassland; heavy clay adobe soils in oak grassland (0'–3,281').	February–April	Absent-Suitable habitat is absent.
American manna grass ( <i>Glyceria grandis</i> )	–	–	2B.3	Bogs and fens, meadows and seeps, and streambanks and lake margins of marshes and swamps (49'–6,496').	June–August	Absent-Suitable habitat is absent. Absent-Suitable habitat is absent.
Winter's sunflower ( <i>Helianthus winteri</i> )	–	–	1B.2	Openings on relatively steep south-facing slopes, granitic, often rocky, often roadsides in cismontane woodland, and valley and foothill grassland (410'–8,415').	January–December	Absent-Suitable habitat is absent.
Munz's iris ( <i>Iris munzii</i> )	–	–	1B.3	Cismontane woodland (1,000'–2,625').	March–April	Potential-suitable habitat is present.
Madera leptosiphon ( <i>Leptosiphon serrulatus</i> )	–	–	1B.2	Cismontane woodland and lower montane coniferous forest (984'–4,265').	April–May	Potential-suitable habitat is present.
San Joaquin Valley Orcutt grass ( <i>Orcuttia inaequalis</i> )	FT	CE	1B.1	Vernal pools (33'–2,477').	April–September	Absent-Suitable habitat is absent.
San Joaquin adobe sunburst ( <i>Pseudobahia peirsonii</i> )	FT	CE	1B.1	Adobe clay soils in cismontane woodland and valley and foothill grassland (295'–2,625').	February–April	Low Potential-marginally suitable habitat is present.
Aromatic canyon gooseberry ( <i>Ribes menziesii</i> var. <i>nixoderm</i> )	–	–	1B.2	Chaparral and cismontane woodland (2,001'–3,806').	April	Absent-Suitable habitat is absent.
Sequoia gooseberry ( <i>Ribes tulareense</i> )	–	–	1B.3	Lower montane coniferous forest and upper montane coniferous forest (4,921'–6,808').	May	Absent-Suitable habitat is absent.
Greene's tuctoria ( <i>Tuctoria greenei</i> )	FE	CR	1B.1	Vernal pools (98'–3,510').	May–July	Absent-Suitable habitat is absent.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Invertebrates						
Vernal pool fairy shrimp <i>(Branchinecta lynchi)</i>	FT	-	-	Vernal pools/wetlands.	November-April	Absent-there is no suitable habitat onsite.
Crotch bumble bee <i>(Bombus crotchii)</i>	-	CC	-	Primarily nests underground in open grassland and scrub habitats from the California coast east to the Sierra Cascade and south to Mexico.	March– September	Potential
Western bumble bee <i>(Bombus occidentalis)</i>	-	CC	-	Meadows and grasslands with abundant floral resources. Primarily nests underground. Largely restricted to high elevation sites in the Sierra Nevada, although rarely detected on the California coast.	April– November	Potential
Valley elderberry longhorn beetle <i>(Desmocerus californicus dimorphus)</i>	FT	-	-	Elderberry shrubs.	Any season	Absent-Tulare County is south of the current range of this species.
Fish						
Delta smelt <i>(Hypomesus transpacificus)</i>	FT	CE	-	Sacramento-San Joaquin Delta.	N/A	Absent-there is no suitable habitat onsite.
Amphibians						
California red-legged frog <i>(Rana draytonii)</i>	FT	-	SSC	Lowlands or foothills at waters with dense shrubby or emergent riparian vegetation. Adults must have aestivation habitat to endure summer dry down.	May 1– November 1	Absent-there is no suitable habitat onsite.

Table 1. Potentially Occurring Special-Status Species

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
California tiger salamander (Central California DPS) <i>(Ambystoma californiense)</i>	FT	CT	SSC	Vernal pools, wetlands (breeding) and adjacent grassland or oak woodland; needs underground refuge (e.g., ground squirrel and/or gopher burrows). Largely terrestrial as adults.	March–May	Absent-there is no suitable habitat onsite.
Foothill yellow-legged frog <i>(Rana boylei)</i>	-	CT	SSC	Foothill yellow-legged frogs can be active all year in warmer locations but may become inactive or hibernate in colder climates. At lower elevations, foothill yellow-legged frogs likely spend most of the year in or near streams. Adult frogs, primarily males, will gather along main-stem rivers during spring to breed.	May–October	Absent-there is no suitable habitat onsite.
Mountain yellow-legged frog <i>(Rana muscosa)</i>	FE	CE	-	Lakes, ponds, marshes, meadows, and streams at elevations ranging from 4,500 to 12,000 feet, but can occur as low as 3,500 feet.	May 1– November 1	Absent-there is no suitable habitat onsite.
Western spadefoot <i>(Spea hammondi)</i>	-	-	SSC	California endemic species of vernal pools, swales, wetlands and adjacent grasslands throughout the Central Valley.	March–May	Absent-there is no suitable habitat onsite.
<b>Reptiles</b>						
Northern legless lizard <i>(Anniella pulchra)</i>	-	-	SSC	The most widespread of California's <i>Anniella</i> species. Occurs in sandy or loose soils under sparse vegetation from Antioch south coastally to Ventura. Bush lupine is often an indicator plant.	Generally spring, but depends on location and conditions	Low Potential-there is marginally suitable habitat onsite.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Blainville's ("Coast") horned lizard <i>(Phrynosoma blainvillii)</i>	-	-	SSC	Formerly a wide-spread horned lizard found in a wide variety of habitats, often in lower elevation areas with sandy washes and scattered low bushes. Also occurs in Sierra Nevada foothills. Requires open areas for basking, but with bushes or grass clumps for cover, patches of loamy soil or sand for burrowing and an abundance of ants (Stebbins and McGinnis 2012). In the northern Sacramento area, this species appears restricted to the foothills between 1,000 to 3,000 feet from Cameron Park (El Dorado County) north and west to Grass Valley and Nevada City.	April-October	Potential-suitable habitat is present onsite.
Western pond turtle <i>(Actinemys marmorata)</i>	-	-	SSC	Requires basking sites and upland habitats up to 0.5 km from water for egg laying. Uses ponds, streams, detention basins, and irrigation ditches.	April–September	Absent-there is no suitable habitat onsite.
<b>Birds</b>						
Clark's grebe <i>(Aechmophorus clarkii)</i>	-	-	BCC	Winters on salt or brackish bays, estuaries, sheltered seacoasts, freshwater lakes, and rivers. Breeds on freshwater to brackish marshes, lakes, reservoirs and ponds, with a preference for large stretches of open water fringed with emergent vegetation.	June–August (breeding)	Absent-there is no suitable nesting or foraging habitat onsite.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Black swift ( <i>Cypseloides niger</i> )	-	-	BCC, SSC	In California, nests from Cascade-Sierra Nevada region south to Tulare and Mono counties; coastal ranges (Santa Cruz south to San Luis Obispo counties), San Gabriel, San Bernardino, and San Jacinto mountains. Nests on ledges or shallow caves on steep rock faces, usually behind waterfalls. Winter range, unknown, but thought to be northern and western South America, and West Indies.	May– September	Absent-there is no suitable nesting habitat onsite.
Costa's hummingbird ( <i>Calypte costae</i> )	-	-	BCC	In California, breeds in coastal scrub and chaparral communities from Santa Barbara County south into Baja California; from Mexico north into Mojave Desert scrub of Eastern Sierra Nevada;	February–June	Absent-there is no suitable nesting habitat onsite.
Rufous hummingbird ( <i>Selasphorus rufus</i> )	-	-	BCC	Breeds in British Columbia and Alaska (does not breed in California). Winters in coastal Southern California south into Mexico. Common migrant during March-April in Sierra Nevada foothills and June-August in Lower Conifer to Alpine zone of Sierra Nevada. Nesting habitat includes secondary succession communities and openings, mature forests, parks and residential area.	April–July	Absent-this species does not nest in this region.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
California condor ( <i>Gymnogyps californianus</i> )	FE	CE	CFP	Nests on cliff ledges and rarely in large tree cavities; foraging occurs over vast expanses of coastline, grassland, meadows, savannahs	Non-migratory; can be observed during any season; nesting: eggs (late January-May), nestlings to fledge (March-December)	Absent-there is no suitable nesting or foraging habitat onsite.
Golden eagle ( <i>Aquila chrysaetos</i> )	-	-	BCC, CFP	Nesting habitat includes mountainous canyon land, rimrock terrain of open desert and grasslands, riparian, oak woodland/ savannah, and chaparral. Nesting occurs on cliff ledges, riverbanks, trees, and human-made structures (e.g., windmills, platforms, and transmission towers). Breeding occurs throughout California, except the immediate coast, Central Valley floor, Salton Sea region, and the Colorado River region, where they can be found during Winter.	Nest (February-August); winter CV (October-February)	Absent-there is no suitable nesting or foraging habitat onsite.
Northern goshawk ( <i>Accipiter gentilis</i> )	-	-	SSC	Nesting occurs in mature to old-growth forests composed primarily of large trees with high canopy closure. In California, nests are built primarily in conifer trees in the Sierra Nevada, Cascade and northwestern coastal Ranges.	March–August	Absent-there is no suitable nesting or foraging habitat onsite.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Bald eagle ( <i>Haliaeetus leucocephalus</i> )	Delisted	CE	CFP, BCC	Typically nests in forested areas near large bodies of water in the northern half of California; nest in trees and rarely on cliffs; wintering habitat includes forest and woodland communities near water bodies (e.g., rivers, lakes), wetlands, flooded agricultural fields, open grasslands	February–September (nesting); October–March (wintering)	Absent-there is no suitable nesting or foraging habitat onsite.
Lewis' woodpecker ( <i>Melanerpes lewis</i> )	-	-	BCC	In California, breeds in Siskiyou and Modoc counties, warmer mountains, inner coast ranges from Tehama to San Luis Obispo counties, San Bernardino Mountains, and Big Pine Mountain (Inyo County); nesting habitat includes open ponderosa pine forest, open riparian woodland, logged/burned forest, and oak woodlands. Does not breed on the west side of Sierran crest (Beedy and Pandalfino 2013).	April–September (breeding); September–March (winter in Central Valley).	Absent-this species does not nest in this region.
Nuttall's woodpecker ( <i>Dryobates nuttallii</i> )	-	-	BCC	Resident from northern California south to Baja California. Nests in tree cavities in oak woodlands and riparian woodlands.	April–July	Potential-suitable nesting habitat is present onsite.
Oak titmouse ( <i>Baeolophus inornatus</i> )			BCC	Nests in tree cavities within dry oak or oak-pine woodland and riparian; where oaks are absent, they nest in juniper woodland, open forests (gray, Jeffrey, Coulter, pinyon pines and Joshua tree)	March–July	Potential-suitable nesting habitat is present onsite.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Wrentit ( <i>Chamaea fasciata</i> )	-	-	BCC	Coastal sage scrub, northern coastal scrub, chaparral, dense understory of riparian woodlands, riparian scrub, coyote brush and blackberry thickets, and dense thickets in suburban parks and gardens.	March–August	Absent-there is no suitable nesting or foraging habitat onsite.
California thrasher ( <i>Toxostoma redivivum</i> )	-	-	BCC	Resident and endemic to coastal and Sierra Nevada-Cascade foothill areas of California. Nests are usually well hidden in dense shrubs, including scrub oak, California lilac, and chamise.	February–July	Absent-there is no suitable nesting or foraging habitat onsite.
Lawrence's goldfinch ( <i>Spinus lawrencei</i> )	-	-	BCC	Breeds in Sierra Nevada and inner Coast Range foothills surrounding the Central Valley and the southern Coast Range to Santa Barbara County east through southern California to the Mojave Desert and Colorado Desert into the Peninsular Range. Nests in arid and open woodlands with chaparral or other brushy areas, tall annual weed fields, and a water source (e.g., small stream, pond, lake), and to a lesser extent riparian woodland, coastal scrub, evergreen forests, pinyon-juniper woodland, planted conifers, and ranches or rural residences near weedy fields and water.	March–September	Potential-suitable nesting habitat is present onsite.
Song sparrow "Modesto" ( <i>Melospiza melodia heermanni</i> )	-	-	BCC, SSC	Resident in central and southwest California, including Central Valley; nests in marsh, scrub habitat	April–June	Absent-there is no suitable nesting or foraging habitat onsite.



**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
San Clemente spotted towhee ( <i>Pipilo maculatus clementae</i> )	-	-	BCC, SSC	Resident on Santa Catalina and Santa Rosa islands; extirpated on San Clemente Island, California. Breeds in dense, broadleaf shrubby brush, thickets, and tangles in chaparral, oak woodland, island woodland, and Bishop pine forest.	Year-round resident; breeding season is April–July	Absent-this subspecies is only found on the Channel Islands. It does not occur in the Project vicinity.
Tricolored blackbird ( <i>Agelaius tricolor</i> )	-	CT	BCC, SSC	Breeds locally west of Cascade-Sierra Nevada and southeastern deserts from Humboldt and Shasta counties south to San Bernardino, Riverside and San Diego counties. Central California, Sierra Nevada foothills and Central Valley, Siskiyou, Modoc and Lassen counties. Nests colonially in freshwater marsh, blackberry bramble, milk thistle, tritcale fields, weedy (mustard, mallow) fields, giant cane, safflower, stinging nettles, tamarisk, riparian scrublands and forests, fiddleneck and fava bean fields.	March–August	Absent-there is no suitable nesting habitat onsite.
Saltmarsh common yellowthroat ( <i>Geothlypis trichas sinuosa</i> )	-	-	BCC, SSC	Breeds in salt marshes of San Francisco Bay; winters in San Francisco south along coast to San Diego County	March–July	Absent-this subspecies is only found nesting in the San Francisco Bay area. It does not occur in the Project vicinity.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Mammals						
Spotted bat  ( <i>Euderma maculatum</i> )	-	-	SSC	Roost in cracks, crevices, and caves, usually high in fractured rock cliffs. Found in desert, sub-alpine meadows, desert-scrub, pinyon-juniper woodland, ponderosa pine, mixed conifer forest, canyon bottoms, rims of cliffs, riparian areas, fields, and open pastures.	April–September	Absent-there is no suitable habitat onsite
Townsend's big-eared bat  ( <i>Corynorhinus townsendii</i> )	-	-	SSC	Caves, mines, buildings, rock crevices, trees.	April–September	Potential-Trees onsite represent potential roosting habitat.
Pallid bat  ( <i>Antrozous pallidus</i> )	-	-	SSC	Crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of redwoods, cavities of oaks, exfoliating pine and oak bark, deciduous trees in riparian areas, and fruit trees in orchards). Also roosts in various human structures such as bridges, barns, porches, bat boxes, and human-occupied as well as vacant buildings.	April–September	Potential-Trees onsite represent potential roosting habitat.
Greater mastiff bat  ( <i>Eumops perotis californicus</i> )	-	-	SSC	Primarily a cliff-dwelling species, found in similar crevices in large boulders and buildings.	April–September	Absent-no suitable habitat is present onsite.
San Joaquin kit fox  ( <i>Vulpes macrotis mutica</i> )	FE	CT	-	Grasslands, sagebrush scrub.	April 15–July 15, September 1–December 1	Absent-the Project is east of the known range of San Joaquin Kit Fox. Nearest CNDDDB occurrence is 9 miles west of the Project.

**Table 1. Potentially Occurring Special-Status Species**

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential to Occur Onsite
	FESA	CESA/ NPPA	Other			
Sierra Nevada red fox ( <i>Vulpes vulpes necator</i> )	FC	CT	-	Found in the Cascades in Siskiyou County, and from Lassen County south to Tulare County, rare in the Sierra Nevada. Sierra Nevada populations may be found in a variety of habitats, including alpine dwarf-shrub, wet meadow subalpine conifer, lodgepole pine, red fir, aspen, montane chaparral, montane riparian, mixed conifer, and ponderosa pine. Most sightings in Sierra Nevada area above 7,000' but range from 3,900' to 11,900'.	Any season	Absent-no suitable habitat is present onsite.
Fisher- West Coast DPS ( <i>Pekania pennanti</i> )	FPT	CT	SSC	Northern coniferous and mixed forests of Canada and northern United States.	Any season	Absent-no suitable habitat is present onsite.
California wolverine ( <i>Gulo gulo</i> )	FPT	CT	-	Scarce resident of North Coast mountains and Sierra Nevada. Wide variety of high elevation habitats.	Any season	Absent-no suitable habitat is present onsite.

**Status Codes:**

FESA	Federal Endangered Species Act
CESA	California Endangered Species Act
FE	FESA listed, Endangered.
FPT	Formally Proposed for FESA listing as Threatened.
FT	FESA listed, Threatened.
Delisted	Formally Delisted (delisted species are monitored for five years).
BCC	USFWS Bird of Conservation Concern (USFWS 2002).
CR	CESA- or NPPA-listed, Rare.
CT	CESA- or NPPA-listed, Threatened.
CC	Candidate for CESA listing as Endangered or Threatened.
CE	CESA or NPPA listed, Endangered.
CFP	California Fish and Game Code Fully Protected Species (§ 3511-birds, § 4700-mammals, §5 050-reptiles/amphibians).
SSC	CDFW Species of Special Concern (CDFW, updated July 2017).
1B	CRPR/Rare or Endangered in California and elsewhere.
3	CRPR/Plants About Which More Information is Needed – A Review List.
4	CRPR/Plants of Limited Distribution – A Watch List.
0.1	Threat Rank/Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2	Threat Rank/Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3	Threat Rank/Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

#### **4.5.1 Plants**

The following is a brief discussion of special-status plants with the potential to occur within the Study Area.

##### **Kaweah Brodiaea**

Kaweah brodiaea (*Brodiaea insignis*) is not listed pursuant to the federal ESA but is listed as endangered pursuant to the California ESA and is designated as a CRPR 1B.2 species. This species is a bulbiferous perennial herb that occurs in granitic or clay soils in cismontane woodland, meadows and seeps, and valley and foothill grassland (CNPS 2020). Kaweah brodiaea blooms from April through June and is known to occur at elevations ranging from 492 to 4,594 feet above MSL (CNPS 2020). Kaweah brodiaea is endemic to California; the current range of this species includes Tulare County (CNPS 2020). The nearest CNDDDB occurrence is located approximately 0.1 mile north of the Study Area (CNDDDB Occurrence #21) (CDFW 2020).

##### **Springville Clarkia**

Springville clarkia (*Clarkia springvillensis*) is listed as threatened pursuant to the federal ESA and endangered pursuant to the California ESA and is designated as a CRPR 1B.2 species. This species is an annual herb that occurs in granitic soils within chaparral, cismontane woodland, and valley and foothill grassland (CNPS 2020). Springville clarkia blooms from March through July and is known to occur at elevations ranging from 803 to 4,003 feet above MSL (CNPS 2020). Springville clarkia is endemic to California; the current range of this species includes Tulare county (CNPS 2020). The nearest CNDDDB occurrence is located approximately three miles at Case Mountain (CNDDDB Occurrence #2) (CDFW 2020).

##### **Streambank Spring Beauty**

Streambank spring beauty (*Claytonia parviflora* ssp. *grandiflora*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 4.2 species. This species is an herbaceous annual that occurs in rocky soils within cismontane woodland (CNPS 2020). Streambank spring beauty blooms from February through May and is known to occur at elevations ranging from 820 to 3,937 feet above MSL (CNPS 2020). Streambank spring beauty is endemic to California; the current range of this species includes Amador, Butte, Calaveras, El Dorado, Fresno, Kern, Placer, Tulare, and Tuolumne counties (CNPS 2020). There are no CNDDDB occurrences of this species within the five miles of the Study Area (CDFW 2020).

##### **Recurved Larkspur**

Recurved larkspur (*Delphinium recurvatum*) is not listed pursuant to either the federal or California ESAs but is designated a CRPR 1B.2 species. This species is an herbaceous perennial that occurs in alkaline substrates in chenopod scrub, cismontane woodland, and valley and foothill grasslands (CNPS 2020). Recurved larkspur blooms from March through June and is known to occur at elevations ranging from 9 to 2,592 feet above MSL (CNPS 2020). Recurved larkspur is endemic to California; the current range of this species includes Alameda, Butte, Contra Costa, Colusa, Fresno, Glenn, Kings, Kern, Madera, Merced,

Monterey, San Joaquin, San Luis Obispo, Solano, Sutter, and Tulare counties (CNPS 2020). The species is presumed extirpated from Butte and Colusa counties (CNPS 2020).

### **Calico Monkeyflower**

Calico monkeyflower (*Diplacus pictus*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 1B.2 species. This species is an herbaceous annual that occurs in granitic, disturbed areas in broadleaf upland forest and cismontane woodland (CNPS 2020). Calico monkeyflower blooms from March through May and is known to occur at elevations ranging from 328 to 4,692 feet above MSL (CNPS 2020). Calico monkeyflower is endemic to California; its current range includes Kern and Tulare counties (CNPS 2020). There are no CNDDDB occurrences of this species within the five miles of the Study Area (CDFW 2020).

### **Mouse Buckwheat**

Mouse buckwheat (*Eriogonum nudum* var. *murinum*) is not listed pursuant to either the federal or California ESAs but is designated as a CRPR 1B.2 species. This species is an herbaceous perennial that occurs in sandy soils in chaparral, cismontane woodland, and valley and foothill grassland. Mouse buckwheat blooms from June through November and is known to occur at elevations ranging from 1,197 to 3,707 feet above MSL (CNPS 2020). Mouse buckwheat is endemic to California; its current range includes Tulare County (CNPS 2020). The nearest CNDDDB occurrence is located approximately 0.7 mile east of the Study Area at Blossom Peak (CNDDDB Occurrence #3) (CDFW 2020).

### **Sierra Nevada Monkeyflower**

Sierra Nevada monkeyflower (*Erythranthe sierrae*) is not listed pursuant to either the federal or California ESAs but is designated as a CRPR 4.2 species. This species is an herbaceous annual that occurs in openings of cismontane woodland and lower montane coniferous forest or dry meadows and seeps, usually granitic, usually sandy, sometimes gravelly, vernal wet depressions, swales, and streambanks (CNPS 2020). Sierra Nevada monkeyflower blooms from March through July and is known to occur at elevations ranging from 607 to 7,497 feet above MSL (CNPS 2020). Sierra Nevada monkeyflower is endemic to California; the current range of this species is only in the southern portion of the Sierra Nevada mountain range in Fresno, Kern, and Tulare counties.

### **Munz's Iris**

Munz's iris (*Iris munzii*) is not listed pursuant to either the federal or California ESAs but is designated as a CRPR 1B.3 species. This species is a perennial rhizomatous herb that occurs in cismontane woodland (CNPS 2020). Munz's iris blooms from March through April and is known to occur at elevations ranging from 1,000 to 2,625 feet above MSL (CNPS 2020). Munz's iris is endemic to California; the current range of this species includes Tulare county (CNPS 2020). The nearest CNDDDB occurrence is located approximately three miles northeast of the Study Area near Hammond (CNDDDB Occurrence #13) (CDFW 2020).

### **Madera Leptosiphon**

Madera leptosiphon (*Leptosiphon serrulatus*) is not listed pursuant to either the federal or California ESAs but is designated as a CRPR 1B.2 species. This species is an herbaceous annual that occurs in cismontane woodland and lower montane coniferous forest (CNPS 2020). Madera leptosiphon blooms between April and May and is known to occur at elevations ranging from 984 to 4,265 feet above MSL (CNPS 2020). Madera leptosiphon is endemic to California; its current range includes Fresno, Kern, Madera, Mariposa, and Tulare counties (CNPS 2020). There is one CNDDDB record (Occurrence #16) of this species within five miles of the Study Area and is described as an unknown location near the community of Three Rivers from 1928 (CDFW 2020).

### **San Joaquin Adobe Sunburst**

San Joaquin adobe sunburst (*Pseudobahia peirsonii*) is listed as threatened pursuant to the federal ESA, endangered pursuant to the California ESA, and is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs on adobe clay in cismontane woodlands and valley and foothill grasslands (CNPS 2020). San Joaquin adobe sunburst blooms from February through April and is known to occur at elevations ranging from 295 to 2,625 feet above MSL (CNPS 2020). San Joaquin adobe sunburst is endemic to California; the current range of this species includes Fresno, Kern, and Tulare counties (CNPS 2020). There are no CNDDDB occurrences of this species within the five miles of the Study Area (CDFW 2020).

## **4.5.2 Reptiles**

The following is a brief discussion of special-status reptiles with the potential to occur within the Study Area.

### **Northern California Legless Lizard**

The Northern California legless lizard (*Anniella pulchra*) is not listed and protected under either federal or California ESAs but is considered a CDFW SSC. The Northern California legless lizard has the largest range of all California *Anniella*, ranging from sites in and around Antioch in the east bay, south to northern San Luis Obispo County. Two distinct segments of this species range occur: one in the eastern foothills of Tulare and Fresno counties, and another at the western edge of the Antelope Valley in Kern and Los Angeles counties. They are found in sparsely vegetated areas with loose, moist soil such as beach dunes, chaparral, pin-oak woodlands, desert scrub, sandy washes, and stream terraces. The grassland and oak woodland onsite represent marginally suitable habitat for this species.

### **Blainville's Horned Lizard**

Blainville's horned lizard is not listed and protected under either California or federal ESAs but is considered a CDFW SSC. This diurnal species can occur within a variety of habitats including scrubland, annual grassland, valley-foothill woodlands and coniferous forests, though it is most common along lowland desert sandy washes and chaparral (Stebbins 2003). In the Central Valley, the species ranges from southern Tehama County southward. In the Sierra Nevada it occurs from Butte County south to Tulare

County, and in the Coast Ranges it occurs from Sonoma County south into Baja California (CDFG 1988). It occurs from sea level to 8,000 feet MSL and an isolated population occurs in Siskiyou County (Stebbins 2003). The grassland and oak woodland onsite represent potential habitat for this species.

#### **4.5.3 Birds**

The following is a brief discussion of special-status birds with the potential to occur within the Study Area.

##### **Nuttall's Woodpecker**

Nuttall's woodpecker (*Dryobates nuttalli*) is not listed and protected under either federal or California ESAs but is considered a USFWS BCC. They are resident from Siskiyou County south to Baja California. Nuttall's woodpeckers nest in tree cavities primarily within oak woodlands, but also can be found in riparian woodlands (Lowther et al. 2020). Breeding occurs during April through July. The trees onsite represent potential nesting habitat for this species.

##### **Oak Titmouse**

Oak titmouse (*Baeolophus inornatus*) are not listed and protected under either the federal or California ESAs but are considered a USFWS BCC. Oak titmouse breeding range includes southwestern Oregon south through California's Coast, Transverse and Peninsular ranges, western foothills of the Sierra Nevada, into Baja California; they are absent from the humid northwestern coastal region and the San Joaquin Valley (Cicero et al. 2020). They are found in dry oak or oak-pine woodlands but may also use scrub oaks or other brush near woodlands (Cicero et al. 2020). Nesting occurs during March through July. The trees onsite represent potential nesting habitat for this species.

##### **Lawrence's Goldfinch**

The Lawrence's goldfinch (*Spinus lawrencei*) is not listed pursuant to either the federal or California ESAs but is currently a BCC according to the USFWS. Lawrence's goldfinch breed west of the Sierra Nevada-Cascade axis from Tehama, Shasta, and Trinity counties south into the foothills surrounding the Central Valley to Kern County; and on the Coast Range from Contra Costa County to Santa Barbara County (Watt et al. 2020). Lawrence's goldfinch nest in arid woodlands usually with brushy areas, tall annual weeds, and a local water source (Watt et al. 2020). Nesting occurs during March through September. Weeds and small trees onsite represent potential nesting habitat for this species.

##### **Migratory Bird Treaty Act Protected Birds**

While not considered species status as previously defined, the Study Area supports potential nesting habitat for other, more common bird species that are protected under the MBTA and the Fish and Game Code of California. These could include common species such as northern mockingbird and house finch, among others. Trees, shrubs, and annual grassland onsite represents potential nesting habitat for protect birds.

#### **4.5.4 Mammals**

The following is a brief discussion of special-status mammals with the potential to occur within the Study Area.

##### **Townsend's Big-eared Bat**

The Townsend's big-eared bat (*Corynorhinus townsendii*) is not listed pursuant to either the California or federal ESAs; however, this species is considered an SSC by CDFW. Townsend's big-eared bat is a fairly large bat with prominent bilateral nose lumps and large rabbit-like ears. This species occurs throughout the west and ranges from the southern portion of British Columbia south along the Pacific coast to central Mexico and east into the Great Plains. This species has been reported from a wide variety of habitat types and elevations from sea level to 10,827 feet. Habitats used include coniferous forests, mixed meso-phytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Its distribution is strongly associated with the availability of caves and cave-like roosting habitat including abandoned mines, buildings, bridges, rock crevices, and hollow trees. This species is readily detectable when roosting due to their habit of roosting pendant-like on open surfaces. Townsend's big-eared bat is a moth specialist with over 90 percent of its diet composed of Lepidopterans. Foraging habitat is generally edge habitats along streams adjacent to and within a variety of wooded habitats. This species often travels long distances when foraging and large home ranges have been documented in California (Western Bat Working Group [WBWG] 2020).

The trees onsite represent marginally suitable roosting habitat for this species.

##### **Pallid Bat**

The pallid bat (*Antrozous pallidus*) is not listed pursuant to either the California or federal ESAs; however, this species is considered an SSC by CDFW. The pallid bat is a large, light-colored bat with long, prominent ears and pink, brown, or grey wing and tail membranes. This species ranges throughout North America from the interior of British Columbia, south to Mexico, and east to Texas. The pallid bat inhabits low elevation (below 6,000 feet) rocky arid deserts and canyonlands, shrub-steppe grasslands, karst formations, and higher elevation coniferous forest (above 7,000 feet). This species roosts alone or in groups in the crevices of rocky outcrops and cliffs, caves, mines, trees, and in various human structures such as bridges, and barns. Pallid bats are feeding generalists that glean a variety of arthropod prey from surfaces as well as capturing insects on the wing. Foraging occurs over grasslands, oak savannahs, ponderosa pine forests, talus slopes, gravel roads, lava flows, fruit orchards, and vineyards. Although this species utilizes echolocation to locate prey, often they use only passive acoustic cues. This species is not thought to migrate long distances between summer and winter sites (WBWG 2020).

The trees onsite represent marginally suitable roosting habitat for this species.

#### **4.6 Sensitive Natural Communities**

No sensitive natural communities were found onsite during the field assessment.



## **4.7 Wildlife Movement/Corridors**

Woodland habitat that was once found within the Study Area has been removed (circa 2005-2009). The Study Area is adjacent to an existing hotel and State Highway 198/Sierra Drive within a matrix of rural residences and farms. There are no significant habitat features (e.g., wetlands) within or adjacent to the Study Area. Project development is not expected to impact wildlife movement. The Survey Area does not support known nursery sites or mule deer fawning areas (CDFW 2020). No nursery sites were identified during the field assessment.

## **4.8 Critical Habitat**

There is no designated Critical Habitat within the Project.

## **5.0 RECOMMENDATIONS**

### **5.1 Waters of the U.S. and State**

There are no aquatic resources onsite. Therefore, there are no recommendations pertaining to potential waters of the U.S./State.

### **5.2 Special-Status Species**

#### **5.2.1 Plants**

The Survey Area supports potentially suitable habitat for special-status plants, including Kaweah brodiaea, Springville clarkia, recurved larkspur, streambank spring beauty, calico monkeyflower, mouse buckwheat, Sierra Nevada monkeyflower, Munz's iris, Madera leptosiphon, and San Joaquin adobe sunburst. The following measures are recommended to minimize potential impacts to special-status plants:

- Perform focused plant surveys according to USFWS, CDFW, and CNPS protocols. Surveys should be timed according to the blooming period for target species and known reference populations, if available, and/or local herbaria should be visited prior to surveys to confirm the appropriate phenological state of the target species.
- If special-status plant species are found during surveys within the Project and avoidance of the species is not possible, seed collection, transplantation, and/or other mitigation measures may be developed in consultation with appropriate resource agencies to reduce impacts to special-status plant populations.
- If no special-status plants are found within the Project Area, no further measures pertaining to special-status plants are necessary.

#### **5.2.2 Invertebrates**

The Project site does not provide suitable habitat for any special-status invertebrates species. No measures are recommended for special-status invertebrates.

### **5.2.3 Fish**

The Project site does not provide suitable habitat for any special-status fish species. No measures are recommended for special-status fish species.

### **5.2.4 Amphibians**

The Project site does not provide suitable habitat for any special-status amphibian species. No measures are recommended for special-status amphibian species.

### **5.2.5 Reptiles**

The Study Area supports potentially suitable habitat for Northern California legless lizard and Blainville's horned lizard. To ensure that there are no impacts to special-status reptiles, the following mitigation measure is recommended:

- A Northern California legless lizard and Blainville's horned lizard pre-construction survey will be conducted by a qualified biologist within 14 days prior to the initiation of ground disturbance (e.g., tree/vegetation removal, mass grading). The survey will consist of the entire Project footprint, including accessible areas within 100 feet.
- If individuals of either of these two special-status reptiles are found during the pre-construction survey, a qualified biologist with a CDFW Scientific Collecting Permit shall relocate the individuals, with the concurrence of CDFW, to a site with suitable habitat. Relocation methods shall be approved by CDFW.

### **5.2.6 Birds and Migratory Bird Treaty Act Protected Birds (including Raptors)**

The Survey Area supports suitable nesting and foraging habitat for a variety of special-status birds and birds protected under the MBTA. To minimize impacts to protected bird and active nests during construction, the following mitigation measure is recommended:

- Conduct a pre-construction nesting raptor and bird survey of all suitable habitat on the Project site within 14 days of the commencement ground disturbance (e.g., tree/vegetation removal, mass grading) during the nesting season (February 1 – August 31). Where accessible, surveys should be conducted within 300 feet of the Project site for nesting raptors, and 100 feet of the Project site for other nesting birds.
- If active nests are found, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist, in consultation with CDFW. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest tree, to be determined by a qualified biologist. Once the young are independent of the nest, no further measures are necessary.

### 5.2.7 Mammals

The Project site provides potential habitat for several special-status bats. To minimize potential impacts to special-status bats, the following measure is recommended.

- A qualified biologist will conduct a bat habitat assessment of all suitable roosting habitat (i.e., suitable trees) prior to the initiation of site disturbance (e.g., tree removal, mass grading). If the assessment identifies suitable roosting habitat, a qualified biologist will conduct an evening bat emergence survey that may include acoustic monitoring to determine whether or not bats are present. If special-status bats are found, consult with CDFW to develop avoidance and/or exclusion methods.
- If no suitable roosting habitat is found, or if no bats are not found during the emergence surveys, no further measures are necessary.

### 5.2.8 Oak Woodlands

There are two isolated small oak trees located within the annual grassland. The oaks that make up the oak woodland mapped in the Study Area are located on the adjacent property with only the dripline overlapping into the Study Area. Although direct impacts to the oak woodland is not anticipated, indirect impacts may occur. If impacts are considered significant, one or more of the following measures should be implemented to reduce the impact to oak woodlands (per the *Three Rivers Voluntary Oak Woodland Plan*):

- If feasible, avoid/conservate oak woodlands.
- If oak woodlands are proposed for impact, plant an appropriate number of trees, including maintain planting and replacing dead or diseased trees; this requirement to maintain trees pursuant to this paragraph terminates seven years after the trees are planted; mitigation pursuant to this paragraph shall not fulfill more than half of the mitigation requirements for the Project; the requirements imposed pursuant to this paragraph also may be used to restore former oak woodlands.
- Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of the Section 1363 of the California Fish and Game Code. A project applicant who contributes funds under this paragraph shall not receive a grant from the Oak Woodland Woodlands Conservation Fund as part of the mitigation for the Project.

and/or

- Other mitigation measures developed by Tulare County.

## 5.3 Sensitive Natural Communities

There are no sensitive natural communities onsite. No measures are recommended.

## **5.4 Wildlife Movement/Corridors and Nursery Sites**

Wildlife have potential to use the Project site for localized wildlife movement. However, Project development would not constitute a significant loss of the available wildlife habitat in the area. No measures are recommended.

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## **LIST OF ATTACHMENTS**

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Attachment A – Special-Status Species Searches (9-Quad CNPS Search, CNNDDB Search, and Study Area IPaC Search)

Attachment B – Representative Site Photographs

Attachment C – Aquatic Resources Delineation Data Sheets



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**ATTACHMENT A**

Special-Status Species Searches  
(9-Quad CNPS Search, CNNDB Search, and Study Area IPaC Search)

\*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

## Plant List

27 matches found. [Click on scientific name for details](#)

### Search Criteria

Found in Quads 3611951, 3611858, 3611857, 3611941, 3611848, 3611847, 3611931 3611838 and 3611837;

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
<a href="#">Angelica callii</a>	Call's angelica	Apiaceae	perennial herb	Jun-Jul	4.3	S3	G3
<a href="#">Brodiaea insignis</a>	Kaweah brodiaea	Themidaceae	perennial bulbiferous herb	Apr-Jun	1B.2	S1	G1
<a href="#">Calochortus westonii</a>	Shirley Meadows star-tulip	Liliaceae	perennial bulbiferous herb	May-Jun	1B.2	S3	G3
<a href="#">Calystegia malacophylla</a> <a href="#">var. berryi</a>	Berry's morning-glory	Convolvulaceae	perennial rhizomatous herb	Jul-Aug	3.3	S2	G4G5T2Q
<a href="#">Cinna bolanderi</a>	Bolander's woodreed	Poaceae	perennial herb	Jul-Sep	1B.2	S2S3	G2G3
<a href="#">Clarkia springvillensis</a>	Springville clarkia	Onagraceae	annual herb	(Mar)Apr-Jul	1B.2	S2	G2
<a href="#">Claytonia palustris</a>	marsh claytonia	Montiaceae	perennial herb	May-Oct	4.3	S4	G4
<a href="#">Claytonia parviflora</a> ssp. <a href="#">grandiflora</a>	streambank spring beauty	Montiaceae	annual herb	Feb-May	4.2	S3	G5T3
<a href="#">Delphinium purpusii</a>	rose-flowered larkspur	Ranunculaceae	perennial herb	(Mar)Apr-May	1B.3	S3	G3
<a href="#">Delphinium recurvatum</a>	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	1B.2	S2?	G2?
<a href="#">Diplacus pictus</a>	calico monkeyflower	Phrymaceae	annual herb	Mar-May	1B.2	S2	G2
<a href="#">Dudleya cymosa</a> ssp. <a href="#">costatifolia</a>	Pierpoint Springs dudleya	Crassulaceae	perennial herb	May-Jul	1B.2	S1	G5T1
<a href="#">Eriogonum nudum</a> var. <a href="#">murinum</a>	mouse buckwheat	Polygonaceae	perennial herb	Jun-Nov	1B.2	S2	G5T2
<a href="#">Eryngium spinosepalum</a>	spiny-sepaed button-celery	Apiaceae	annual / perennial herb	Apr-Jun	1B.2	S2	G2
<a href="#">Erythranthe norrisii</a>	Kaweah monkeyflower	Phrymaceae	annual herb	Mar-May	1B.3	S2	G2
<a href="#">Erythranthe sierrae</a>	Sierra Nevada monkeyflower	Phrymaceae	annual herb	Mar-Jul	4.2	S2	G2
<a href="#">Glyceria grandis</a>	American manna grass	Poaceae	perennial rhizomatous herb	Jun-Aug	2B.3	S3	G5

<a href="#"><u>Helianthus winteri</u></a>	Winter's sunflower	Asteraceae	perennial shrub	Jan-Dec	1B.2	S2?	G2?
<a href="#"><u>Iris munzii</u></a>	Munz's iris	Iridaceae	perennial rhizomatous herb	Mar-Apr(May)	1B.3	S2	G2
<a href="#"><u>Leptosiphon serrulatus</u></a>	Madera leptosiphon	Polemoniaceae	annual herb	Apr-May	1B.2	S3	G3
<a href="#"><u>Meesia triquetra</u></a>	three-ranked hump moss	Meesiaceae	moss	Jul	4.2	S4	G5
<a href="#"><u>Mielichhoferia elongata</u></a>	elongate copper moss	Mielichhoferiaceae	moss		4.3	S4	G5
<a href="#"><u>Orthotrichum holzingeri</u></a>	Holzinger's orthotrichum moss	Orthotrichaceae	moss		1B.3	S2	G3
<a href="#"><u>Pseudobahia peirsonii</u></a>	San Joaquin adobe sunburst	Asteraceae	annual herb	Feb-Apr	1B.1	S1	G1
<a href="#"><u>Ribes menziesii var. ixoderme</u></a>	aromatic canyon gooseberry	Grossulariaceae	perennial deciduous shrub	Apr	1B.2	S1	G4T1
<a href="#"><u>Ribes tularense</u></a>	Sequoia gooseberry	Grossulariaceae	perennial deciduous shrub	May	1B.3	S1	G1
<a href="#"><u>Tuctoria greenei</u></a>	Greene's tuctoria	Poaceae	annual herb	May-Jul(Sep)	1B.1	S1	G1

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[The California Lichen Society](#)

[California Natural Diversity Database](#)

[The Jepson Flora Project](#)

[The Consortium of California Herbaria](#)

[CalPhotos](#)

### Questions and Comments

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# Selected Elements by Element Code

## California Department of Fish and Wildlife

### California Natural Diversity Database



**Query Criteria:** Quad<span style='color:Red'> IS </span>(Auckland (3611951)<span style='color:Red'> OR </span>Shadequarter Mtn. (3611858)<span style='color:Red'> OR </span>Giant Forest (3611857)<span style='color:Red'> OR </span>Woodlake (3611941)<span style='color:Red'> OR </span>Kaweah (3611848)<span style='color:Red'> OR </span>Case Mountain (3611847)<span style='color:Red'> OR </span>Rocky Hill (3611931)<span style='color:Red'> OR </span>Chickencoop Canyon (3611838)<span style='color:Red'> OR </span>Dennison Peak (3611837))

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AAAAD02140	<b><i>Batrachoseps regius</i></b> Kings River slender salamander	None	None	G2	S2S3	
AAAAD02200	<b><i>Batrachoseps altasierae</i></b> Greenhorn Mountains slender salamander	None	None	G4	S3S4	
AAABF02020	<b><i>Spea hammondi</i></b> western spadefoot	None	None	G3	S3	SSC
AAABH01050	<b><i>Rana boylei</i></b> foothill yellow-legged frog	None	Candidate Threatened	G3	S3	SSC
AAABH01330	<b><i>Rana muscosa</i></b> southern mountain yellow-legged frog	Endangered	Endangered	G1	S1	WL
ABNGA04010	<b><i>Ardea herodias</i></b> great blue heron	None	None	G5	S4	
ABNKA03010	<b><i>Gymnogyps californianus</i></b> California condor	Endangered	Endangered	G1	S1	FP
ABNKC10010	<b><i>Haliaeetus leucocephalus</i></b> bald eagle	Delisted	Endangered	G5	S3	FP
ABNKC12060	<b><i>Accipiter gentilis</i></b> northern goshawk	None	None	G5	S3	SSC
ABNUA01010	<b><i>Cypseloides niger</i></b> black swift	None	None	G4	S2	SSC
ABPBXB0020	<b><i>Agelaius tricolor</i></b> tricolored blackbird	None	Threatened	G2G3	S1S2	SSC
AMACC01070	<b><i>Myotis evotis</i></b> long-eared myotis	None	None	G5	S3	
AMACC01090	<b><i>Myotis thysanodes</i></b> fringed myotis	None	None	G4	S3	
AMACC01140	<b><i>Myotis ciliolabrum</i></b> western small-footed myotis	None	None	G5	S3	
AMACC07010	<b><i>Euderma maculatum</i></b> spotted bat	None	None	G4	S3	SSC
AMACC08010	<b><i>Corynorhinus townsendii</i></b> Townsend's big-eared bat	None	None	G3G4	S2	SSC
AMACC10010	<b><i>Antrozous pallidus</i></b> pallid bat	None	None	G5	S3	SSC
AMACD02011	<b><i>Eumops perotis californicus</i></b> western mastiff bat	None	None	G5T4	S3S4	SSC
AMAJA03012	<b><i>Vulpes vulpes necator</i></b> Sierra Nevada red fox	Candidate	Threatened	G5T1T2	S1	



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Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AMAJA03041	<b><i>Vulpes macrotis mutica</i></b> San Joaquin kit fox	Endangered	Threatened	G4T2	S2	
AMAJF01021	<b><i>Pekania pennanti</i></b> fisher - West Coast DPS	None	Threatened	G5T2T3Q	S2S3	SSC
AMAJF03010	<b><i>Gulo gulo</i></b> California wolverine	Proposed Threatened	Threatened	G4	S1	FP
ARAAD02030	<b><i>Emys marmorata</i></b> western pond turtle	None	None	G3G4	S3	SSC
ARACC01020	<b><i>Anniella pulchra</i></b> northern California legless lizard	None	None	G3	S3	SSC
CARA2443CA	<b>Central Valley Drainage Hardhead/Squawfish Stream</b> Central Valley Drainage Hardhead/Squawfish Stream	None	None	GNR	SNR	
CTT44120CA	<b>Northern Claypan Vernal Pool</b> Northern Claypan Vernal Pool	None	None	G1	S1.1	
CTT62100CA	<b>Sycamore Alluvial Woodland</b> Sycamore Alluvial Woodland	None	None	G1	S1.1	
CTT84250CA	<b>Big Tree Forest</b> Big Tree Forest	None	None	G3	S3.2	
ICBRA03030	<b><i>Branchinecta lynchi</i></b> vernal pool fairy shrimp	Threatened	None	G3	S3	
ICMAL01210	<b><i>Bowmanasellus sequoiae</i></b> Sequoia cave isopod	None	None	G1	S1	
IICOL48011	<b><i>Desmocerus californicus dimorphus</i></b> valley elderberry longhorn beetle	Threatened	None	G3T2	S2	
IICOL4C020	<b><i>Lytta moesta</i></b> moestan blister beetle	None	None	G2	S2	
IICOL4C040	<b><i>Lytta morrisoni</i></b> Morrison's blister beetle	None	None	G1G2	S1S2	
IICOL58010	<b><i>Atractelmis wawona</i></b> Wawona riffle beetle	None	None	G1G3	S1S2	
IIHYM24250	<b><i>Bombus occidentalis</i></b> western bumble bee	None	Candidate Endangered	G2G3	S1	
IIHYM24380	<b><i>Bombus caliginosus</i></b> obscure bumble bee	None	None	G4?	S1S2	
IIHYM24480	<b><i>Bombus crotchii</i></b> Crotch bumble bee	None	Candidate Endangered	G3G4	S1S2	
IIHYM72010	<b><i>Chrysis tularensis</i></b> Tulare cuckoo wasp	None	None	G1G2	S1S2	
IITRI11030	<b><i>Cryptochia denningi</i></b> Denning's cryptic caddisfly	None	None	G1G2	S1S2	
ILARA98020	<b><i>Talanites moodyae</i></b> Moody's gnaphosid spider	None	None	G1G2	S1S2	



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ILARAU8090	<i>Calicina cloughensis</i> Clough Cave harvestman	None	None	G1	S1	
NBMUS4Q022	<i>Mielichhoferia elongata</i> elongate copper moss	None	None	G5	S3S4	4.3
NBMUS560E0	<i>Orthotrichum holzingeri</i> Holzinger's orthotrichum moss	None	None	G3G4	S2	1B.3
PDAP10Z0Y0	<i>Eryngium spinosepalum</i> spiny-sepaled button-celery	None	None	G2	S2	1B.2
PDAST4N260	<i>Helianthus winteri</i> Winter's sunflower	None	None	G2?	S2?	1B.2
PDAST7P030	<i>Pseudobahia peirsonii</i> San Joaquin adobe sunburst	Threatened	Endangered	G1	S1	1B.1
PDCON040K2	<i>Calystegia malacophylla</i> var. <i>berryi</i> Berry's morning-glory	None	None	G4G5T2Q	S2	3.3
PDCRA040A2	<i>Dudleya cymosa</i> ssp. <i>costatifolia</i> Pierpoint Springs dudleya	None	None	G5T1	S1	1B.2
PDCUS011T0	<i>Cuscuta jepsonii</i> Jepson's dodder	None	None	G1	S1	1B.2
PDGRO02104	<i>Ribes menziesii</i> var. <i>ixoderme</i> aromatic canyon gooseberry	None	None	G4T1	S1	1B.2
PDGRO021L0	<i>Ribes tulareense</i> Sequoia gooseberry	None	None	G1	S1	1B.3
PDONA05120	<i>Clarkia springvillensis</i> Springville clarkia	Threatened	Endangered	G2	S2	1B.2
PDPGN08495	<i>Eriogonum nudum</i> var. <i>murinum</i> mouse buckwheat	None	None	G5T2	S2	1B.2
PDPLM09130	<i>Leptosiphon serrulatus</i> Madera leptosiphon	None	None	G3	S3	1B.2
PDRAN0B1G0	<i>Delphinium purpusii</i> rose-flowered larkspur	None	None	G3	S3	1B.3
PDRAN0B1J0	<i>Delphinium recurvatum</i> recurved larkspur	None	None	G2?	S2?	1B.2
PDSCR1B240	<i>Diplacus pictus</i> calico monkeyflower	None	None	G2	S2	1B.2
PDSCR1B2Y0	<i>Erythranthe norrisii</i> Kaweah monkeyflower	None	None	G2	S2	1B.3
PMIRI090M0	<i>Iris munzii</i> Munz's iris	None	None	G2	S2	1B.3
PMLIL02360	<i>Allium abramsii</i> Abrams' onion	None	None	G3	S3	1B.2
PMLIL0C060	<i>Brodiaea insignis</i> Kaweah brodiaea	None	Endangered	G1	S1	1B.2



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California Department of Fish and Wildlife  
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Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PMLIL0D1M0	<i>Calochortus westonii</i> Shirley Meadows star-tulip	None	None	G3	S3	1B.2
PMLIL0V0K0	<i>Fritillaria striata</i> striped adobe-lily	None	Threatened	G1	S1	1B.1
PMPOA1H040	<i>Cinna bolanderi</i> Bolander's woodreed	None	None	G2G3	S2S3	1B.2
PMPOA2Y080	<i>Glyceria grandis</i> American manna grass	None	None	G5	S3	2B.3
PMPOA4G060	<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	Threatened	Endangered	G1	S1	1B.1
PMPOA6N010	<i>Tuctoria greenei</i> Greene's tuctoria	Endangered	Rare	G1	S1	1B.1

Record Count: 67

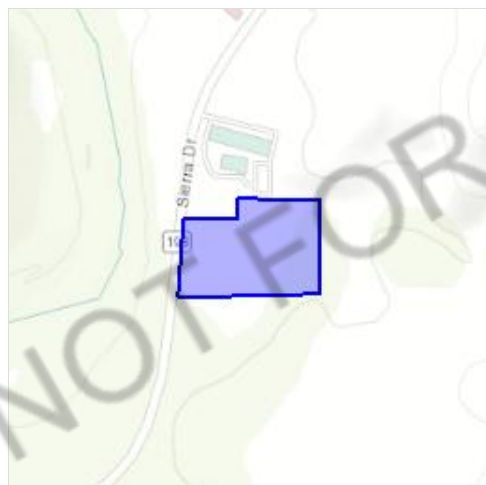
# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Tulare County, California



## Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846



# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME

STATUS

San Joaquin Kit Fox *Vulpes macrotis mutica*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/2873>

## Birds

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/8193">https://ecos.fws.gov/ecp/species/8193</a>	Endangered

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	Threatened

## Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A  
BREEDING SEASON IS INDICATED  
FOR A BIRD ON YOUR LIST, THE  
BIRD MAY BREED IN YOUR  
PROJECT AREA SOMETIME WITHIN  
THE TIMEFRAME SPECIFIED,  
WHICH IS A VERY LIBERAL  
ESTIMATE OF THE DATES INSIDE  
WHICH THE BIRD BREEDS  
ACROSS ITS ENTIRE RANGE.  
"BREEDS ELSEWHERE" INDICATES

THAT THE BIRD DOES NOT LIKELY  
BREED IN YOUR PROJECT AREA.)

### Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Aug 31

### Black Swift *Cypseloides niger*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8878>

Breeds Jun 15 to Sep 10

### California Thrasher *Toxostoma redivivum*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Jul 31

### Clark's Grebe *Aechmophorus clarkii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Dec 31

### Common Yellowthroat *Geothlypis trichas sinuosa*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/2084>

Breeds May 20 to Jul 31

### Costa's Hummingbird *Calypte costae*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9470>

Breeds Jan 15 to Jun 10

### Golden Eagle *Aquila chrysaetos*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Breeds Jan 1 to Aug 31

### Lawrence's Goldfinch *Carduelis lawrencei*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9464>

Breeds Mar 20 to Sep 20

**Lewis's Woodpecker** *Melanerpes lewis*

Breeds Apr 20 to Sep 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9408>

**Nuttall's Woodpecker** *Picoides nuttallii*

Breeds Apr 1 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9410>

**Oak Titmouse** *Baeolophus inornatus*

Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9656>

**Rufous Hummingbird** *Selasphorus rufus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

**Song Sparrow** *Melospiza melodia*

Breeds Feb 20 to Sep 5

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

**Spotted Towhee** *Pipilo maculatus clementae*

Breeds Apr 15 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/4243>

**Wrentit** *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

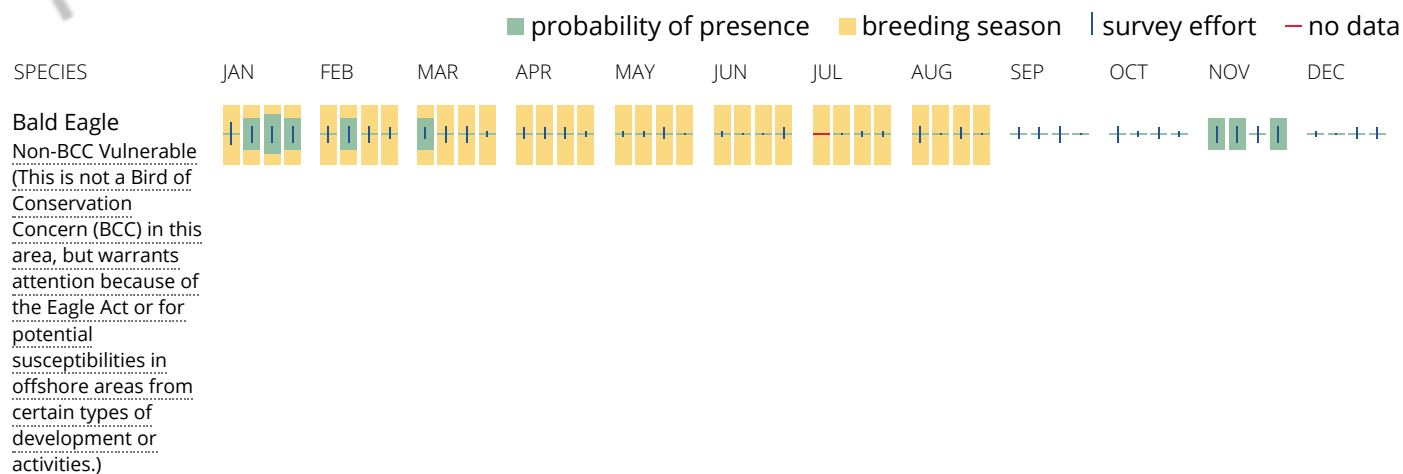
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

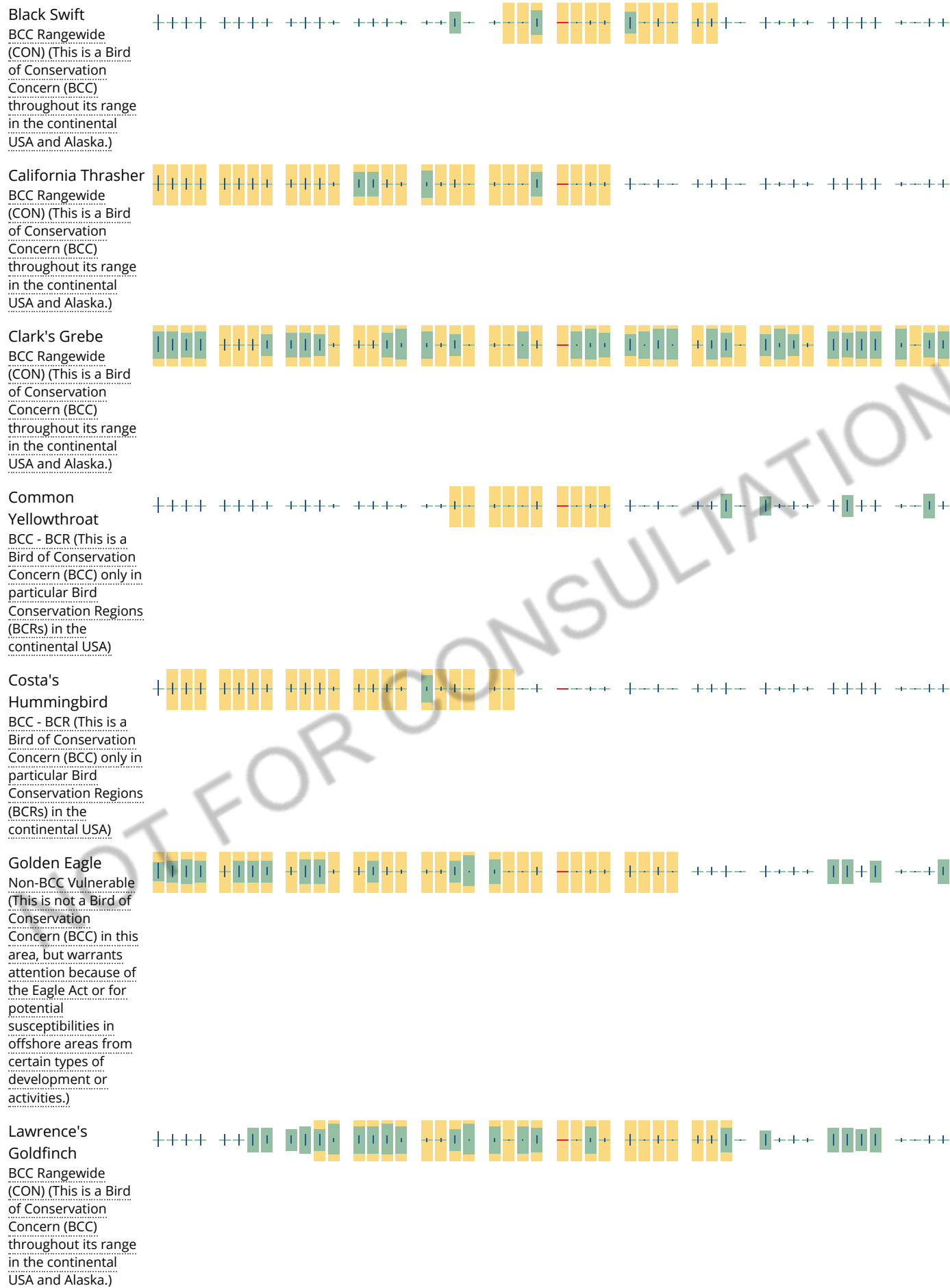
### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.









Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.



[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

### What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

### What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

## Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

[PFOA](#)

RIVERINE

[R4SBC](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters.

Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

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**ATTACHMENT B**

Representative Site Photos





Photo1. Oak woodland in SE corner of Survey Area, facing SW.



Photo 2. Oak woodland, annual grassland and elderberries, facing SSE.



Photo 3. Representative photo of annual grassland, facing W.



Photo 4. Ruderal area, topped cottonwoods on W side of Survey Area, facing SSW.







Photo 5. Ruderal area, access road on southern property boundary, facing W.



Photo 6. Delineation Sample Point 1 location in NE corner of property, facing N.



Photo 7. NE corner of Survey Area, facing NNE.



Photo 8. Elderberry in SE portion of property, facing West.



## **ATTACHMENT C**

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### Aquatic Resources Delineation Data Sheets



# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Hampton Inn & Suites in Three Rivers City/County: Tulare Sampling Date: 8/13/2020  
 Applicant/Owner: Ineffable Hospitality, Inc. State: CA Sampling Point: 1  
 Investigator(s): Keith Kwan Section, Township, Range: Section 26, T.17 South, R.28 East  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 3  
 Subregion (LRR): C Lat: 36.425129 Long: -118.913574 Datum: NAD83  
 Soil Map Unit Name: 105 - Blasingame sandy loam, 9 to 15 percent slopes NWI classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: shallow swale with no evidence of wetland characteristics or an ordinary high water mark	

## VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	<b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
_____ = Total Cover				
<b>Herb Stratum</b> (Plot size: <u>5' radius</u> )				
1. <u>Anthriscus caucalis</u>	<u>2</u>	<u>no</u>	<u>N/L</u>	
2. <u>Bromus diandrus</u>	<u>15</u>	<u>yes</u>	<u>N/L</u>	
3. <u>Carduus pycnocephalus</u>	<u>5</u>	<u>no</u>	<u>N/L</u>	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>
4. <u>Galium aparine</u>	<u>1</u>	<u>no</u>	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>
_____ = Total Cover				
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>80</u> % Cover of Biotic Crust <u>0</u>				
Remarks: many Ca. ground squirrel diggings present				

**SOIL**Sampling Point: 1**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR3/3	100						sandy loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5) (**LRR C**)  
☐ 1 cm Muck (A9) (**LRR D**)  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Sandy Mucky Mineral (S1)  
☐ Sandy Gleyed Matrix (S4)

☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Loamy Mucky Mineral (F1)  
☐ Loamy Gleyed Matrix (F2)  
☐ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)  
☐ Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

☐ 1 cm Muck (A9) (**LRR C**)  
☐ 2 cm Muck (A10) (**LRR B**)  
☐ Reduced Vertic (F18)  
☐ Red Parent Material (TF2)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No ☒

Remarks:

**HYDROLOGY****Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

☐ Surface Water (A1)  
☐ High Water Table (A2)  
☐ Saturation (A3)  
☐ Water Marks (B1) (**Nonriverine**)  
☐ Sediment Deposits (B2) (**Nonriverine**)  
☐ Drift Deposits (B3) (**Nonriverine**)  
☐ Surface Soil Cracks (B6)  
☐ Inundation Visible on Aerial Imagery (B7)  
☐ Water-Stained Leaves (B9)

☐ Salt Crust (B11)  
☐ Biotic Crust (B12)  
☐ Aquatic Invertebrates (B13)  
☐ Hydrogen Sulfide Odor (C1)  
☐ Oxidized Rhizospheres along Living Roots (C3)  
☐ Presence of Reduced Iron (C4)  
☐ Recent Iron Reduction in Tilled Soils (C6)  
☐ Thin Muck Surface (C7)  
☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

☐ Water Marks (B1) (**Riverine**)  
☐ Sediment Deposits (B2) (**Riverine**)  
☐ Drift Deposits (B3) (**Riverine**)  
☐ Drainage Patterns (B10)  
☐ Dry-Season Water Table (C2)  
☐ Crayfish Burrows (C8)  
☐ Saturation Visible on Aerial Imagery (C9)  
☐ Shallow Aquitard (D3)  
☐ FAC-Neutral Test (D5)

**Field Observations:**Surface Water Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_Water Table Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_Saturation Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_  
(includes capillary fringe)**Wetland Hydrology Present?** Yes \_\_\_\_\_ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

shallow swale with no evidence of an OHWM

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Hampton Inn & Suites in Three Rivers City/County: Tulare Sampling Date: 8/13/2020  
 Applicant/Owner: Ineffable Hospitality, Inc. State: \_\_\_\_\_ Sampling Point: 2  
 Investigator(s): Keith Kwan Section, Township, Range: Section 26, T.17 South, R.28 East  
 Landform (hillslope, terrace, etc.): toe of slope Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR): C Lat: 36.424787 Long: -118.913852 Datum: NAD83  
 Soil Map Unit Name: 105 - Blasingame sandy loam, 9 to 15 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks:  shallow swale with no evidence of wetland characteristics or an ordinary high water mark	

## VEGETATION – Use scientific names of plants.

<b>Tree Stratum</b> (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ _____ = Total Cover <b>Sapling/Shrub Stratum</b> (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover <b>Herb Stratum</b> (Plot size: <u>5' radius</u> ) 1. <u>Bromus diandrus</u> 30 yes N/L 2. <u>Centaurea solstitialis</u> 15 yes N/L 3. <u>Carduus pycnocephalus</u> 5 no N/L 4. <u>Amsinckia sp.</u> 1 no N/L 5. _____ 6. _____ 7. _____ 8. _____ _____ = Total Cover <b>Woody Vine Stratum</b> (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover % Bare Ground in Herb Stratum <u>50</u> % Cover of Biotic Crust <u>0</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B) <b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____ <b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. <b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>
Remarks:	

# SOIL

Sampling Point: 2

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR3/3	100						sandy loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)

- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No ☒

Remarks:

# HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)

- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_

Water Table Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_

Saturation Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_  
(includes capillary fringe)

**Wetland Hydrology Present?** Yes \_\_\_\_\_ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



July 6, 2020

Haren-deep Sanghera,  
Ineffable Hospitality, Inc.  
6473 E. Hatch Road  
Hughson, California 95326

**RE: Hampton Inn and Suites, Three Rivers, Tulare County, California – Special-Status Plant Survey**

Dear Mr. Sanghera:

On behalf of Ineffable Hospitality, Inc., ECORP Consulting, Inc. conducted a special-status plant survey for the Hampton Inn and Suites in Three Rivers, Tulare County, California (Survey Area) (Figure 1. *Survey Area Location and Vicinity*). The ±4.57-acre Survey Area is located adjacent to the community of Three Rivers east of State Highway 198 (Sierra Drive), approximately 1,000 feet north of the Old Three Rivers Road intersection, and immediately south of the Comfort Inn and Suites. The site corresponds to a portion of Section 26, Township 17 South, Range 28 East (Mount Diablo Base and Meridian) of the “Kaweah, California” 7.5-minute quadrangle (North American Datum [NAD] 27) (U.S. Geological Survey [USGS] 1993). The approximate center of the site is located at latitude 36.424827° (NAD83) and longitude - 118.914718° (NAD83) within the Upper Kaweah Watershed (Hydrologic Unit Code#18030007)(Natural Resources Conservation Service [NRCS] et al. 2019). The purpose of the survey was to identify and map the locations of special-status plant species, if found, within the Survey Area.

Prior to conducting the survey, background information was collected on the potential presence of special-status plants within or near the Survey Area from a variety of sources, including the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CDFW 2020), the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation tool (USFWS 2020), and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants of California (CNPS 2020). Each special-status plant species with potential to occur in the vicinity of the Survey Area was evaluated for its potential to occur onsite, and a list of target species was determined. The following 12 species were included as targets for the survey:

- Kaweah brodiaea (*Brodiaea insignis*)
- Springville clarkia (*Clarkia springvillensis*)
- Streambank spring beauty (*Claytonia parviflora* ssp. *grandiflora*)
- Recurved larkspur (*Delphinium recurvatum*)
- Calico monkeyflower (*Diplacus pictus*)
- Mouse buckwheat (*Eriogonum nudum* var. *murinum*)
- Spiny-sepaled button-celery (*Eryngium spinosepalum*)

- Sierra Nevada monkeyflower (*Erythranthe sierrae*)
- American manna grass (*Glyceria grandis*)
- Munz's iris (*Iris munzii*)
- Madera leptosiphon (*Leptosiphon serrulatus*)
- San Joaquin adobe sunburst (*Pseudobahia peirsonii*)

Reference populations, where available, were visited to assess phenology and observe morphology for target species. When reference populations were not available, herbaria specimens, Calflora (Calflora 2020), Calphotos (Calphotos 2020), and *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012) were used as a reference. Observation of the reference populations and review of other reference sources confirmed that the survey coincided with optimal identifiable periods for all target species.

ECORP biologist Hannah Stone conducted the special-status plant survey on April 15, 2020 and June 30, 2020. The survey was conducted in accordance with guidelines promulgated by USFWS (USFWS 2000), CDFW (CDFW 2018), and CNPS (CNPS 2001). The biologist walked meandering transects throughout the Survey Area, including all suitable habitat for target species. A list of all plant species observed within the Survey Area is included in Attachment A. No special-status plant species were observed during the survey.

If you have any questions, please call me at (916) 782-9100.

Sincerely,



Chris Stabenfeldt  
Senior Environmental Planner/Project Manager  
ECORP Consulting, Inc.

## REFERENCES

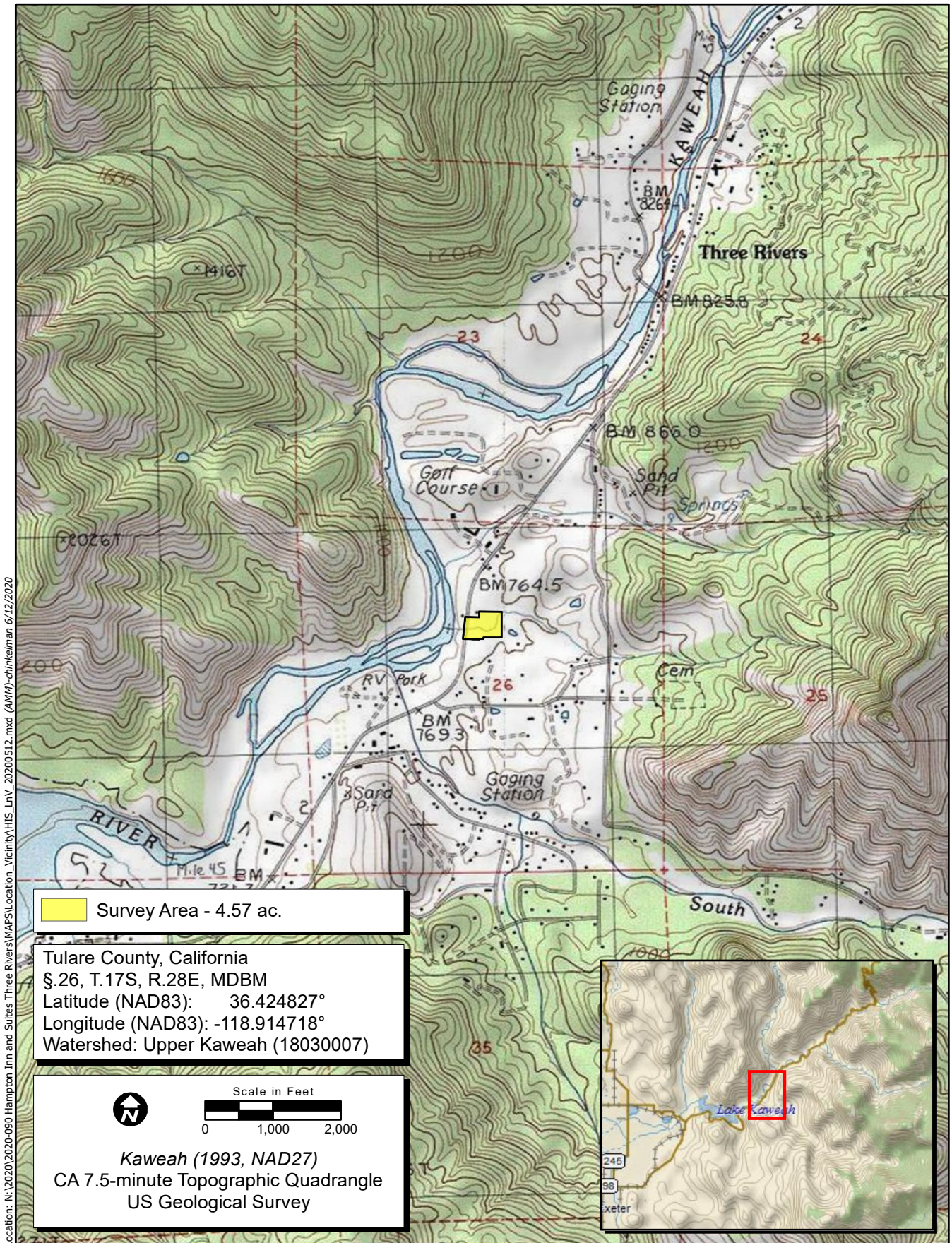
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Figure 1. Survey Area Location and Vicinity





**Figure 1. Survey Area Location and Vicinity**

2020-090 Hampton Inn and Suites in Three Rivers



## **ATTACHMENT A**

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Plant Species Observed Onsite (April 15, 2020 and June 30, 2020)

**Hampton Inn and Suites Three Rivers Project**  
Plant Species Observed (April 15, 2020 and June 30, 2020)

SCIENTIFIC NAME	COMMON NAME
<b>ADOXACEAE</b>	<b>MUSKROOT FAMILY</b>
<i>Sambucus nigra</i> subsp. <i>caerulea</i>	Blue elderberry
<b>AMARANTHACEAE</b>	<b>AMARANTH FAMILY</b>
<i>Amaranthus albus</i> *	Pigweed amaranth
<b>APIACEAE</b>	<b>CARROT FAMILY</b>
<i>Anthriscus caucalis</i> *	Bur chervil
<i>Conium maculatum</i> *	Poison hemlock
<i>Torilis arvensis</i> *	Field hedge parsley
<b>ARACEAE</b>	<b>ARUM FAMILY</b>
<i>Lemna</i> sp.	Duckweed
<b>ASTERACEAE</b>	<b>SUNFLOWER FAMILY</b>
<i>Ambrosia psilostachya</i>	Western ragweed
<i>Carduus pycnocephalus</i> *	Italian thistle
<i>Centaurea melitensis</i> *	Tocalote
<i>Centaurea solstitialis</i> *	Yellow star-thistle
<i>Erigeron canadensis</i>	Canada horseweed
<i>Helianthus annuus</i>	Common sunflower
<i>Heterotheca grandiflora</i>	Telegraph weed
<i>Holocarpha virgata</i>	Narrow tarplant
<i>Hypochaeris glabra</i> *	Smooth cat's-ear
<i>Hypochaeris radicata</i> *	Rough cat's-ear
<i>Lactuca serriola</i> *	Prickly lettuce
<i>Pseudognaphalium luteoalbum</i> *	Jersey cudweed
<i>Silybum marianum</i> *	Milk thistle
<b>BORAGINACEAE</b>	<b>BORAGE FAMILY</b>
<i>Amsinckia</i> sp.	Fiddleneck
<b>BRASSICACEAE</b>	<b>MUSTARD FAMILY</b>
<i>Boechera</i> sp.	Rockcress
<i>Capsella bursa-pastoris</i> *	Shepherd purse
<i>Hirschfeldia incana</i> *	Shortpod mustard
<i>Sisymbrium officinale</i> *	Hedge mustard

An asterisk (\*) indicates a non-native species.

**Hampton Inn and Suites Three Rivers Project**  
Plant Species Observed (April 15, 2020 and June 30, 2020)

SCIENTIFIC NAME	COMMON NAME
<b>CARYOPHYLLACEAE</b>	<b>PINK FAMILY</b>
<i>Stellaria media</i> *	Common chickweed
<b>CHENOPODIACEAE</b>	<b>GOOSEFOOT FAMILY</b>
<i>Chenopodium album</i> *	White goosefoot
<b>EUPHORBIACEAE</b>	<b>SPURGE FAMILY</b>
<i>Croton setiger</i>	Turkey mullein
<b>FABACEAE</b>	<b>LEGUME FAMILY</b>
<i>Acemisson americanus</i>	Spanish clover
<i>Lupinus bicolor</i>	Bicolored lupine
<i>Vicia villosa</i> *	Hairy vetch
<i>Wisteria sinensis</i> *	Chinese wisteria
<b>FAGACEAE</b>	<b>OAK FAMILY</b>
<i>Quercus lobata</i>	Valley oak
<i>Quercus wislizeni</i>	Interior live oak
<b>GERANIACEAE</b>	<b>GERANIUM FAMILY</b>
<i>Erodium brachycarpum</i> *	Short fruited filaree
<i>Erodium cicutarium</i> *	Red-stemmed filaree
<b>LAMIACEAE</b>	<b>MINT FAMILY</b>
<i>Marrubium vulgare</i> *	Common horehound
<b>MELIACEAE</b>	<b>MAHOGANY FAMILY</b>
<i>Melia azedarach</i> *	China berry tree
<b>MYRSINACEAE</b>	<b>MYRSINE FAMILY</b>
<i>Lysimachia arvensis</i> *	Scarlet pimpernel
<b>ONAGRACEAE</b>	<b>EVENING PRIMROSE FAMILY</b>
<i>Camissonia strigulosa</i>	Contorted primrose
<i>Epilobium</i> sp.	Willow-herb
<b>PHRYMACEAE</b>	<b>LOPSEED FAMILY</b>
<i>Erythranthe floribunda</i>	Many flowered monkey flower
<b>PLANTAGINACEAE</b>	<b>PLANTAIN FAMILY</b>
<i>Veronica persica</i> *	Bird's eye speedwell

An asterisk (\*) indicates a non-native species.

**Hampton Inn and Suites Three Rivers Project**  
Plant Species Observed (April 15, 2020 and June 30, 2020)

SCIENTIFIC NAME	COMMON NAME
<b>POACEAE</b>	<b>GRASS FAMILY</b>
<i>Avena fatua</i> *	Wild oat
<i>Bromus diandrus</i> *	Ripgut brome
<i>Bromus hordeaceus</i> *	Soft brome
<i>Distichlis spicata</i>	Saltgrass
<i>Elymus caput-medusae</i> *	Medusahead grass
<i>Elymus glaucus</i>	Blue wild-rye
<i>Elymus triticoides</i>	Creeping wild-rye
<i>Festuca perennis</i> *	Italian Ryegrass
<i>Hordeum murinum</i> ssp. <i>glaucum</i> *	Foxtail barley
<b>POLYGONACEAE</b>	<b>BUCKWHEAT FAMILY</b>
<i>Chorizanthe membranacea</i>	Pink spineflower
<i>Rumex crispus</i> *	Curly dock
<b>PORTULACAEAE</b>	<b>PURSLANE FAMILY</b>
<i>Claytonia parviflora</i> ssp. <i>parviflora</i>	Streambank springbeauty
<b>ROSACEAE</b>	<b>ROSE FAMILY</b>
<i>Rubus armeniacus</i> *	Himalayan blackberry
<b>RUBIACEAE</b>	<b>MADDER FAMILY</b>
<i>Galium aparine</i>	Common bedstraw
<b>SALICACEAE</b>	<b>WILLOW FAMILY</b>
<i>Populus deltoides</i> *	Eastern cottonwood
<i>Populus fremontii</i>	Fremont's cottonwood
<i>Salix lasiolepis</i>	Arroyo willow
<b>SCROPHULARIACEAE</b>	<b>FIGWORT FAMILY</b>
<i>Verbascum thapsus</i> *	Common mullein
<b>SIMAROUBACEAE</b>	<b>QUASSIA FAMILY</b>
<i>Ailanthus altissima</i> *	Tree-of-heaven
<b>SOLANACEAE</b>	<b>NIGHTSHADE FAMILY</b>
<i>Datura stramonium</i> *	Jimson weed
<i>Datura wrightii</i>	Sacred thornapple
<i>Solanum americanum</i>	Comon nightshade

An asterisk (\*) indicates a non-native species.

**Hampton Inn and Suites Three Rivers Project**  
 Plant Species Observed (April 15, 2020 and June 30, 2020)

SCIENTIFIC NAME	COMMON NAME
<b>URTICACEAE</b>	<b>NETTLE FAMILY</b>
<i>Urtica dioica</i>	Stinging nettle
<b>VITACEAE</b>	<b>GRAPE FAMILY</b>
<i>Vitis californica</i>	California wild grape
<b>ZYGOPHYLLACEAE</b>	<b>CALTROP FAMILY</b>
<i>Tribulus terrestris</i> *	Puncture vine

# Attachment “C”

## Cultural and Tribal Cultural Resources

## **CULTURAL RESOURCES ASSESSMENT**

This report contains confidential information exempt from public disclosure pursuant to:

54 USC § 307103 (National Historic Preservation Act), and/or

16 USC § 470hh (Archaeological Resources Protection Act), and/or

16 USC § 470aaa (Paleontological Resources Preservation Act), and/or

36 CFR § 296.18 (Confidentiality of Archaeological Resource Information), and/or

Gov. Code § 6254(r): California Public Records, Records exempt from disclosure requirements, Native American grave, cemetery and sacred place records, and/or

Gov. Code § 6254.10: California Public Records Act, Disclosure of records relating to archaeological site information and specified reports not required, and/or

14 CCR §15120(d): CEQA Guidelines, Contents of Environmental Impact Reports.



# Attachment “D”

## Noise

# Noise Impact Assessment

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## Three Rivers Hampton Inn and Suites Project

Tulare County, California

### Prepared For:

Ineffable Hospitality, Inc.

**August 2020**



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

ANSI	American National Standards Institute
Caltrans	California Department of Transportation
CNEL	Community Noise Equivalent Level
County	County of Tulare
dB	Decibel
dBA	A-weighted decibels
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
Hz	Hertz
I-8	Interstate 8
L <sub>dn</sub>	Day-night average sound level
L <sub>eq</sub>	Measure of ambient noise
L <sub>max</sub>	The maximum A-weighted noise level during the measurement period.
L <sub>min</sub>	The minimum A-weighted noise level during the measurement period.
OPR	Office of Planning and Research
PPV	Peak particle velocity
Project	Three Rivers Hampton Inn & Suites Project
RMS	Root mean square
RS	Residential Single Unit
sf	Square foot

**LIST OF ACRONYMS AND ABBREVIATIONS**

STC	Sound Transmission Class
WEAL	Western Electro-Acoustic Laboratory, Inc.

## 1.0 INTRODUCTION

This report documents the results of a Noise Impact Assessment completed for the Three Rivers Hampton Inn and Suites Project (Project), which includes the development a 105-room hotel with 108 parking spaces in the community of Three Rivers in the County of Tulare (County). This assessment was prepared to assess the land use compatibility of the Proposed Project within the existing noise environment affecting the Project area. This assessment compares the predicted Project noise levels to noise standards promulgated by the County of Tulare General Plan Health and Safety Element.

### 1.1 Project Location and Description

The Project site is located within the County of Tulare, in the community of Three Rivers. Three Rivers is located in the northern portion of the County of Tulare, bordered by Fresno, Inyo, and Kings Counties. The Project site is located on approximately 2.8 acres, just east of State Highway 198 (see Figure 1. Project Location). The Project is the development of a Hampton Inn on an irregularly shaped and currently undeveloped site. The Project site is surrounded by a Comfort Inn and Suites hotel to the north, a vacant commercial building to the west, and farmland and rural housing to the east, south, and west.

The Project is the development of a 105-room hotel with 108 parking spaces. The hotel is proposed to be three stories. Aside from the 105 guest rooms, the hotel is proposed to contain a meeting room, lobby, breakfast and food preparation areas, laundry, an employee breakroom, and more rooms typical of a moderate to high-end hotel. Other onsite infrastructure would include a swimming pool, two water tanks and wells, and a trash enclosure.

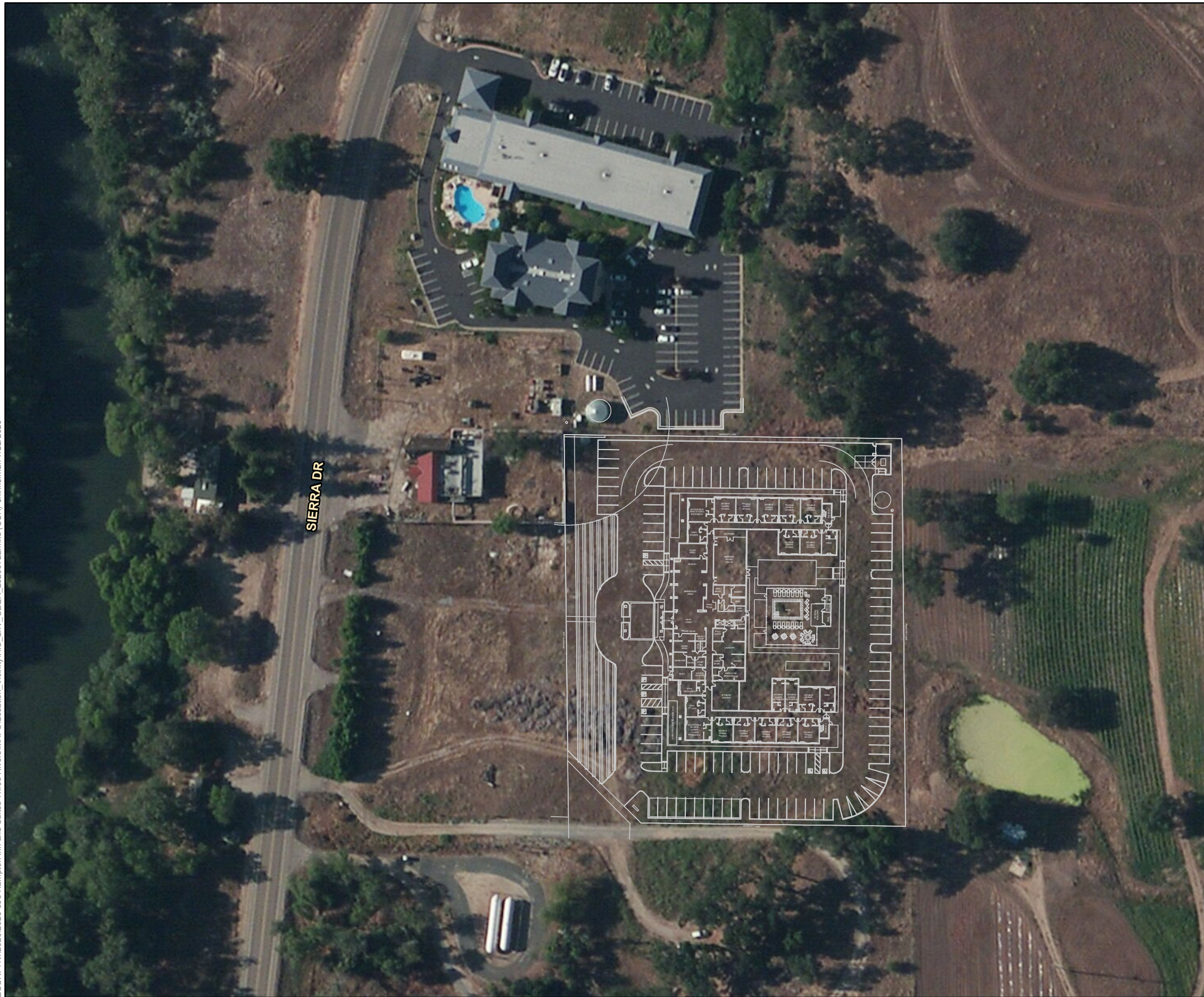
The Project is anticipated to generate 860 additional one-way vehicle trips per day on Saturdays, 625 additional one-way vehicle trips per day on Sundays, and 858 additional one-way vehicle trips per day on weekdays.

A construction period of approximately one year is anticipated, with construction likely to begin in summer of 2021. Project construction is anticipated to include site preparation, grading, building construction, paving, and painting of buildings and parking space and road lines.

The Proposed Project site is designated for *Urban Development* in the Tulare County General Plan.



ECORP: N:\2020\2020-090 Hampton Inn and Suites Three Rivers\MAPS\Location\_Vicinity\HIS\_LnV\_CEOA\_20200722.mxd (CCH)-chinkelman 7/22/2020



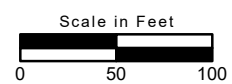
**Map Features**  
—— Site Plan

Sources: ESRI, USGS



Map Date: 7/22/2020

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**Figure 1. Project Location and Vicinity**

2020-090 Hampton Inn and Suites Three Rivers



## **2.0 ENVIRONMENTAL NOISE**

### **2.1 Fundamentals of Noise and Environmental Sound**

#### **2.1.1 Addition of Decibels**

The decibel (dB) scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted (dBA), an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound and twice as loud as a 60-dBA sound. When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be three dB higher than one source under the same conditions (Federal Transit Administration [FTA] 2018). For example, a 65-dB source of sound, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by three dB). Under the decibel scale, three sources of equal loudness together would produce an increase of five dB.

Typical noise levels associated with common noise sources are depicted in Figure 2. *Common Noise Levels.*



Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet Fly-over at 300m (1000 ft)	110	Rock Band
Gas Lawn Mower at 1 m (3 ft)	100	
Diesel Truck at 15 m (50 ft), at 80 km (50 mph)	90	Food Blender at 1 m (3 ft)
Noisy Urban Area, Daytime	80	Garbage Disposal at 1 m (3 ft)
Gas Lawn Mower, 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area		Normal Speech at 1 m (3 ft)
Heavy Traffic at 90 m (300 ft)	60	Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		Library
Quiet Rural Nighttime	30	Bedroom at Night, Concert Hall (Background)
	20	Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

**Figure 2. Common Noise Levels**

Source: California Department of Transportation Caltrans 2012)

### **2.1.2 Sound Propagation and Attenuation**

Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately six dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately three dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (Federal Highway Administration [FHWA] 2011). No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. For line sources, an overall attenuation rate of three dB per doubling of distance is assumed (FHWA 2011).

Noise levels may also be reduced by intervening structures; generally, a single row of detached buildings between the receptor and the noise source reduces the noise level by about five dBA (FHWA 2006), while a solid wall or berm generally reduces noise levels by 10 to 20 dBA (FHWA 2011). However, noise barriers or enclosures specifically designed to reduce site-specific construction noise can provide a sound reduction 35 dBA or greater (Western Electro-Acoustic Laboratory, Inc. [WEAL] 2000). To achieve the most potent noise-reducing effect, a noise enclosure/barrier must physically fit in the available space, must completely break the "line of sight" between the noise source and the receptors, must be free of degrading holes or gaps, and must not be flanked by nearby reflective surfaces. Noise barriers must be sizable enough to cover the entire noise source and extend lengthwise and vertically as far as feasibly possible to be most effective. The limiting factor for a noise barrier is not the component of noise transmitted through the material, but rather the amount of noise flanking around and over the barrier. In general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver.

The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). The exterior-to-interior reduction of newer residential units is generally 30 dBA or more (Harris Miller, Miller & Hanson Inc. [HMMH] 2006). Generally, in exterior noise environments ranging from 60 dBA Community Noise Equivalent Level (CNEL) to 65 dBA CNEL, interior noise levels can typically be maintained below 45 dBA, a typically residential interior noise standard, with the incorporation of an adequate forced air mechanical ventilation system in each residential building, and standard thermal-pane residential windows/doors with a minimum rating of Sound Transmission Class (STC) 28. (STC is an integer rating of how well a building partition attenuates airborne sound. In the U.S., it is widely used to rate interior partitions, ceilings, floors, doors, windows, and exterior wall configurations.) In exterior noise environments of 65 dBA CNEL or greater, a combination of forced-air mechanical ventilation and sound-rated construction methods is often required to meet the interior noise level limit. Attaining the necessary noise reduction from exterior to interior spaces is readily achievable in noise environments less than 75 dBA CNEL with proper wall construction techniques following California Building Code methods, the selections of proper windows and doors, and the incorporation of forced-air mechanical ventilation systems.

### 2.1.3 Noise Descriptors

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The  $L_{eq}$  is a measure of ambient noise, while the  $L_{dn}$  and CNEL are measures of community noise. Each is applicable to this analysis and defined in Table 2-1.

Table 2-1. Common Acoustical Descriptors	
Descriptor	Definition
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micropascals (or 20 micronewtons per square meter), where one pascal is the pressure resulting from a force of one newton exerted over an area of one square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micropascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hertz (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, $L_{eq}$	The average acoustic energy content of noise for a stated period of time. Thus, the $L_{eq}$ of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
$L_{max}$ , $L_{min}$	The maximum and minimum A-weighted noise level during the measurement period.
$L_{01}$ , $L_{10}$ , $L_{50}$ , $L_{90}$	The A-weighted noise levels that are exceeded one percent, 10 percent, 50 percent, and 90 percent of the time during the measurement period.
Day/Night Noise Level, $L_{dn}$ or DNL	A 24-hour average $L_{eq}$ with a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour $L_{eq}$ would result in a measurement of 66.4 dBA $L_{dn}$ .
Community Noise Equivalent Level, CNEL	A 24-hour average $L_{eq}$ with a five dBA "weighting" during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour $L_{eq}$ would result in a measurement of 66.7 dBA CNEL.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

The dBA sound level scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about  $\pm$ one dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends on the distance between the receptor and the noise source. Close to the noise source, the models are accurate to within about  $\pm$ one to two dBA.

#### **2.1.4 Human Response to Noise**

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60- to 70-dBA range, and high, above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of one dBA cannot be perceived by humans.
- Outside of the laboratory, a three-dBA change is considered a just-perceivable difference.
- A change in level of at least five dBA is required before any noticeable change in community response would be expected. An increase of five dBA is typically considered substantial.
- A 10-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

## **2.1.5 Effects of Noise on People**

### **Hearing Loss**

While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise.

The Occupational Safety and Health Administration has a noise exposure standard that is set at the noise threshold where hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over eight hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

### **Annoyance**

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The  $L_{dn}$  as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. For ground vehicles, a noise level of about 55 dBA  $L_{dn}$  is the threshold at which a substantial percentage of people begin to report annoyance.

## **2.2 Fundamentals of Environmental Groundborne Vibration**

### **2.2.1 Vibration Sources and Characteristics**

Sources of earthborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or manmade causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions).

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

### **2.2.2 Vibration Sources and Characteristics**

Table 2-2 displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care as vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be

annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

For the purposes of this analysis, the PPV descriptor with units of inches per second is used to evaluate construction-generated vibration for building damage and human complaints.

<b>Table 2-2. Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels</b>			
<b>Peak Particle Velocity (inches/second)</b>	<b>Approximate Vibration Velocity Level (VdB)</b>	<b>Human Reaction</b>	<b>Effect on Buildings</b>
0.006–0.019	64–74	Range of threshold of perception	Vibrations unlikely to cause damage of any type
0.08	87	Vibrations readily perceptible	Recommended upper level to which ruins and ancient monuments should be subjected
0.1	92	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities	Virtually no risk of architectural damage to normal buildings, yet threshold at which there is a risk of architectural damage to fragile buildings
0.2	94	Vibrations may begin to annoy people	Threshold at which there is a risk of architectural damage to normal dwellings
0.4–0.6	98–104	Vibrations considered unpleasant by people subjected to continuous vibrations	Architectural damage and possibly minor structural damage

Source: Caltrans 2020

Ground vibration can be a concern in instances where buildings shake and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. For instance, heavy-duty trucks generally generate groundborne vibration velocity levels of 0.006 PPV at 50 feet under typical circumstances, which as identified in Table 2-2 is considered very unlikely to cause damage to buildings of any type. Common sources for groundborne vibration are planes, trains, and construction activities such as earthmoving that requires the use of heavy-duty earthmoving equipment.

### 3.0 EXISTING ENVIRONMENTAL NOISE SETTING

#### 3.1 Noise-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and

prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The Project site is generally surrounded by farmland and rural residential development, with commercial development concentrated along State Route (SR) 198. The nearest noise-sensitive receptors to the Project site are the Comfort Inn and Suites hotel building, located approximately 113 feet north of the Project site, a vacant commercial building located approximately 96 feet west of the Project site at the nearest point, and a residence located across State Highway 198 from the site at approximately 270 feet to the west. The distances to the Comfort Inn and Suites and the vacant commercial building were measured from the property line of the Proposed Project to the physical building. The parking lot and outdoor area associated with hotels and commercial uses are not considered sensitive receptors. Noise-sensitive hotel activities, such as sleeping and resting, would be performed indoors.

### 3.2 Existing Ambient Noise Environment

The primary noise source in the Project vicinity is traffic. Existing roadway noise levels were calculated for the roadway segments in the Project vicinity. This task was accomplished using the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) (see Attachment B) and traffic volumes from the Project's Traffic Impact Study (VRPA Technologies, Inc. 2020). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) used in the FHWA model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data shows that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along these roadway segments are presented in Table 2-3.

Table 2-3. Existing (Baseline) Traffic Noise Levels		
Roadway Segment	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway
<b>SR 198</b>		
South of Old Three Rivers Road	Residential and Commercial	58.4
Between Old Three River Road & Project Driveway	Residential and Commercial	58.4
North of Project Driveway	Residential and Commercial	58.4
<b>Old Three Rivers Road</b>		
East of SR 198	Residential	48.7

Source: Traffic noise levels were calculated by ECORP using the FHWA roadway noise prediction model in conjunction with the trip generation rate identified by VRPA Technologies, Inc. (2020). Refer to Attachment B for traffic noise modeling assumptions and results.

Note: A total of two intersections were analyzed in the Traffic Impact Study; roadway segments that impact sensitive receptors were included.

As shown, the existing traffic-generated noise level on Project-vicinity roadways currently ranges from 48.7 to 58.4 dBA CNEL. As previously described, CNEL is 24-hour average noise level with a 5 dBA “weighting” during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

The community of Three Rivers in the County of Tulare, which encompasses the Project site, is impacted by various noise sources. It is subject to both typical urban and rural noise, such as noise generated by traffic, heavy machinery, and day-to-day outdoor activities as well as noise generated from the various land uses (i.e., residential, commercial, and agricultural) throughout Three Rivers that generate stationary source noise. Mobile sources of noise, especially cars and trucks, are the most common source of noise in the community. The ambient noise environment in the County of Tulare is largely influenced by roadway noise. The Project site is located directly off SR 198, identified by the Tulare General Plan as one of two major regional state highways which traverse the County. The General Plan states that SR 198 connects from U.S. Highway 101 on the west and continues eastward to the County of Tulare, passing through the City of Visalia and into Sequoia National Park (Tulare 2012).

## **4.0 REGULATORY FRAMEWORK**

### **4.1 State**

#### **4.1.1 State of California General Plan Guidelines**

The State of California regulates vehicular and freeway noise affecting noise-sensitive land uses, sets standards for sound transmission and occupational noise control, and identifies noise insulation standards and airport noise/land-use compatibility criteria. The State of California General Plan Guidelines, published by the Office of Planning and Research (OPR 2003), also provides guidance for the acceptability of projects within specific CNEL/L<sub>dn</sub> contours. The guidelines also present adjustment factors that may be used in order to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community’s sensitivity to noise, and the community’s assessment of the relative importance of noise pollution.

#### **State OPR Noise Element Guidelines**

The State OPR Noise Element Guidelines include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The Noise Element Guidelines contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the CNEL.

### **4.2 Local**

#### **4.2.1 County of Tulare General Plan Health and Safety Element**

The Health and Safety Element of the General Plan provides policy direction for minimizing noise impacts in the County and for establishing noise control measures for construction and operation of land use



projects. By identifying noise-sensitive land uses and establishing compatibility guidelines for land use and noise, noise considerations will influence the general distribution, location, and intensity of future land use. The result is that effective land use planning and mitigation can alleviate the majority of noise problems.

The most basic planning strategy to minimize adverse impacts on new land uses due to noise is to avoid designating certain land uses at locations within the County that would negatively affect noise sensitive land uses. Uses such as schools, hospitals, childcare, senior care, congregate care, churches, and all types of residential use should be located outside of any area anticipated to exceed acceptable noise levels as defined by the Land Use Compatibility for Community Noise Environments table and pertinent goals and policies. Additionally, these uses should be protected from excess noise through sound attenuation measures such as site and architectural design and sound walls.

The County of Tulare has adopted these guidelines as a basis for planning decisions based on noise considerations. The land use compatibility guidelines are shown in Table 2-4. In the case that the noise levels identified at a proposed project site fall within levels considered normally acceptable, the project is considered compatible with the existing noise environment. The General Plan also identifies noise goals and policies set to minimize noise impacts within the County.

**Table 2-4. Land Use Compatibility for Community Noise Environments**

Land Use Category	Community Noise Exposure (Ldn or CNEL, dB)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low Density Single Family, Duplex, Mobile Homes	≤ 60	55 - 70	70 - 75	≥ 75
Residential – Multi-Family	≤ 65	60 - 70	70 - 75	≥ 75
Transient Lodging – Motels, Hotels	≤ 65	60 - 70	70 - 80	≥ 80
Schools, Libraries, Churches, Hospitals, Nursing Homes	≤ 70	60 - 70	70 - 80	≥ 80
Auditoriums, Concerts Halls, Amphitheaters	NA	≤ 70	NA	≥ 65
Sports Arenas, Outdoor Spectator Sports	NA	≤ 75	NA	≥ 70
Playgrounds, Neighborhood Parks	≤ 70	NA	68-75	≥ 73
Golf Courses, Riding Stables, Water Recreation, Cemeteries	≤ 75	NA	70 – 80	≥ 80
Office Buildings, Business Commercial and Professional	≤ 70	68 – 78	≥ 75	NA
Industrial, Manufacturing, Utilities, Agriculture	≤ 75	70 - 80	≥ 75	NA

Source: County of Tulare General Plan Health and Safety Element

Notes:

NA: Not Applicable; CNEL: Community Noise Equivalent Level

Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Normally Unacceptable – New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Outdoor areas must be shielded.

Clearly Unacceptable – New construction or development should generally not be undertaken.

The Public Health and Safety Element also contains goals and policies that must be used to guide decisions concerning land uses that are common sources of excessive noise levels. The following relevant and applicable goals and policies from the County's Health and Safety Element have been identified for the Project.

**Goal HS-8:** To protect County residents and visitors from the harmful effects of excessive noise while promoting the County economic base.

- **Policy HS-8.1 Economic Base Protection:** The County shall protect its economic base by preventing the encroachment of incompatible land uses on known noise-producing industries, railroads, airports, and other sources.
- **Policy HS-8.2 Noise Impacted Areas:** The County shall designate areas as noise-impacted if exposed to existing or projected noise levels that exceed 60 dB Ldn (or Community Noise Equivalent Level (CNEL)) at the exterior of buildings.

- **Policy HS-8.3 Noise Sensitive Land Uses:** The County shall not approve new noise sensitive uses unless effective mitigation measures are incorporated into the design of such projects to reduce noise levels to 60 dB Ldn (or CNEL) or less within outdoor activity areas and 45 dB Ldn (or CNEL) or less within interior living spaces.
- **Policy HS-8.4 Airport Noise Contours:** The County shall ensure new noise sensitive land uses are located outside the 60 CNEL contour of all public use airports.
- **Policy HS-8.5 State Noise Standards:** The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code (UBC). Title 24 requires that interior noise levels not exceed 45 dB Ldn (or CNEL) with the windows and doors closed within new developments of multi-family dwellings, condominiums, hotels, or motels. Where it is not possible to reduce exterior noise levels within an acceptable range the County shall require the application of noise reduction technology to reduce interior noise levels to an acceptable level.
- **Policy HS-8.6 Noise Level Criteria:** The County shall ensure noise level criteria applied to land uses other than residential or other noise-sensitive uses are consistent with the recommendations of the California Office of Noise Control (CONC).
- **Policy HS-8.8 Adjacent Uses:** The County shall not permit development of new industrial, commercial, or other noise-generating land uses if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas designated and zoned for residential or other noise-sensitive uses, unless it is determined to be necessary to promote the public health, safety and welfare of the County.
- **Policy HS-8.11 Peak Noise Generators:** The County shall limit noise generating activities, such as construction, to hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generating activities shall be allowed to occur outside of normal business hours without County approval.
- **Policy HS-8.13 Noise Analysis:** The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Health and Safety Element, where there is development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels (such as those referenced in Table 10-1 of the Health and Safety Element).
- **Policy HS-8.14 Sound Attenuation Features:** The County shall require sound attenuation features such as walls, berming, heavy landscaping, between commercial, industrial, and residential uses to reduce noise and vibration impacts.
- **Policy HS-8.15 Noise Buffering:** The County shall require noise buffering or insulation in new development along major streets, highways, and railroad tracks.
- **Policy HS-8.16 State Noise Insulation:** The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code.

- **Policy HS-8.17 Coordinate with Caltrans:** The County shall work with Caltrans to mitigate noise impacts on sensitive receptors near State roadways, by requiring noise buffering or insulation in new construction.
- **Policy HS-8.18 Construction Noise:** The County shall seek to limit the potential noise impacts of construction activities by limiting construction activities to the hours of 7 am to 7pm, Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors.
- **Policy HS-8.19 Construction Noise Control:** The County shall ensure that construction contractors implement best practices guidelines (i.e. berms, screens, etc.) as appropriate and feasible to reduce construction-related noise impacts on surrounding land uses.

## 5.0 IMPACT ASSESSMENT

### 5.1 Thresholds of Significance

The impact analysis provided below is based on the following California Environmental Quality Act Guidelines Appendix G thresholds of significance. The Project would result in a significant noise-related impact if it would meet any of the following criteria:

- 1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- 2) Generation of excessive groundborne vibration or groundborne noise levels.
- 3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would expose people residing or working in the project area to excessive noise levels.

For purposes of this analysis and where applicable, the County noise standards were used for evaluation of Project-related noise impacts.

### 5.2 Methodology

This analysis of the existing and future noise environments is based on noise prediction modeling and empirical observations. In order to estimate the worst-case construction noise levels that may occur at the nearest noise-sensitive receptors in the Project vicinity, predicted construction noise levels were calculated utilizing the FHWA's Roadway Construction Model (2006). Offsite transportation noise was calculated using the FHWA's Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels, coupled with traffic levels calculated by VRPA Technologies, Inc (2020). Onsite operational noise levels are addressed qualitatively with reference measurements previously taken by ECORP Consulting, Inc. Groundborne vibration levels associated with construction-related activities for the Project were evaluated utilizing typical groundborne vibration levels associated with construction equipment, obtained from the Caltrans guidelines set forth above. Potential groundborne vibration

impacts related to structural damage and human annoyance were evaluated, taking into account the distance from construction activities to nearby land uses.

### **5.2.1 Impact Analysis**

#### **Would the Project Result in Short-Term Construction-Generated Noise in Excess of County Noise Standards?**

Construction noise associated with the Proposed Project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., building construction, paving). Noise generated by construction equipment, including earthmovers, material handlers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive receptors in the vicinity of the construction site.

The nearest noise receptors to the Project site are the Comfort Inn and Suites located approximately 113 feet north of the Project site, a vacant commercial building located approximately 96 feet west of the Project parking lot at the nearest point, and a residence located across State Highway 198 from the site at approximately 270 feet to the west. Consistent with the recommendations of the FTA (2018) for assessing construction noise, such noise is measured from the center of the Project site to the nearest receptor. As previously described, per General Plan Safety Element policy HS-8.18, construction activity is exempted provided that noise generating activity does not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday. As mandated by General Plan policy HS-8.11, no peak noise generating activities shall be allowed to occur outside of normal business hours without County approval. In addition, General Plan Policy HS-8.19 requires construction noise control best practices to be implemented to minimize construction noise impacts.

To estimate the worst-case construction noise levels that may occur at the nearest noise-sensitive receptors in the Project vicinity, the construction equipment noise levels were calculated using the Roadway Noise Construction Model for the site preparation, grading and building construction, paving and architectural coating. The anticipated short-term construction noise levels generated for the necessary equipment is presented in Table 2-5.

For comparison purposes, Project construction noise is compared against the construction-related noise level threshold established in the Criteria for a Recommended Standard: Occupational Noise Exposure prepared in 1998 by the National Institute for Occupational Safety and Health (NIOSH). A division of the US Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The construction-related noise level threshold starts at 85 dBA for more than 8 hours per day; for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per

day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative threshold of 85 dBA  $L_{eq}$  is used as an acceptable threshold for construction noise at the nearby sensitive receptors. Since this construction-related noise level threshold represents the energy average of the noise source over a given time period, the noise level is expressed in  $L_{eq}$ . As stated previously, the nearest noise-sensitive receptor is located approximately 190 feet from the center of the Project site. As shown in Table 2-5, the predicted maximum eight-hour noise levels at the vacant commercial building to the west could potentially reach approximately 74.4 dBA  $L_{eq}$ , which is below the NIOSH threshold of 85 dBA. Thus, construction noise would reach even lower levels at the Comfort Inn and Suites and the nearest residence.

<b>Table 2-5. Construction Average (dBA) Noise Levels at Nearest Receptor</b>			
<b>Equipment</b>	<b>Estimated Exterior Construction Noise Level @ Nearest Residence (dBA <math>L_{eq}</math>)</b>	<b>NIOSH Construction Noise Standards (dBA <math>L_{eq}</math>)</b>	<b>Exceeds Standard at Nearest Sensitive Receptor?</b>
<b>Site Preparation</b>			
Grader	69.4	85	No
Scraper	68.0	85	No
Tractor/ Loader/ Backhoe	62.0	85	
<b>Combined Site Preparation Equipment</b>	<b>72.2</b>	85	<b>No</b>
<b>Grading</b>			
Rubber Tired Dozers	66.1	85	No
Graders	69.4	85	No
Tractors/Loaders/Backhoes (2)	62.0 (each)	85	No
<b>Combined Grading Equipment</b>	<b>72.0</b>	85	<b>No</b>
<b>Building Construction/ Paving/ Architectural Coating</b>			
Crane	61.0	85	No
Forklifts (2)	63.5 (each)	85	No
Generator Set	66.0	85	No
Tractors/Loaders/Backhoes (2)	62.0 (each)	85	No
Welders (3)	58.4	85	No
Cement and Mortar Mixer	63.2	85	
Paver	62.6	85	No
Rollers (2)	61.4 (each)	85	No
Paving Equipment	62.6	85	No
Air Compressors	66.3	85	No
<b>Combined Building Equipment</b>	<b>74.4</b>	85	<b>No</b>

Source: Construction noise levels were calculated by ECORP Consulting, Inc. using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Attachment A for Model Data Outputs.

Notes: Construction equipment used during construction derived from CalEEMod 2016.3.2. CalEEMod is designed to calculate air pollutant emissions from construction activity and contains default construction equipment and usage parameters for typical construction projects based on several construction surveys conducted in order to identify such parameters. The distance to the nearest sensitive receptor was calculated from the center of the Project site consistent with FTA (2018) recommendations (approximately 190 feet). Building construction, paving and architectural coating are assumed to occur simultaneously.

As shown, no individual piece of construction equipment or cumulative construction equipment would exceed the NOISH threshold of 85 dBA at the closest residence.

Therefore, Project construction activities would not expose persons to and generate noise levels in excess of NOISH standards and all construction activities would occur during the times permitted by the County.

**Would the Project Result in a Substantial Permanent Increase in Ambient Noise Levels in Excess of County Standards During Operations?**

As previously described, noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise sensitive and may warrant unique measures for protection from intruding noise. The nearest noise receptors to the Project site are the Comfort Inn and Suites located approximately 113 feet north of the Project site, a vacant commercial building located approximately 96 feet west of the Project site, and a residence located across State Highway 198 at approximately 270 feet to the west. Distance to the adjacent hotel and vacant commercial building was measured to the nearest point of each physical building from the Project property line.

*Project Operational Offsite Traffic Noise*

Future traffic noise levels throughout the Project vicinity (i.e., vicinity roadway segments that traverse noise sensitive residential land uses) were modeled using the FHWA's Highway Noise Prediction Model (FHWA-RD-77-108) and based on the traffic volumes identified by VRPA Technologies, Inc. (2020) to determine the noise levels along Project vicinity roadways. Table 2-6 shows the calculated offsite roadway noise levels under existing traffic levels compared to existing traffic levels plus the Project. The calculated noise levels as a result of the Project at affected sensitive land uses are compared to the operational noise standards in the County General Plan (Policy HS-8.3). In the case that the existing ambient noise levels already exceed the applicable numeric noise threshold, an increase of more than 5 dBA over the existing ambient noise level is considered significant. As previously described, a change in level of at least 5 dBA is required before any noticeable change in community response would be expected.

**Table 2-6. Existing Plus Project Conditions - Predicted Traffic Noise Levels**

Roadway Segment	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway		Noise Standard (dBA CNEL)	Exceed Standard/ Significant Impact?
		Existing Conditions	Existing + Project Conditions		
SR 198					
South of Old 3 Rivers Road	Residential and Commercial	58.4	58.6	60	No
Between Old 3 Rivers Road and Project Driveway	Residential and Commercial	58.4	58.5	60	No
North of Project Driveway	Residential and Commercial	58.4	58.4	60	No
Old Three River Road					
East of SR 198	Residential	48.7	48.7	60	No

Source: Traffic noise levels were calculated by ECORP Consulting using the FHWA's Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels in conjunction with the trip generation rate identified by VRPA Technologies, Inc. 2020. Refer to Attachment B for traffic noise modeling assumptions and results.

Notes: A total of 2 intersections were analyzed in the Traffic Impact Study; however, all roadway segments that impact sensitive receptors were included for the purposes of this analysis.

As shown in Table 2-6, predicted increase in traffic noise levels associated with the Project would be less than the County noise standards.

### Operational Stationary Noise

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Hotel uses, such as those proposed by the Project, are not typically associated with excessive, ongoing operations-related noise that would lead to substantial permanent increases in ambient noise levels. Instead, much of the operational stationary noise generated by the Project would be voices and maneuvering vehicles as hotel guests move in and out of the parking lot. Parking lot noise will be the focus of the operational noise analysis due to their proximity to the existing residences and hotel.

The loudest source of noise associated with the proposed hotel would be parking lot noise. Previous measurements were taken by ECORP staff during a weekday in the middle of a parking lot serving a large grocery store identified noise levels reaching 61.1 dBA at approximately 5 feet distant. These measurements were taken with a Larson Davis SoundExpert LxT precision sound level meter, which satisfies the American National Standards Institute for general environmental noise measurement instrumentation. Prior to the measurements, the SoundExpert LxT sound level meter was calibrated according to manufacturer specifications with a Larson Davis CAL200 Class I Calibrator. The proposed hotel would not be expected to generate noise levels at the same intensity as a large grocery store and therefore this reference noise applied to the Project is conservative.



The Project is proposing the development of a 105-room hotel. As stated previously, the parking lot would be the main source of stationary noise. Based on prior parking lot noise measurements taken by ECORP staff, the Project parking lot is conservatively estimated to reach a maximum noise level of 61.1 dBA, as explained above.

As previously stated, the two nearest noise receptors to the Project site are the Comfort Inn and Suites hotel building, located approximately 113 feet north of the Project site and the vacant commercial building, located approximately 96 feet west of the Project parking lot at the nearest point. The vacant commercial building is located in close proximity to the Proposed Project boundary. However, as previously stated, noise attenuates a rate of approximately six dB for each doubling of distance from a stationary or point source (FHWA 2011). Considering the conservative parking lot noise measurement of 61.1 dBA at approximately five feet distant, the nearest noise-sensitive receptor, the vacant commercial building located 96 feet away from the Proposed Project Parking lot, would experience operational stationary noise levels of below 35.5 dBA. This falls below the County of Tulare operational noise threshold of 60 dBA (Policy HS-8.8).

As previously stated, the manner in which older homes and buildings for lodging in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). Thus, exterior noise levels of 37.1 could be expected to at least 20 dBA less in interior.

Thus, the Proposed Project would not result in noise levels in excess of County noise standards. The Project would have a less than significant impact in this area.

#### *Land Use Compatibility*

The County of Tulare provides a Land Use Compatibility Table to gauge the compatibility of new land uses (the Proposed Project) relative to existing noise levels. As shown in Table 2-4 above, the General Plan identifies normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for various land uses; including hotels and motels such as that proposed by the Project. In the case that the noise levels identified at the Project site fall within levels considered normally acceptable, the Project is considered compatible with the existing noise environment. As shown in Table 2-4, a clearly compatible noise level for locating hotel uses is anything 65 dBA and under. Additionally, General Plan Health and Safety Element Policy HS-8.5 limits exterior noise levels at hotels to 60 dBA CNEL and interior noise level within hotels to 45 dBA CNEL.

The predominate noise source in the Project vicinity is generated by traffic on SR 198. As shown in Table 2-6 above, traffic noise would not exceed 60 dBA under existing plus Project conditions.

Furthermore, the primary stationary noise source emitted from the adjacent hotel and vacant commercial building (if use was to resume) would be parking lot noise. As mentioned previously, previous measurements were taken by ECORP staff during a weekday in the middle of a parking lot serving a large grocery store identified noise levels reaching 61.1 dBA at approximately 5 feet distant. Considering the attenuation of sound with distance and the reduction of exterior-to-interior noise levels provided by

building walls, the noise experienced inside the proposed new hotel would be significantly less than 61.1 dBA. Thus, noise emitted from the adjacent hotel and commercial building would not exceed 65 dBA.

Therefore, the Project is considered a compatible land use with the adjacent hotel and vacant commercial building, both in terms of commercial land use class and in terms of noise falling in the normally compatible range for hotels and motels. Thus, the proposed and existing land uses are considered compatible.

### **Would the Project Expose Structures to Substantial Groundborne Vibration During Construction?**

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Once operational, the Project would not be a source of groundborne vibration. Increases in groundborne vibration levels attributable to the Proposed Project would be primarily associated with short-term, construction-related activities. Construction on the Project site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. Pile drivers are not anticipated to be necessary for Project construction in the case of the Proposed Project. Vibration decreases rapidly with distance and it is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with typical construction equipment are summarized in Table 2-7.

The County of Tulare does not regulate construction vibration. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020) recommended standard of 0.2 inch per second PPV with respect to the prevention of structural damage for normal buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings.

<b>Table 2-7. Representative Vibration Source Levels for Construction Equipment</b>	
<b>Equipment Type</b>	<b>Peak Particle Velocity at 20 Feet (inches per second)</b>
Large Bulldozer	0.124
Caisson Drilling	0.124
Loaded Trucks	0.106
Rock Breaker	0.115
Jackhammer	0.049
Small Bulldozer/Tractor	0.004

Source: FTA 2018; Caltrans 2020

It is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to the nearest structure. The nearest structure of concern to the construction site is a vacant commercial building with the closest physical building being approximately 20 feet away from the Project site boundary. Based on the vibration levels presented in Table 2-7, ground vibration generated by heavy-duty equipment would not be anticipated to exceed approximately 0.124 inch per second PPV at 20 feet. Thus, the nearby structures would not be negatively affected.

### **Would the Project Expose Structures to Substantial Groundborne Vibration During Operations?**

Project operations would not include the use of any stationary equipment that would result in excessive groundborne vibration levels.

### **Would the Project Expose People Residing or Working in the Project area to Excessive Airport Noise?**

The Project site is located approximately 10.22 miles east of the City of Woodlake Airport, located in the City of Woodlake. Although aircraft flight patterns may cover Three Rivers, noise from aircrafts is not a significant issue in the community. As shown in the Tulare General Plan, the community of Three Rivers is well outside of the airport zone. Aircraft noise does not significantly impact the community of Three Rivers and the Proposed Project would not expose people visiting or working on the Project site to excess airport noise levels.

## **5.2.2 Cumulative Noise Impacts?**

### **Cumulative Construction Noise**

Construction activities associated with the Proposed Project and other construction projects in the area may overlap, resulting in construction noise in the area. However, construction noise impacts primarily affect the areas immediately adjacent to the construction site. Construction noise for the Proposed Project was determined to be less than significant following compliance with the County General Plan's construction timing and construction noise control guidelines. Per the General Plan, construction is to be limited to the hours of 7 am to 7 pm, Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors. Further, the County requires noise construction control per policy HS 8.19. In addition, the individual Project would not exceed the NOISH construction noise standard prior to implementation of construction noise control.

Cumulative development in the vicinity of the Project site could result in elevated construction noise levels at sensitive receptors in the Project area. However, each project would be required to comply with the applicable County General Plan limitations on allowable hours of construction and the NOISH construction noise limits. Therefore, the Project would not contribute to cumulative impacts and impacts in this regard are not cumulatively considerable.

### **Cumulative Operational Noise**

Cumulative long-term noise sources associated with development at the Project, combined with other cumulative projects, could cause local noise level increases. Noise levels associated with the Proposed Project and related cumulative projects together could result in higher noise levels than considered separately. The Project is the construction of a hotel. Operations of the Proposed Project would not result in any substantial changes in the noise environment due to onsite sources. Noise increase as a result of the Project would not exceed County standards. In addition, with implementation of the measures required by Policies HS- 8.14, HS 8.15, HS 8.16, HS 8.17, HS 8.18, and HS 8.19 of the General Plan, Project noise would be further controlled. Therefore, the Project would not contribute to cumulative impacts during operations.

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## **LIST OF ATTACHMENTS**

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Attachment A – Roadway Construction Noise Model Outputs – Project Construction Noise

Attachment B – Federal Highway Administration Roadway Traffic Noise Model Outputs – Project Traffic Noise

Federal Highway Administration Roadway Construction Noise Model Outputs – Project  
Construction Noise

## Roadway Construction Noise Model (RCNM), Version 1.1

**Report date:** 7/10/2020

**Case Description:** Site Prep

**Description**      **Land Use**

Residence / small b Residential

Description			Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85		160	0
Scraper	No	40		83.6	160	0
Backhoe	No	40		77.6	160	0

### Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	74.9	<b>70.9</b>
Scraper	73.5	<b>69.5</b>
Backhoe	67.5	<b>63.5</b>
Total	74.9	<b>73.7</b>

\*Calculated Lmax is the Loudest value.



## Roadway Construction Noise Model (RCNM), Version 1.1

**Report date:** 7/10/2020  
**Case Description:** Grading

**Description**                      **Land Use**  
 Reidence / Small Business    Residential

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Dozer	No	40		81.7	160	0
Grader	No	40	85		160	0
Backhoe	No	40		77.6	160	0
Backhoe	No	40		77.6	160	0

Results		
Calculated (dBA)		
Equipment	*Lmax	Leq
Dozer	71.6	<b>67.6</b>
Grader	74.9	<b>70.9</b>
Backhoe	67.5	<b>63.5</b>
Backhoe	67.5	<b>63.5</b>
Total	74.9	<b>73.5</b>

\*Calculated Lmax is the Loudest value.

## Roadway Construction Noise Model (RCNM), Version 1.1

**Report date:** 7/10/2020  
**Case Description:** Const. / Paving / Arch. Coating

**Description**                      **Land Use**  
 Residence / Small Business      Residential

Description			Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16		80.6	160	0
Front End Loader	No	40		79.1	160	0
Generator	No	50		80.6	160	0
Front End Loader	No	40		79.1	160	0
Backhoe	No	40		77.6	160	0
Backhoe	No	40		77.6	160	0
Welder / Torch	No	40		74	160	0
Welder / Torch	No	40		74	160	0
Welder / Torch	No	40		74	160	0
Concrete Mixer Truck	No	40		78.8	160	0
Paver	No	50		77.2	160	0
Roller	No	20		80	160	0
Roller	No	20		80	160	0
Paver	No	50		77.2	160	0
Pumps	No	50		80.9	160	0

### Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	70.4	62.5

Front End Loader	69	<b>65</b>
Generator	70.5	<b>67.5</b>
Front End Loader	69	<b>65</b>
Backhoe	67.5	<b>63.5</b>
Backhoe	67.5	<b>63.5</b>
Welder / Torch	63.9	<b>59.9</b>
Welder / Torch	63.9	<b>59.9</b>
Welder / Torch	63.9	<b>59.9</b>
Concrete Mixer Truck	68.7	<b>64.7</b>
Paver	67.1	<b>64.1</b>
Roller	69.9	<b>62.9</b>
Roller	69.9	<b>62.9</b>
Paver	67.1	<b>64.1</b>
Pumps	70.8	<b>67.8</b>
Total	70.8	<b>75.9</b>

\*Calculated Lmax is the Loudest value.

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Federal Highway Administration Roadway Traffic Noise Model Outputs – Project Traffic Noise

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 2020-090  
Project Name: Hampton Inn & Suites Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
Source of Traffic Volumes: VRPA 2020  
Community Noise Descriptor: L<sub>dn</sub>: CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

														Traffic Volumes				
Analysis Condition	Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway					Calc Dist	Day	Eve	Night	
							Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour								
									70 CNEL	65 CNEL	60 CNEL	55 CNEL						
Existing																		
SR 198																		
South of Old Three Rivers Rd.		2	0	5,153	45	0.5	1.8%	0.7%	58.4	-	36	78	167	100	4,003	654	495	
Between Old Three River Rd. & Project Driveway		2	0	5,202	45	0.5	1.8%	0.7%	58.4	-	36	78	168	100	4,042	661	499	
North of Project Driveway		2	0	5,211	45	0.5	1.8%	0.7%	58.4	-	36	78	169	100	4,049	662	500	
Old Three Rivers Rd.																		
East of SR 198		2	0	558	45	0.5	1.8%	0.7%	48.7	-	-	-	38	100	434	71	54	

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 2020-090  
Project Name: Hampton Inn & Suites Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
Source of Traffic Volumes: VRPA 2020  
Community Noise Descriptor: L<sub>dn</sub>: CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

														Traffic Volumes				
Analysis Condition	Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway					Calc Dist	Day	Eve	Night	
							Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour								
									70 CNEL	65 CNEL	60 CNEL	55 CNEL						
Existing + Project																		
SR 198																		
South of Old Three Rivers Rd.		2	0	5,481	45	0.5	1.8%	0.7%	58.6	-	38	81	174	100	4,259	696	526	
Between Old Three River Rd. & Project Driveway		2	0	5,337	45	0.5	1.8%	0.7%	58.5	-	37	79	171	100	4,147	678	512	
North of Project Driveway		2	0	5,270	45	0.5	1.8%	0.7%	58.4	-	37	79	170	100	4,094	669	506	
Old Three Rivers Rd.																		
East of SR 198		2	0	558	45	0.5	1.8%	0.7%	48.7	-	-	-	38	100	434	71	54	

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 2020-090  
Project Name: Hampton Inn & Suites Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
Source of Traffic Volumes: VRPA 2020  
Community Noise Descriptor: L<sub>dn</sub>: CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

														Traffic Volumes				
Analysis Condition	Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway					Calc Dist	Day	Eve	Night	
							Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour								
70 CNEL							65 CNEL	60 CNEL	55 CNEL									
Buildout NO Project																		
SR 198																		
South of Old Three Rivers Rd.		2	0	7,295	45	0.5	1.8%	0.7%	59.9	-	45	98	211	100	5,668	926	700	
Between Old Three River Rd. & Project Driveway		2	0	6,894	45	0.5	1.8%	0.7%	59.6	-	44	94	203	100	5,357	876	662	
North of Project Driveway		2	0	7,448	45	0.5	1.8%	0.7%	60.0	-	46	99	214	100	5,787	946	715	
Old Three Rivers Rd.																		
East of SR 198		2	0	1,899	45	0.5	1.8%	0.7%	54.0	-	-	40	86	100	1,476	241	182	

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Project Number: 2020-090  
Project Name: Hampton Inn & Suites Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.  
Source of Traffic Volumes: VRPA 2020  
Community Noise Descriptor: L<sub>dn</sub>: CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

														Traffic Volumes				
Analysis Condition	Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Centerline of Roadway					Calc Dist	Day	Eve	Night	
							Medium Trucks	Heavy Trucks	CNEL at 100 Feet	Distance to Contour								
									70 CNEL	65 CNEL	60 CNEL	55 CNEL						
Buildout with Project																		
SR 198																		
South of Old Three Rivers Rd.		2	0	7,614	45	0.5	1.8%	0.7%	60.0	-	47	101	217	100	5,916	967	731	
Between Old Three River Rd. & Project Driveway		2	0	7,124	45	0.5	1.8%	0.7%	59.8	-	45	96	208	100	5,535	905	684	
North of Project Driveway		2	0	7,511	45	0.5	1.8%	0.7%	60.0	-	46	100	215	100	5,836	954	721	
Old Three Rivers Rd.																		
East of SR 198		2	0	1,899	45	0.5	1.8%	0.7%	54.0	-	-	40	86	100	1,476	241	182	



# Attachment “E”

## Traffic

# Three Rivers Hampton Inn & Suites

## Traffic Impact Study Report June 2020

**Prepared by:**

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## Three Rivers Hampton Inn & Suites Traffic Impact Study

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## Executive Summary

This Traffic Impact Study (TIS) has been prepared for the purpose of analyzing traffic conditions related to the Three Rivers Hampton Inn & Suites Development (Project). The Project seeks to develop a 105-room hotel to be located off of State Route (SR) 198 (Sierra Drive), approximately 1,100 feet north of Old 3 Rivers Road in the Three Rivers Community.

Three Rivers is located in the Kaweah River canyon, just above Lake Kaweah, approximately 28 miles east of the City of Visalia. Three Rivers' name comes from its location near the junction of the North, Middle, and South Forks of the Kaweah River. The surrounding terrain is marked by oak woodland forest and foothills. Three Rivers is located in the northern portion of Tulare County at an elevation of 825 feet above sea level with a total area of 45.4 square miles. Three Rivers is the gateway town for the Ash Mountain Main Entrance to Sequoia-Kings Canyon National Park, home of the Giant Sequoia trees.

### IMPACTS

#### Intersections

Table E-1 shows the anticipated level of service conditions at study intersections for the Existing through the Cumulative Year 2042 Plus Project scenarios. Results of the analysis show that levels of service at the SR 198 (Sierra Drive) and Project Driveway and SR 198 (Sierra Drive) and Old 3 Rivers Road intersections will not exceed target LOS 'D' for all the study scenarios. Therefore, no mitigation measures are required to achieve acceptable levels of service. It should be noted that the Project Driveway along SR 198 (Sierra Drive) must meet Tulare County and Caltrans standards.

**Table E-1**  
**Intersection Operations**

INTERSECTION	CONTROL	TARGET LOS	PEAK HOUR		EXISTING		EXISTING PLUS PROJECT		NEAR-TERM PLUS PROJECT		CUMULATIVE YEAR 2042 WITHOUT PROJECT		CUMULATIVE YEAR 2042 PLUS PROJECT	
					DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
1. SR 198 (Sierra Drive) / Project Driveway	One-Way Stop Sign	D	Saturday	Midday	11.2	B	13.1	B	13.8	B	13.0	B	16.5	C
				PM	9.8	A	16.0	C	17.8	C	10.5	B	22.4	C
			Sunday	Midday	12.9	B	12.9	B	13.7	B	15.6	C	15.4	C
				PM	11.1	B	13.5	B	14.5	B	11.8	B	14.6	B
2. SR 198 (Sierra Drive) / Old 3 Rivers Road	One-Way Stop Sign	D	Saturday	Midday	14.3	B	15.0	C	20.5	C	22.8	C	24.8	C
				PM	13.5	B	14.0	B	27.6	D	31.1	D	33.9	D
			Sunday	Midday	14.8	B	15.4	C	18.1	C	21.2	C	22.4	C
				PM	12.3	B	12.7	B	18.1	C	18.9	C	19.9	C

DELAY is measured in seconds

LOS = Level of Service

For one-way controlled intersections, delay results show the delay for the worst movement.

### CEQA Environmental Checklist

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. Implementation of the Project result in a significant impact if it would:

- ✓ Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

**Less Than Significant** - An important goal is to maintain acceptable levels of service along the highway, street, and road network. To accomplish this, Tulare County RMA and Caltrans adopt minimum levels of service in an attempt to control congestion that may result as new development occurs. Tulare County's 2030 General Plan, policy number TC-1.16, identifies a minimum LOS standard of "D" on the County roadway system (both segments and intersections). Caltrans' SR-198 Transportation Concept Report (TCR) identifies the 2040 concept as LOS "D".

Results of the analysis show that the proposed Project will not exceed the minimum LOS standard of "D" as shown in Tables 2-1 and 3-2.

The Project does not conflict with any applicable adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Tulare County Area Transit (TCaT) Route 30 (Northeast County Route) operates between the Three Rivers Memorial Building and the Visalia Transit Center in downtown Visalia. Route 30 provides 4 roundtrips to the Visalia Transit Center on weekdays and 1 roundtrip on the weekend, all at 4-hour intervals. Implementation of the Project will not hinder the operation of Route 30 in the Three Rivers Community.

Caltrans' SR 198 TCR indicated that bicycles are permitted along the SR 198 corridor in the Three Rivers Community. The proposed Project will not prohibit the use of bicycles along SR 198. The SR 198 TCR also indicates that pedestrian facilities are nonexistent in the Three Rivers community. The Project will comply with Tulare County General Plan goals, which include Bicycle/Pedestrian Trail System (TC-5.1) and Consideration of Non-Motorized Modes in Planning and Development (TC-5.2).

Therefore, the Project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. Therefore, no mitigation is needed.

- ✓ Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

**Less Than Significant Impact** - In the fall of 2013, Senate Bill 743 (SB 743) was passed by the

legislature and signed into law by the governor. For California, this legislation will eventually change the way that transportation studies are conducted for environmental documents. Delay-based metrics such as roadway capacity and level of service will no longer be the performance measures used for the determination of the transportation impacts of projects in studies conducted under CEQA. Instead, new performance measures such as vehicle miles travelled (VMT) or other similar measures will be used.

July 1, 2020 is the statewide implementation date and agencies may opt-in use of new metrics prior to that date. Therefore, the traffic analysis currently follows current practice regarding state and local guidance as of the date of preparation.

Tourism is the largest and most important industry in the Three Rivers area, as the town is situated near Sequoia National Forest, which receives over 1.2 million annual visitors, and Kings Canyon National Park, which receives nearly 700,000 annual visitors. The industries and businesses surrounding Three Rivers are almost all related to visitors passing through, en route to the Sequoia National Forest and Kings Canyon National Park. The Three Rivers Community and surrounding area features a multitude of boutique lodging facilities, restaurants, and small retail shops to support the area's small population and transient travelers.

The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable accommodations or stay in properties located outside the market area. Seeking accommodations outside of the desired market area increases VMT since travelers would be forced to travel longer distances to secure accommodations. The development of the Project would reduce the unaccommodated demand, thus reducing VMT in the market area. Therefore, no mitigation is needed.

- ✓ Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (eg., farm equipment)?

**Less Than Significant Impact** - The Project would not result in hazards due to design features, since all proposed improvements (Project Driveway) would be built to County design standards. Access to the proposed Project will be provided at one (1) driveway along SR 198 (Sierra Drive), which is an existing driveway within Tulare County jurisdiction. Internal traffic and parking operations will be designed in accordance with Tulare County design standards. The proposed Project seeks to utilize a plot of relatively undeveloped land for a hotel with approximately 105 rooms in a rural area surrounded by rural/agricultural residences. The Project would not increase the use of farm equipment on streets and roads in the Three Rivers Community. As a result, the Project will not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Therefore, no mitigation is needed.



- ✓ Result in inadequate emergency access?

***Less Than Significant Impact*** - The Project would not result in any degradation of emergency access within the community. Congestion at an intersection or along a roadway can adversely impact emergency access. Results of the traffic analysis shows that all of the study intersections and roadway segments will meet Tulare County's and Caltrans' LOS "D" criteria through the year 2042. As a result, the Project will not result in inadequate emergency access. Therefore, no mitigation is needed.

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## 1.0 Introduction

### 1.1 Description of the Region/Project

This Traffic Impact Study (TIS) has been prepared for the purpose of analyzing traffic conditions related to the Three Rivers Hampton Inn & Suites Development (Project). The Project seeks to develop a 105-room hotel to be located off of State Route (SR) 198 (Sierra Drive), approximately 1,100 feet north of Old 3 Rivers Road in the Three Rivers Community.

Three Rivers is located in the Kaweah River canyon, just above Lake Kaweah, approximately 28 miles east of the City of Visalia as shown in Figure 1-1. Three Rivers' name comes from its location near the junction of the North, Middle, and South Forks of the Kaweah River. The surrounding terrain is marked by oak woodland forest and foothills. Three Rivers is located in the northern portion of Tulare County at an elevation of 825 feet above sea level with a total area of 45.4 square miles. Three Rivers is the gateway town for the Ash Mountain Main Entrance to Sequoia-Kings Canyon National Park, home of the Giant Sequoia trees.

#### 1.1.1 Project Access

The Project will have one (1) driveway along SR 198, approximately 1,100 feet to the north of Old 3 Rivers Road.

#### 1.1.2 Study Area

The Project location is shown in Figure 1-2 and the Project site plan is provided in Appendix A. The following intersections analyzed in this TIS are shown in Figure 1-2 and include:

#### Intersections

- ✓ SR 198 (Sierra Drive) and Project Driveway
- ✓ SR 198 (Sierra Drive) and Old 3 Rivers Road

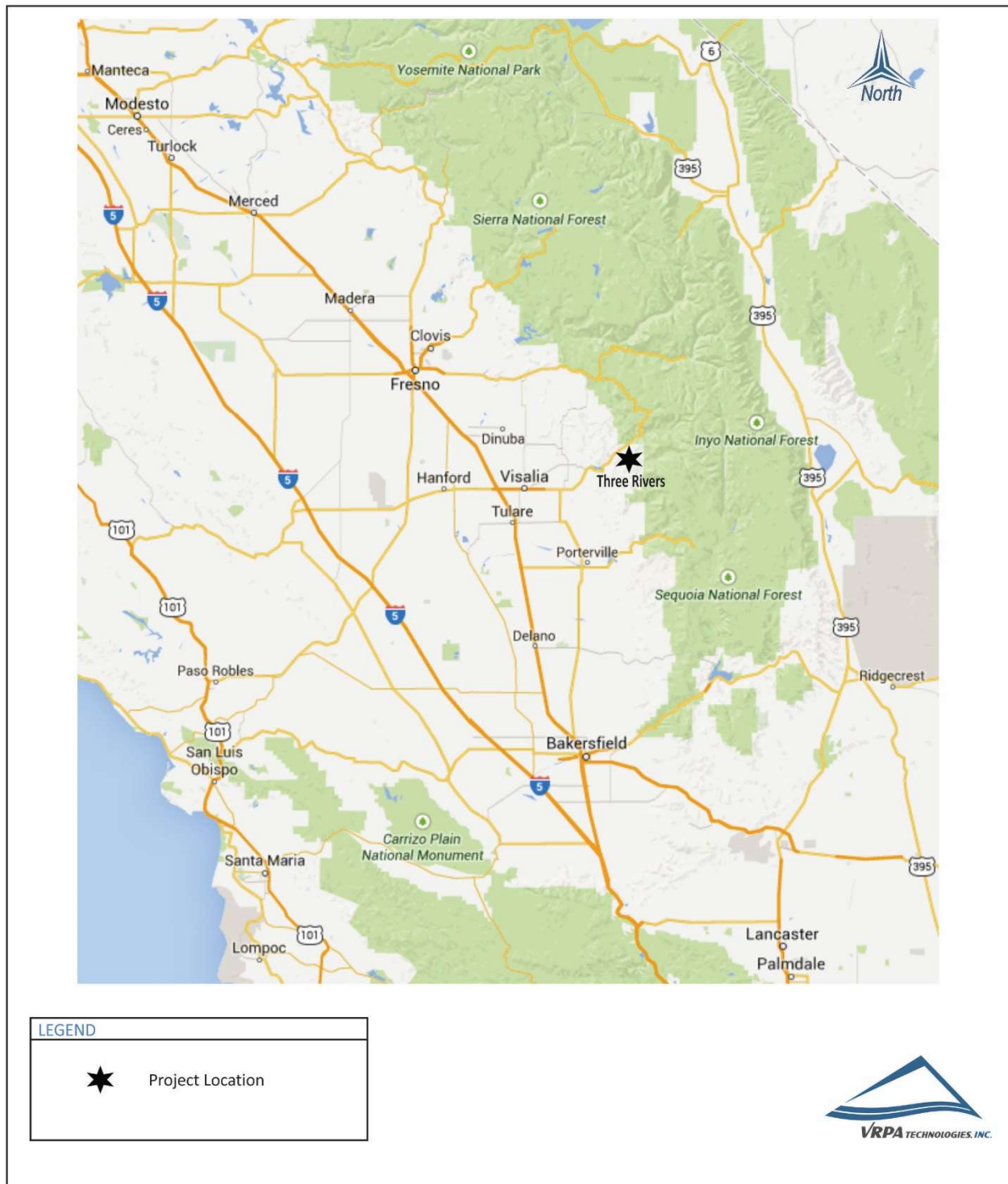
#### 1.1.3 Study Scenarios

The TIS completed for the proposed Project includes level of service (LOS) analysis for the following traffic scenarios:

- ✓ Existing
- ✓ Existing Plus Project
- ✓ Near-Term Plus Project
- ✓ Cumulative Year 2042 Without Project
- ✓ Cumulative Year 2042 Plus Project

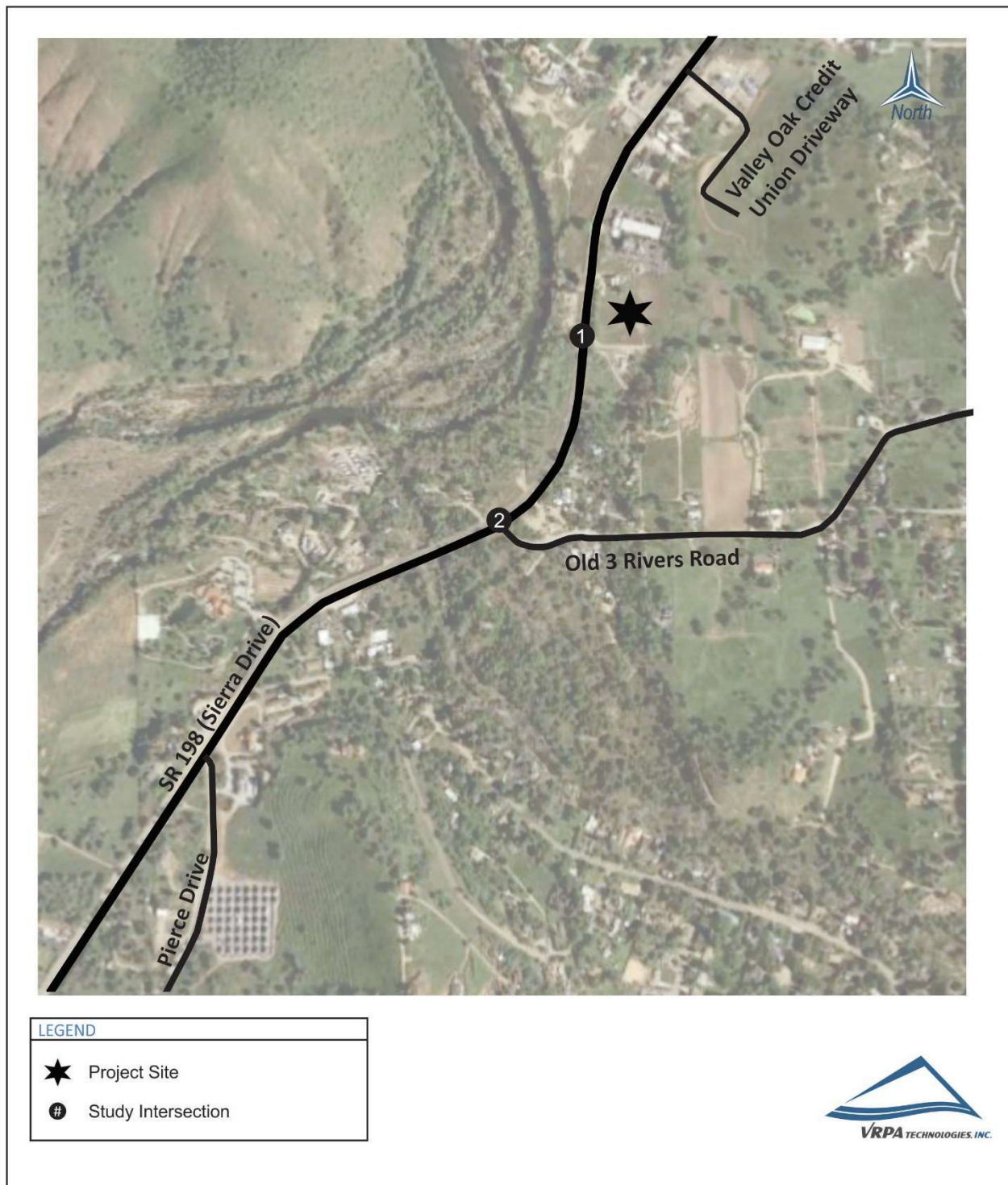
## Three Rivers Hampton Inn & Suites Regional Location

Figure  
1-1



**Three Rivers Hampton Inn & Suites**  
**Project Location**

**Figure**  
**1-2**



## 1.2 Methodology

When preparing a TIS, guidelines set by affected agencies are followed. In analyzing street and intersection capacities the Level of Service (LOS) methodologies are applied. LOS standards are applied by transportation agencies to quantitatively assess a street and highway system's performance. In addition, safety concerns are analyzed to determine the need for appropriate mitigation resulting from increased traffic near sensitive uses and other evaluations such as the need for signalized intersections or other improvements.

### 1.2.1 Intersection Analysis

Intersection LOS analysis was conducted using the Synchro 10 software program. Synchro 10 supports the Highway Capacity Manual (HCM) 6<sup>th</sup> Edition methodologies and is an acceptable program by Tulare County and Caltrans staff for assessment of traffic impacts. Levels of Service can be determined for both signalized and unsignalized intersections. The existing study intersections are currently unsignalized.

Tables 1-1 indicates the ranges in the amounts of average delay for a vehicle at unsignalized intersections for the various levels of service ranging from LOS "A" to "F".

Intersection turning movement counts and roadway geometrics used to develop LOS calculations were obtained from field review findings and count data provided from the traffic count sources identified in Section 2.1.

When an unsignalized intersection does not meet acceptable LOS standards, the investigation of the need for a traffic signal shall be evaluated. The California Manual on Uniform Traffic Control Devices (California MUTCD) introduces standards for determining the need for traffic signals. The California MUTCD indicates that the satisfaction of one or more traffic signal warrants does not in itself require the installation of a traffic signal. In addition to the warrant analysis, an engineering study of the current or expected traffic conditions should be conducted to determine whether the installation of a traffic signal is justified. The California MUTCD Peak Hour Warrant (Warrant 3) will be used, as necessary, to determine if a traffic signal is warranted at the unsignalized intersection that falls below current LOS standards.

## 1.3 Policies to Maintain Level of Service

An important goal is to maintain acceptable levels of service along the highway, street, and road network. To accomplish this, Tulare County and Caltrans adopt minimum levels of service in an attempt to control congestion that may result as new development occurs.

Tulare County's 2030 General Plan, policy number TC-1.16, identifies a minimum LOS standard of D on the County roadway system (both segments and intersections).



Based on guidance from Caltrans, the LOS for operating State highway facilities is based on Measures of Effectiveness (MOE) identified in the Highway Capacity Manual (HCM). Caltrans endeavors to maintain a target LOS at the transition between LOS “C” and LOS “D” on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than this target LOS, the existing MOE should be maintained. In general, the region-wide goal for an acceptable LOS on all freeways, roadways segments, and intersections is “D”. For undeveloped or not densely developed locations, the goal may be to achieve LOS “C”.

Given the LOS standards of the various agencies in the Project area, the goal of the Project is to provide LOS results that meet the minimum LOS “C” for Caltrans facilities and LOS “D” for County facilities for all intersections and segments. However, due to the location of the Kaweah River and topographical challenges, Caltrans’ SR-198 Transportation Concept Report (TCR) identifies the 2040 concept as LOS “D”. This target level of service is consistent with the Tulare County General Plan minimum LOS standard of “D”. Caltrans District 6 staff confirmed by email on September 6, 2016 that “reference to the 2040 concept with a LOS D means that Caltrans will accept LOS “D” on this segment of SR 198 in 2040”. This TIS, therefore, will utilize a minimum LOS standard of “D” for the County and Caltrans on SR 198 in the Three Rivers Urban Development Boundary (UDB).

**Table 1-1**  
**Unsignalized Intersections**  
**Level of Service Definitions**  
**(Highway Capacity Manual)**

LEVEL OF SERVICE	DEFINITION		AVERAGE TOTAL DELAY (sec/veh)
A	No delay for stop-controlled approaches.		0 - 10.0
B	Describes operations with minor delay.		> 10.0 - 15.0
C	Describes operations with moderate delays.		> 15.0 - 25.0
D	Describes operations with some delays.		> 25.0 - 35.0
E	Describes operations with high delays and long queues.		> 35.0 - 50.0
F	Describes operations with extreme congestion, with very high delays and long queues unacceptable to most drivers.		> 50.0



## 2.0 Existing Conditions

### 2.1 Existing Traffic Counts and Roadway Geometrics

The first step toward assessing Project traffic impacts is to assess existing traffic conditions. Typically, existing peak hour counts are collected in the study area for purposes of evaluating existing conditions. However, the present COVID-19 pandemic has altered travel patterns in the State of California, especially with the closure of the Sequoia-Kings Canyon National Park. As a result, existing traffic counts would be skewed and wouldn't reflect typical travel patterns in the study area. 2018 Traffic counts in the study area were used to evaluate existing traffic conditions in this traffic analysis. Intersection turning movement counts conducted for the Saturday and Sunday peak hour periods on February 3, 2018 and February 4, 2018, were used and are provided in Appendix B.

Due to the Project's proximity to Sequoia National Park, a seasonal adjustment factor was applied to the traffic counts as described above. The region sees significantly larger volumes of traffic during the summer months due to tourists/visitors of Sequoia National Park. In consultation with Caltrans staff, a seasonal growth factor of 1.76 was applied to the existing traffic counts to account for the increase in traffic in Three Rivers during the summer months. In addition, a growth rate of 1.3% per year was applied to the counts to estimate Year 2020 traffic volumes in the study area. Historical growth in Tulare County is approximately 1.3% based on population trends as forecasted in the Tulare County General Plan 2030 Update.

### 2.2 Existing Functional Roadway Classification System

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the type of service they are intended to provide. Fundamental to this process is the recognition that individual streets and highways do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads.

The following are general descriptions of the roadway types shown in the Three Rivers Community:

- ✓ **State Freeways and Highways** – There is one state facility serving the Three Rivers Community Area, State Highway 198. The segment of State Highway 198 (Sierra Drive), which passes through the Planning Area, is classified as a principal arterial.
- ✓ **Collectors** – Five (5) roads within the Three Rivers Community area are currently designated as county collector roads. Those roads include, North Fork Drive, Dinely Drive, Kaweah Drive, South Fork Drive, Mineral King Road. The primary function of collector roads is to collect and distribute traffic between local streets and the arterial roadway system. They generally provide access and movement between residential, commercial, and industrial areas.

- ✓ **Local Streets** – Roadways which provide access to individual homes and businesses. Local streets have one lane in each direction. Local streets connect single family homes and other uses to the arterial-collector network. All of the roadways in the Three Rivers Community that are not listed above would be classified as local streets.

## 2.3 Affected Streets and Highways

Major street and highway intersections and segments in the Three Rivers Community were analyzed to determine levels of service utilizing HCM-based methodologies described previously. The study intersections and street and highway segments included in this TIS are listed below.

### Intersections

- ✓ SR 198 (Sierra Drive) and Project Driveway
- ✓ SR 198 (Sierra Drive) and Old 3 Rivers Road

The existing lane geometry at study area intersections are shown in Figure 2-1. Existing study intersections are currently unsignalized. Figure 2-2 shows existing traffic volumes for the Saturday and Sunday Midday and PM peak hours in the study area.

## 2.4 Level of Service

### 2.4.1 Intersection Capacity Analysis

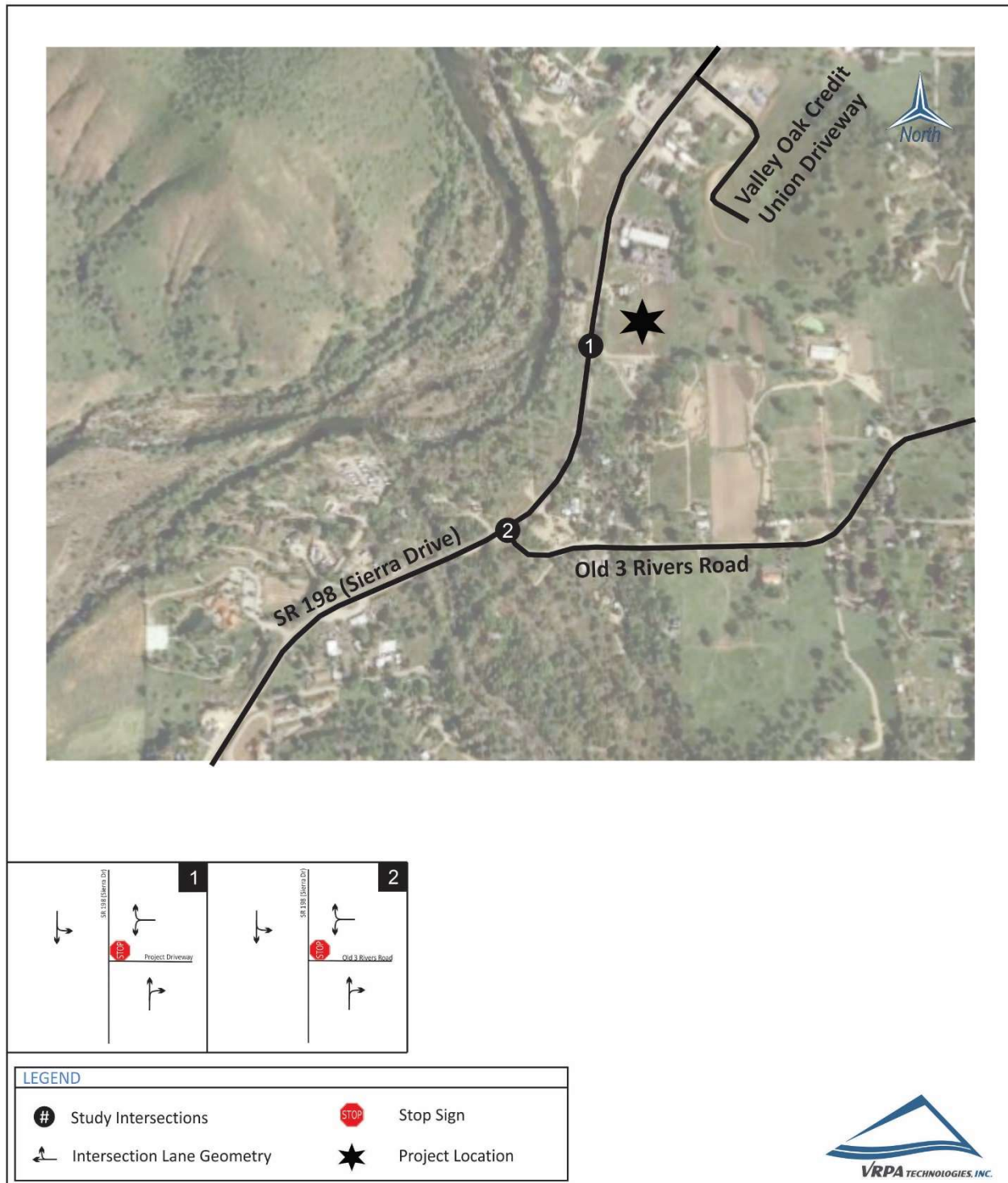
All intersection LOS analyses were estimated using the Synchro 10 software program. Various roadway geometrics, traffic volumes, and properties (peak hour factors, storage pocket length, etc.) were input into the Synchro 10 software program in order to accurately determine the travel delay and LOS for each Study scenario. The intersection LOS and delays reported represent the HCM 6<sup>th</sup> Edition outputs. Synchro assumptions, listed below, show the various Synchro inputs and methodologies used in the analysis.

- ✓ **Traffic Conditions**
  - The peak hour factor (PHF) used for Existing, Existing Plus Project, and Near-Term Plus Project conditions was determined from the existing counts. The HCM peak hour default value of 0.92 was used for the Cumulative Year 2042 scenarios unless the existing PHF is above 0.92.
  - Heavy vehicle percentages were applied as follows and are based on the HCM default, traffic counts, or Caltrans' parameters:
    - State Highway 198 – 9% (Caltrans' TCR shows 9% truck trips in the study area except between Mineral King Road and Sequoia Park, which is 6%)
    - All other roadways – 3%

Results of the analysis show that all of the study intersections are currently operating at acceptable levels of service during the Saturday and Sunday peak hours. Table 2-1 shows the intersection LOS for the existing conditions. Synchro 10 (HCM 6<sup>th</sup> Edition) Worksheets are provided in Appendix C.

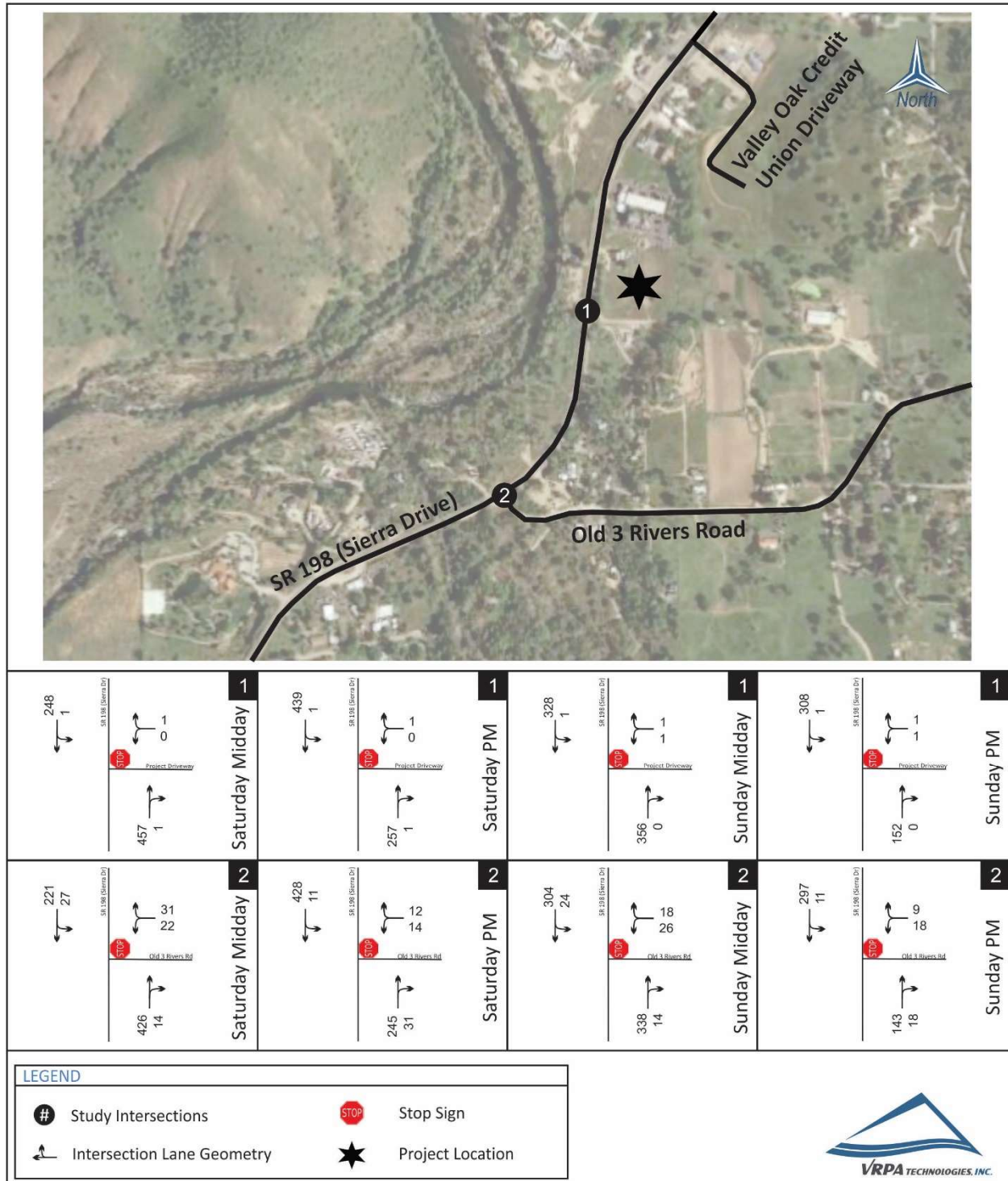
### Three Rivers Hampton Inn & Suites Existing Lane Geometry

Figure  
2-1



**Three Rivers Hampton Inn & Suites**  
**Existing Peak Hour Traffic**

**Figure**  
**2-2**



## 2.4.2 Queuing Analysis

Table 2-2 provides a queue length summary for study intersections for the Existing scenario. Traffic queue lengths at an intersection or along a roadway segment assist in the determination of a roadways overall performance. Excessive queuing at an intersection increases vehicle delay and reduces capacity. The queuing analyses is based upon methodology presented in Chapter 400 of Caltrans' Highway Design Manual (HDM), which is included in Appendix D. The queue results shown in Table 2-2 represent the approximate queue lengths for the respective lane movements.

**Table 2-1**  
**Existing Intersection Operations**

INTERSECTION	CONTROL	TARGET LOS	PEAK HOUR		EXISTING	
					DELAY	LOS
1. SR 198 (Sierra Drive) / Project Driveway	One-Way Stop Sign	D	Saturday	Midday	11.2	B
				PM	9.8	A
			Sunday	Midday	12.9	B
				PM	11.1	B
2. SR 198 (Sierra Drive) / Old 3 Rivers Road	One-Way Stop Sign	D	Saturday	Midday	14.3	B
				PM	13.5	B
			Sunday	Midday	14.8	B
				PM	12.3	B

DELAY is measured in seconds

LOS = Level of Service

For one-way controlled intersections, delay results show the delay for the worst movement.



**Table 2-2**  
**Existing Queuing Operations**

INTERSECTION	EXISTING QUEUE STORAGE LENGTH (ft)		EXISTING CONDITIONS			
			SATURDAY		SUNDAY	
			MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue
1. SR 198 (Sierra Drive) / Project Driveway	WB Approach	--	1	1	2	2
2. SR 198 (Sierra Drive) / Old 3 Rivers Road	WB Approach	325	44	22	37	23

Queue is measured in feet

## 2.5 Public Transit and Active Transport Systems

While the private automobile is the dominant mode of travel within Three Rivers, as it is throughout Tulare County, other modes of transportation are important. Data available from the American Community Survey (ACS) indicates that the average commute time for Three Rivers Community residents is about 23 minutes. About two-third of commuters drive alone to work, while one-third use other means: 21 percent carpool or vanpool, 1 percent walked, and 13 percent worked at home.<sup>1</sup> The Census bureau does not collect data on non-work trips, which represent a greater share of travel than work trips but tend to be less concentrated in peak traffic periods. The Census bureau does not collect data on non-work trips, which represent a greater share of travel than work trips but tend to be less concentrated in peak traffic periods. Off-peak trips also tend to have a greater proportion of shared ride and active (walk and bike) trips.

While congestion is not a major issue in the Three Rivers Community, overreliance on automobiles creates other costs for both society and households and means that many in the community who cannot drive (the young, the old, the disabled, the poor) must rely on those who can drive for their mobility. For this reason, it is important to encourage public transit systems and increased use of active modes of transportation, including bicycles and walking. The public transit system alternative for Three Rivers is a fixed route public transit system.

Investment in bikeways provides an inexpensive environment-friendly transportation opportunity. Bicycling is considered an effective alternative mode of transportation that can help to improve air quality and reduce the number of vehicles traveling along existing highways, especially within the cities and unincorporated communities. While the numbers of cyclists are

<sup>1</sup> Source: US Census American Community Survey, via [datausa.io/profile/geo/three-rivers-ca/](https://datausa.io/profile/geo/three-rivers-ca/)

small in comparison to the amount of auto traffic, the size of the Three Rivers Community means that most trips within the community can be comparable to using an automobile. Caltrans' SR-198 Transportation Concept Report, dated June 2016, indicates that bike use is permitted along SR-198 throughout the Three Rivers Community. However, it should be noted that roadway shoulders along SR-198 are generally between 4 - 8 feet.

Tulare County Area Transit (TCaT) Route 30 (Northeast County Route) operates between the Three Rivers Memorial Building and the Visalia Transit Center in downtown Visalia. Route 30 provides 4 roundtrips to the Visalia Transit Center on weekdays and 1 roundtrip on the weekend, all at 4-hour intervals. At the Visalia Transit Center, transfers can be made to connect to remainder of Visalia, as well as the City of Tulare, and the smaller cities and communities in the County served by the TCaT fixed route transit system. Visalia transit vehicles are wheelchair accessible and all full-size buses include bike racks.

The Sequoia Shuttle, which operates from May to September, offers approximately five (5) daily trips to the Sequoia National Park. The shuttle departs from various convenient locations throughout Visalia, Exeter, and Three Rivers, Ca.

## 3.0 Traffic Impacts

This chapter provides an assessment of the traffic the Project is expected to generate and the impact of that traffic on the surrounding street system.

### 3.1 Trip Generation

To assess the impacts that the Project may have on the surrounding street and highway segments and intersections, the first step is to determine Project trip generation. Project trip generation was determined using trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition). Trips associated with the Project were derived from the Hotel (310) Land Use in the ITE Trip Generation Manual.

The considerations described above led to the recommended trip generation for both Saturday and Sunday Midday and PM peak hours shown in Table 3-1. The peak hour trips for Saturday and Sunday identified in Table 3-1 below were applied to the Midday and PM peak hour time periods.

**Table 3-1**  
**Project Trip Generation**

LAND USE	Quantity	SATURDAY DAILY TRIP ENDS	(ADT)	SATURDAY PEAK HOUR OF GENERATOR					SUNDAY DAILY TRIP ENDS	(ADT)	SUNDAY PEAK HOUR OF GENERATOR				
		RATE	VOLUME	RATE	IN:OUT SPLIT	VOLUME			RATE	VOLUME	RATE	IN:OUT SPLIT	VOLUME		
						IN	OUT	TOTAL					IN	OUT	TOTAL
Hotel (310)	105 Rooms	8.19	860	0.72	56:44	43	33	76	5.95	625	0.56	46:54	27	32	59
<b>TOTAL TRIP GENERATION</b>			<b>860</b>			<b>43</b>	<b>33</b>	<b>76</b>		<b>625</b>			<b>27</b>	<b>32</b>	<b>59</b>

Source: Generation factors from ITE Trip Generation Manual, 10th Edition.  
Trip ends are one-way traffic movements, entering or leaving.  
The numbers in parenthesis are ITE land use codes.

### 3.2 Trip Distribution

Project trip distribution is shown in Figure 3-1 and is based upon engineering judgement, prevailing traffic patterns in the study area, complementary land uses, major routes, population centers, and a review of data available in the Tulare County General Plan. The Project will have one (1) driveway along SR 198 (Sierra Drive), approximately 1,100 feet to the north of Old 3 Rivers Road.

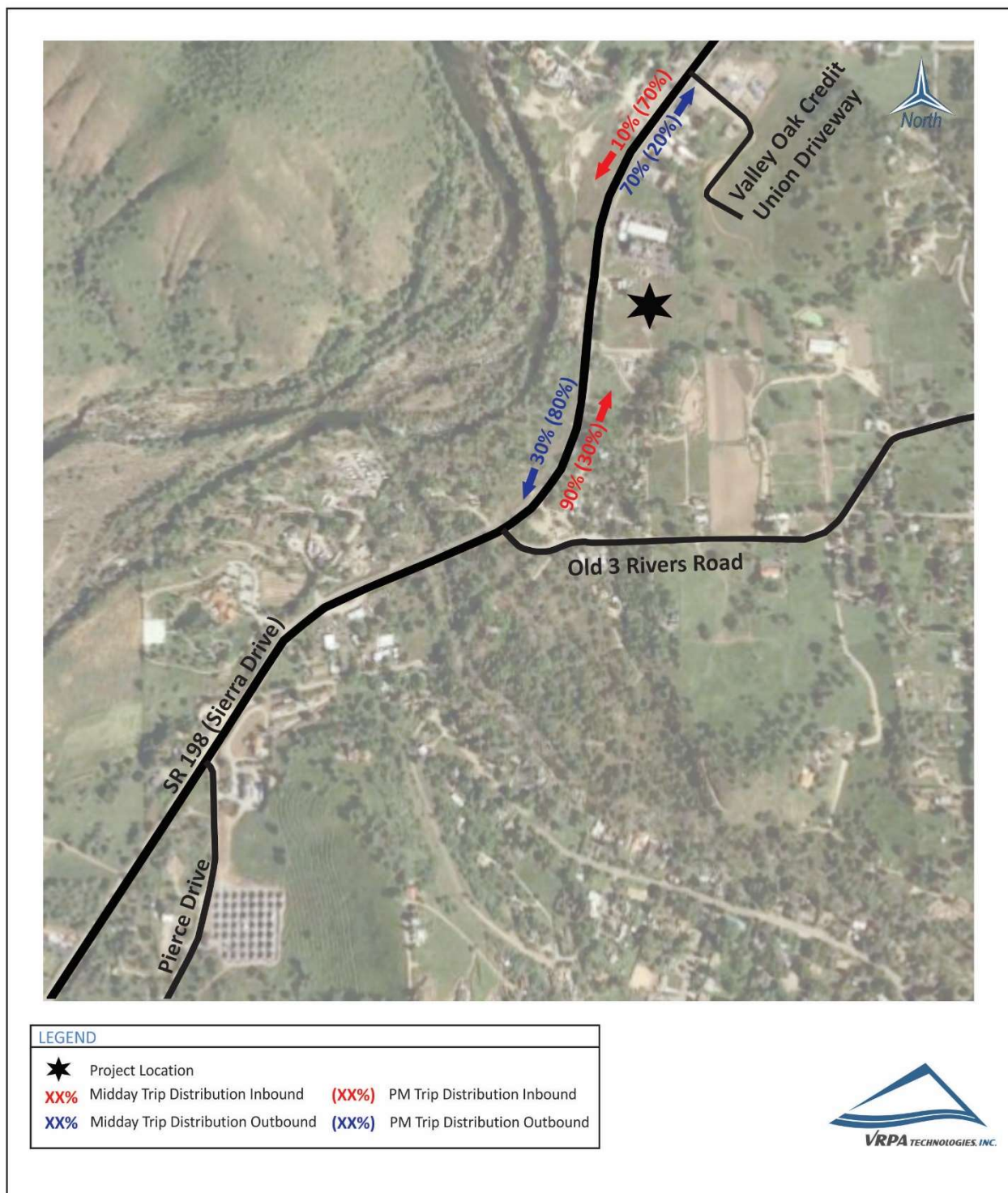
### 3.3 Project Traffic

Project traffic as shown in Table 3-1 was distributed to the roadway system using the trip distribution percentages shown in Figure 3-1. A graphical representation of the resulting noon and PM peak hour Project trips used is shown in Figure 3-2.



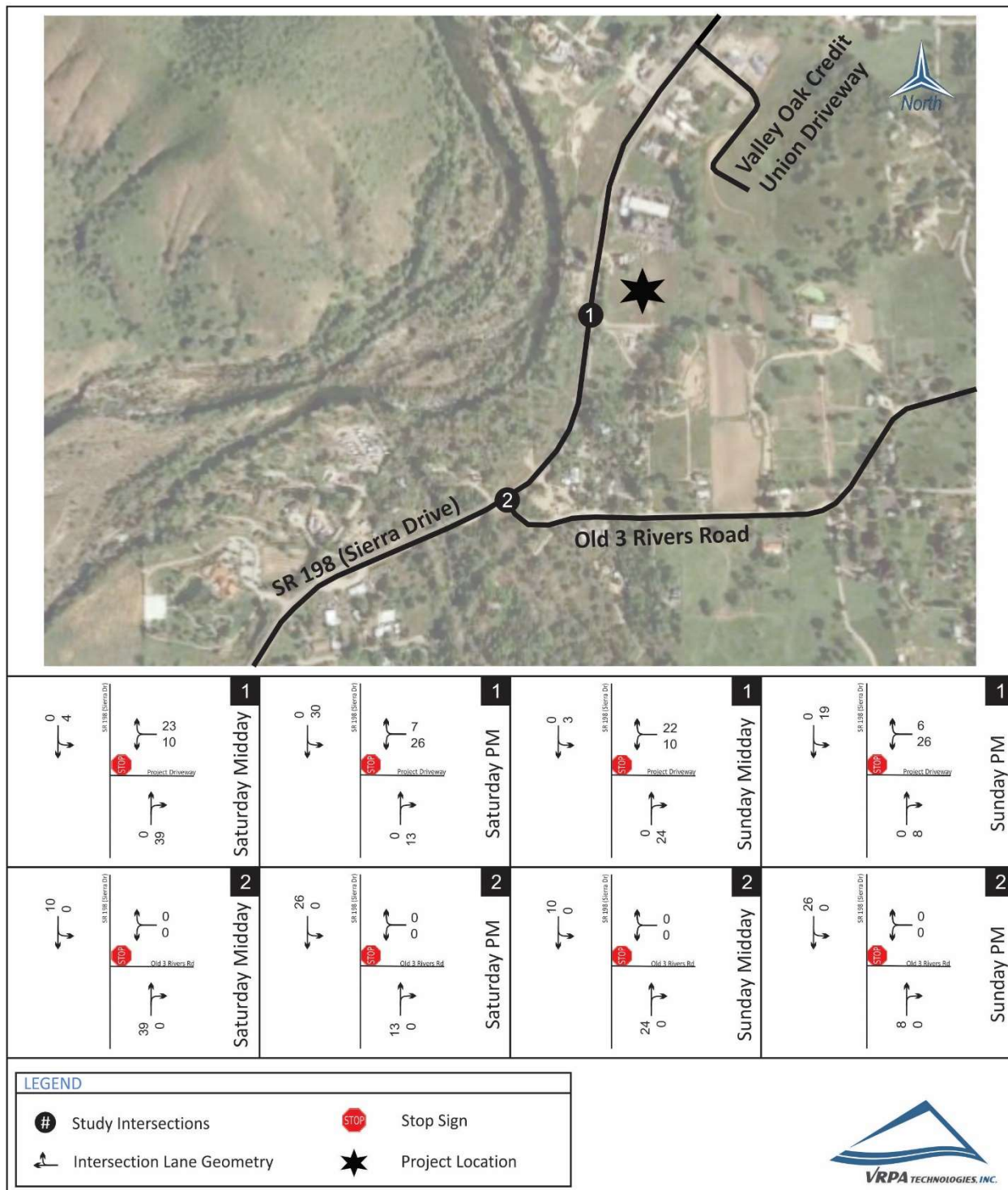
**Three Rivers Hampton Inn & Suites**  
**Project Trip Distribution**

**Figure**  
**3-1**



**Three Rivers Hampton Inn & Suites**  
**Peak Hour Project Traffic**

**Figure**  
**3-2**



### 3.4 Existing Plus Project Traffic Conditions

An Existing Plus Project Scenario was analyzed to include existing traffic plus traffic generated by development of the Project. The resulting traffic is shown in Figure 3-3.

### 3.5 Approved/Pending Project Traffic

Traffic impact analyses typically require the analysis of approved or pending developments that have not yet been built in the vicinity of the Project in addition to the proposed Project. The approved or pending developments identified for use in this traffic analysis included a proposed 200-room hotel located along Old 3 Rivers Road, approximately 700 feet to the east of SR 198 (Sierra Drive). Trip generation and distribution information for the development was based on information found in its corresponding TIS report. Trip generation and distribution information is provided in Appendix D. The peak hour trips for the approved or pending project traffic was applied to the Near-Term and Cumulative Year 2042 traffic conditions discussed later in the report.

### 3.6 Near-Term Plus Project Traffic Conditions

Traffic conditions with the Project in the Year 2022 were estimated by applying a growth rate of 1.3% per year to the existing traffic volumes. Historical growth in Tulare County is approximately 1.3% based on population trends as forecasted in the Tulare County General Plan 2030 Update. In consultation with Tulare County RMA and Caltrans staff it was determined that a growth rate of 1.3% was consistent with the overall growth in the study area and should be used to evaluate Near-Term conditions. The resulting traffic is shown in Figure 3-4.

### 3.7 Cumulative Year 2042 Without Project Traffic Conditions

The impacts of the Project were analyzed considering future traffic conditions in the year 2042. The levels of traffic expected in 2042 relate to the cumulative effect of traffic increases resulting from the implementation of the General Plans of local agencies, including Tulare County. Traffic conditions without the Project in the Year 2042 were estimated by applying a 1.3% per year growth factor to existing roadway segment volumes in the study area (ambient growth). The resulting traffic volumes were compared and evaluated against cumulative development in the area and adjusted as necessary. The resulting traffic is shown in Figure 3-5.

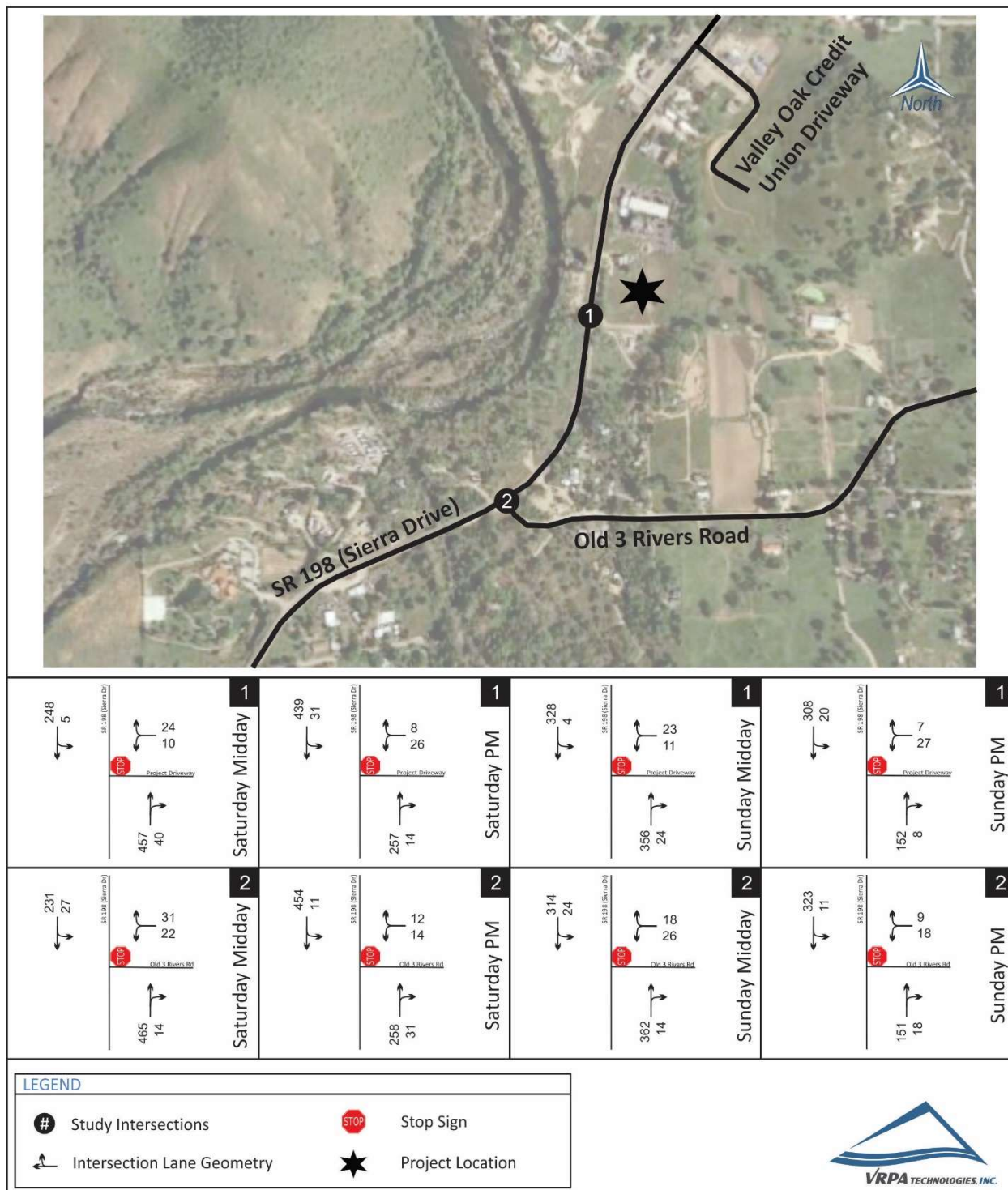
### 3.8 Cumulative Year 2042 Plus Project Traffic Conditions

The addition of Project trips, as shown in Figure 3-2 (Section 3.3), were added to Cumulative Year 2042 Without Project traffic volumes. This leads to the Cumulative Year 2042 Plus Project Peak Hour Traffic Volumes shown in Figure 3-6.



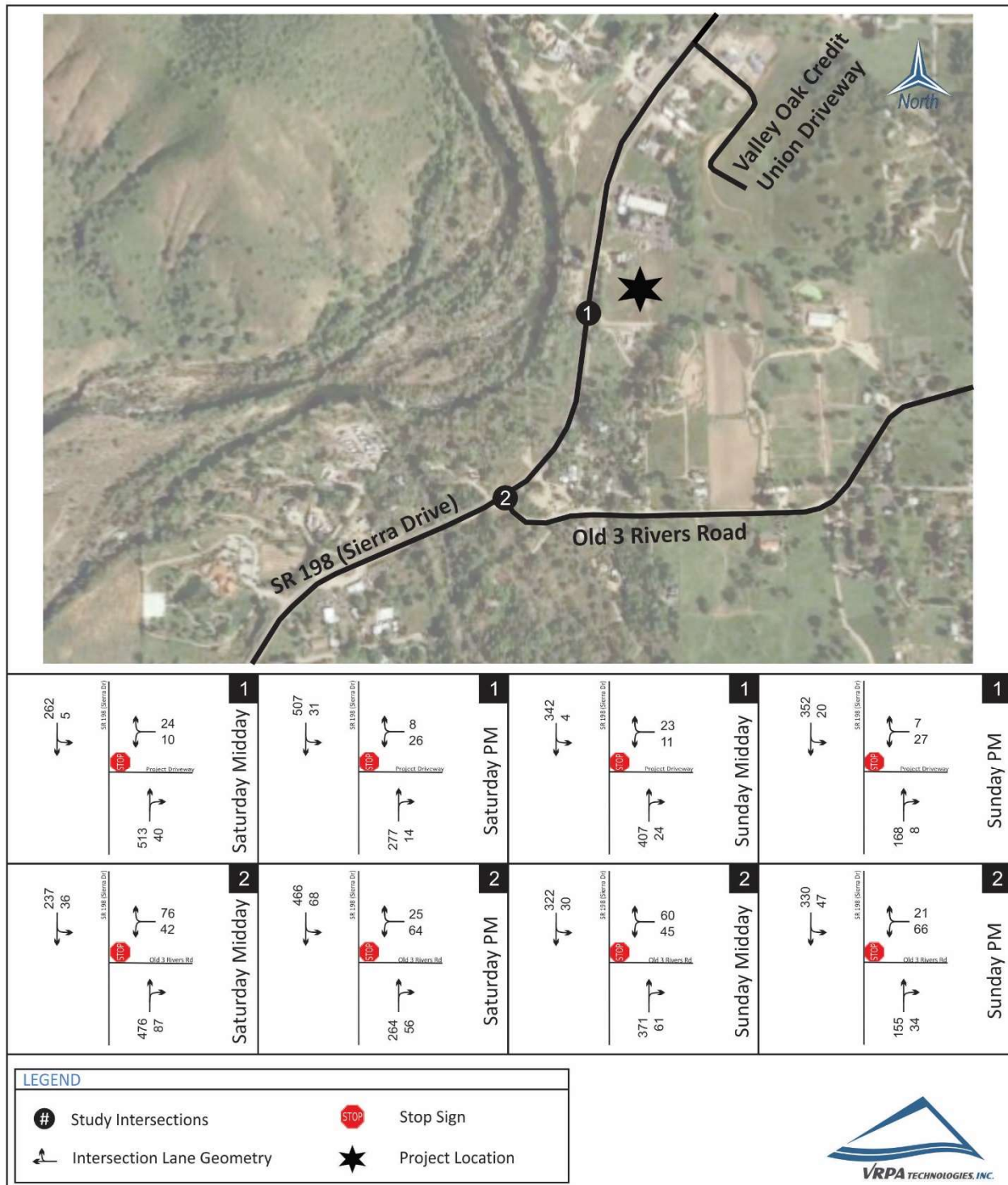
**Three Rivers Hampton Inn & Suites**  
**Existing Plus Project Peak Hour Traffic**

**Figure**  
**3-3**



**Three Rivers Hampton Inn & Suites**  
**Near-Term Peak Hour Traffic**

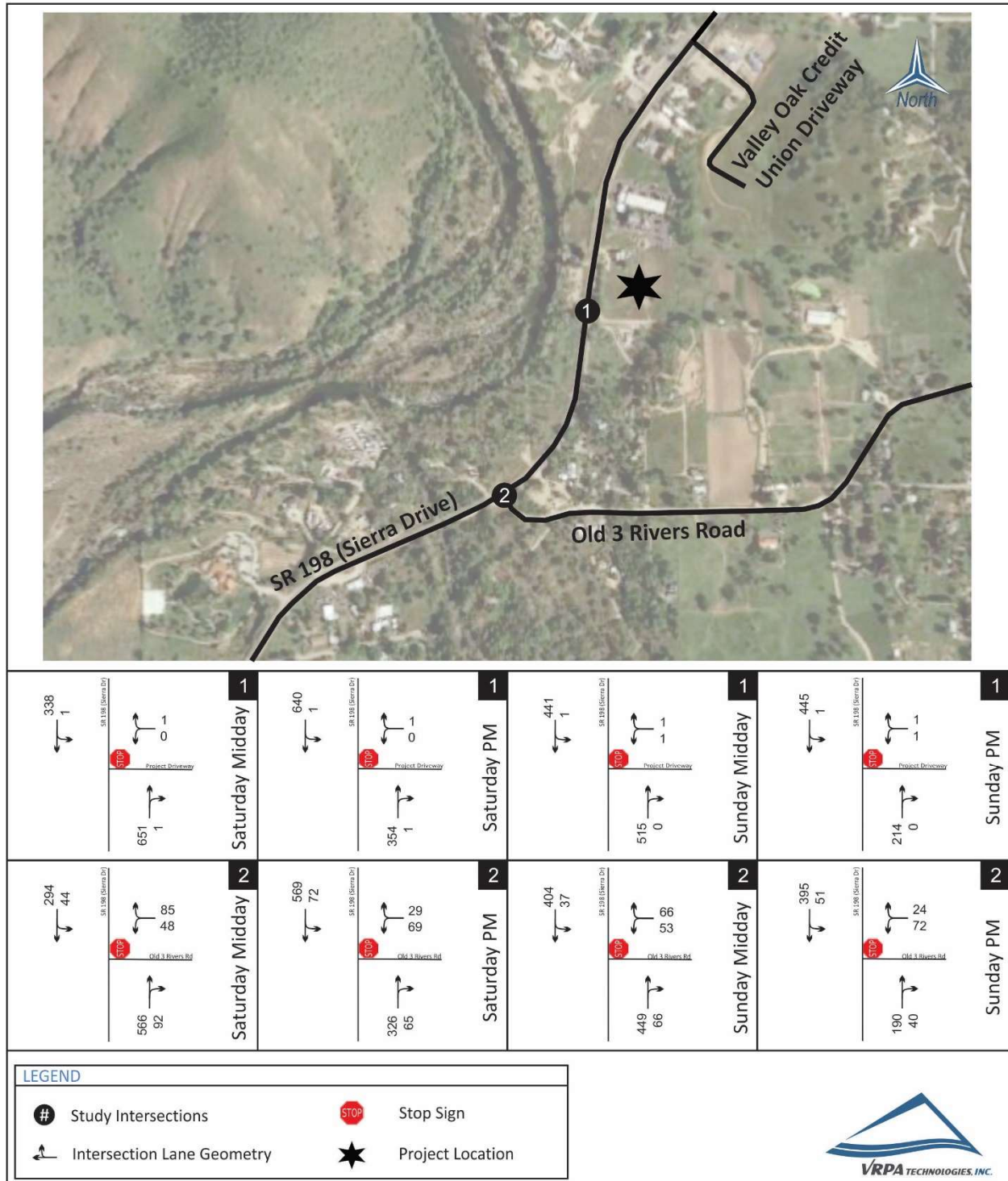
**Figure**  
**3-4**





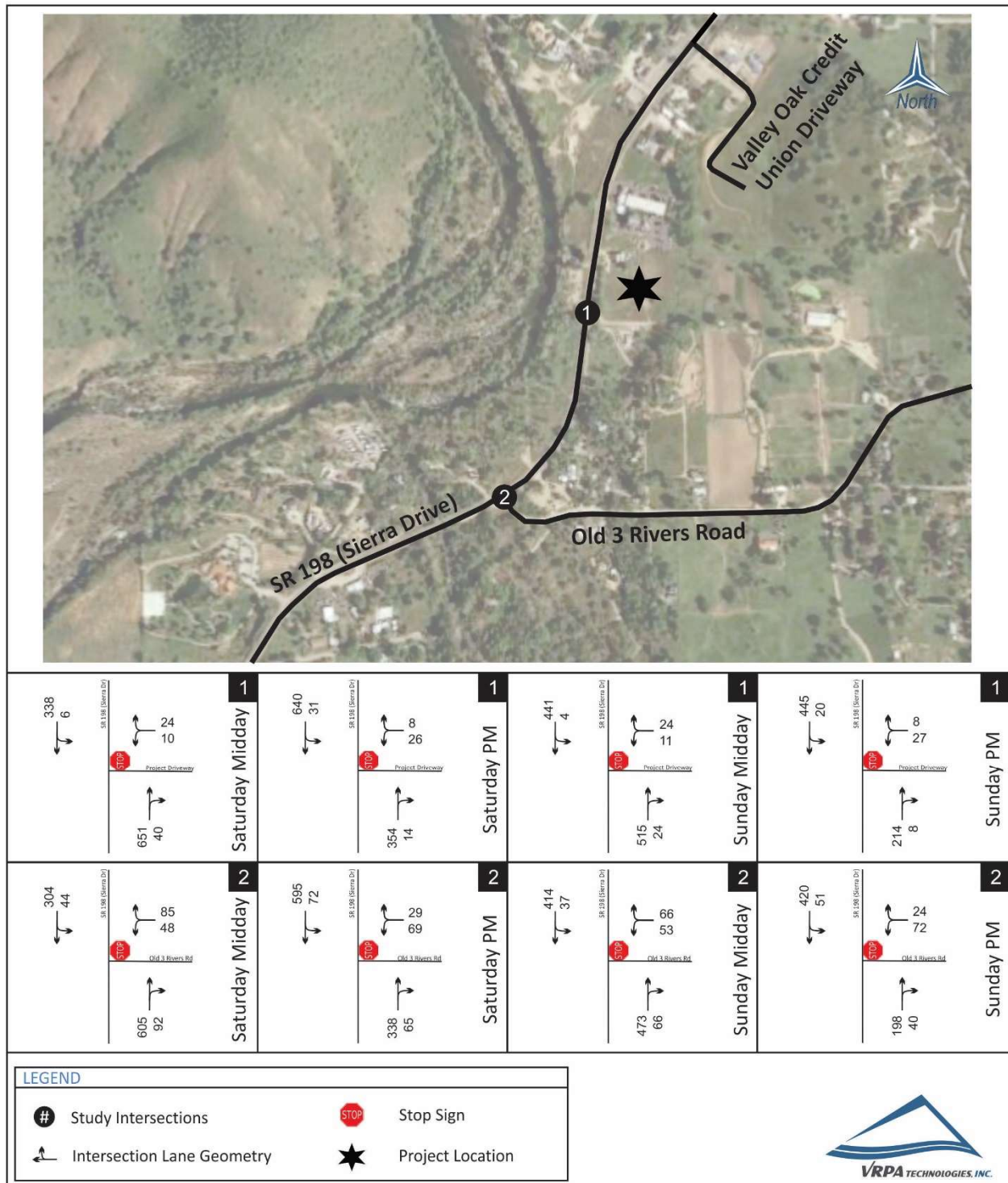
**Three Rivers Hampton Inn & Suites**  
**Cumulative Year 2042 Without Project Peak Hour Traffic**

**Figure**  
**3-5**



**Three Rivers Hampton Inn & Suites**  
**Cumulative Year 2042 Plus Project Peak Hour Traffic**

**Figure**  
**3-6**



## 3.9 Impacts

### 3.9.1 Intersection Capacity Analysis

Table 3-2 shows the projected delay for all scenarios at study area intersections. Results of the analysis show that levels of service at the SR 198 (Sierra Drive) and Project Driveway and SR 198 (Sierra Drive) and Old 3 Rivers Road intersections will not exceed target LOS 'D' for all the study scenarios. Therefore, no mitigation measures are required to achieve acceptable levels of service. It should be noted that the Project Driveway along SR 198 (Sierra Drive) must meet Tulare County and Caltrans standards.

### 3.9.2 Queuing Analysis

Table 3-3 provides a queue length summary for turning movements at the Project Driveway and Old 3 Rivers Road. Queuing analysis for unsignalized intersections was completed using Section 400 of Caltrans' Highway Design Manual. Results of the analysis show that the queue lengths along Old 3 Rivers Road are not projected to encroach upon the most easterly driveway to SR 198 (Sierra Drive).

**Table 3-2**  
**Intersection Operations**

INTERSECTION	CONTROL	TARGET LOS	PEAK HOUR		EXISTING PLUS PROJECT		NEAR-TERM PLUS PROJECT		CUMULATIVE YEAR 2042 WITHOUT PROJECT		CUMULATIVE YEAR 2042 PLUS PROJECT	
					DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
1. SR 198 (Sierra Drive) / Project Driveway	One-Way Stop Sign	D	Saturday	Midday	13.1	B	13.8	B	13.0	B	16.5	C
				PM	16.0	C	17.8	C	10.5	B	22.4	C
			Sunday	Midday	12.9	B	13.7	B	15.6	C	15.4	C
				PM	13.5	B	14.5	B	11.8	B	14.6	B
2. SR 198 (Sierra Drive) / Old 3 Rivers Road	One-Way Stop Sign	D	Saturday	Midday	15.0	C	20.5	C	22.8	C	24.8	C
				PM	14.0	B	27.6	D	31.1	D	33.9	D
			Sunday	Midday	15.4	C	18.1	C	21.2	C	22.4	C
				PM	12.7	B	18.1	C	18.9	C	19.9	C

DELAY is measured in seconds

LOS = Level of Service

For one-way controlled intersections, delay results show the delay for the worst movement.



Table 3-3

Queuing Operations

INTERSECTION	EXISTING QUEUE STORAGE LENGTH (ft)		EXISTING PLUS PROJECT				NEAR-TERM YEAR PLUS PROJECT				CUMULATIVE YEAR 2042 WITHOUT PROJECT				CUMULATIVE YEAR 2042 PLUS PROJECT			
			SATURDAY		SUNDAY		SATURDAY		SUNDAY		SATURDAY		SUNDAY		SATURDAY		SUNDAY	
			MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue	MIDDAY Queue	PM Queue
1. SR 198 (Sierra Drive) / Project Driveway	WB Approach	--	28	28	28	28	28	28	28	28	1	1	3	3	28	28	29	29
2. SR 198 (Sierra Drive) / Old 3 Rivers Road	WB Approach	325	44	22	37	23	98	75	88	73	111	82	98	80	111	82	98	80

Queue is measured in feet

## 4.0 Standards of Significance

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in significant adverse impacts on the environment. The criteria used to determine the significance of an impact to traffic are based on the following thresholds of significance which come from Appendix G of the CEQA Guidelines. Accordingly, traffic impacts resulting from the proposed Project are considered significant if the Project would:

- ✓ Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
- ✓ Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
- ✓ Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (eg., farm equipment)?
- ✓ Result in inadequate emergency access?

### 4.1 Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

**Less Than Significant** - An important goal is to maintain acceptable levels of service along the highway, street, and road network. To accomplish this, Tulare County RMA and Caltrans adopt minimum levels of service in an attempt to control congestion that may result as new development occurs. Tulare County's 2030 General Plan, policy number TC-1.16, identifies a minimum LOS standard of "D" on the County roadway system (both segments and intersections). Caltrans' SR-198 Transportation Concept Report (TCR) identifies the 2040 concept as LOS "D".

Results of the analysis show that the proposed Project will not exceed the minimum LOS standard of "D" as shown in Tables 2-1 and 3-2.

The Project does not conflict with any applicable adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Tulare County Area Transit (TCaT) Route 30 (Northeast County Route) operates between the Three Rivers Memorial Building and the Visalia Transit Center in downtown Visalia. Route 30 provides 4 roundtrips to the Visalia Transit Center on weekdays and 1 roundtrip on the weekend, all at 4-hour intervals. Implementation of the Project will not hinder the operation of Route 30 in the Three Rivers Community.

Caltrans' SR 198 TCR indicated that bicycles are permitted along the SR 198 corridor in the Three Rivers Community. The proposed Project will not prohibit the use of bicycles along SR 198. The SR 198 TCR also indicates that pedestrian facilities are nonexistent in the Three Rivers community. The Project will comply with Tulare County General Plan goals, which include Bicycle/Pedestrian Trail System (TC-5.1) and Consideration of Non-Motorized Modes in Planning and Development (TC-5.2).

Therefore, the Project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. Therefore, no mitigation is needed.

#### 4.2 Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

***Less Than Significant Impact*** - In the fall of 2013, Senate Bill 743 (SB 743) was passed by the legislature and signed into law by the governor. For California, this legislation will eventually change the way that transportation studies are conducted for environmental documents. Delay-based metrics such as roadway capacity and level of service will no longer be the performance measures used for the determination of the transportation impacts of projects in studies conducted under CEQA. Instead, new performance measures such as vehicle miles travelled (VMT) or other similar measures will be used.

July 1, 2020 is the statewide implementation date and agencies may opt-in use of new metrics prior to that date. Therefore, the traffic analysis currently follows current practice regarding state and local guidance as of the date of preparation.

Tourism is the largest and most important industry in the Three Rivers area, as the town is situated near Sequoia National Forest, which receives over 1.2 million annual visitors, and Kings Canyon National Park, which receives nearly 700,000 annual visitors. The industries and businesses surrounding Three Rivers are almost all related to visitors passing through, en route to the Sequoia National Forest and Kings Canyon National Park. The Three Rivers Community and surrounding area features a multitude of boutique lodging facilities, restaurants, and small retail shops to support the area's small population and transient travelers.

The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure accommodations in the market because all the local hotels are filled. These travelers must settle for less desirable accommodations or stay in properties located outside the market area. Seeking accommodations outside of the desired market area increases VMT

since travelers would be forced to travel longer distances to secure accommodations. The development of the Project would reduce the unaccommodated demand, thus reducing VMT in the market area. Therefore, no mitigation is needed.

#### 4.3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

**Less Than Significant Impact** - The Project would not result in hazards due to design features, since all proposed improvements (Project Driveway) would be built to County design standards. Access to the proposed Project will be provided at one (1) driveway along SR 198 (Sierra Drive), which is an existing driveway within Tulare County jurisdiction. Internal traffic and parking operations will be designed in accordance with Tulare County design standards. The proposed Project seeks to utilize a plot of relatively undeveloped land for a hotel with approximately 105 rooms in a rural area surrounded by rural/agricultural residences. The Project would not increase the use of farm equipment on streets and roads in the Three Rivers Community. As a result, the Project will not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Therefore, no mitigation is needed.

#### 4.4 Result in inadequate emergency access?

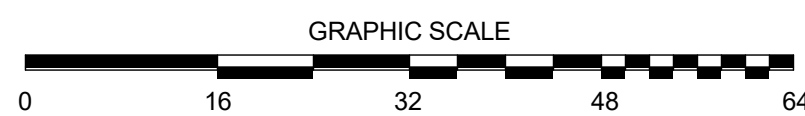
**Less Than Significant Impact** - The Project would not result in any degradation of emergency access within the community. Congestion at an intersection or along a roadway can adversely impact emergency access. Results of the traffic analysis shows that all of the study intersections and roadway segments will meet Tulare County's and Caltrans' LOS "D" criteria through the year 2042. As a result, the Project will not result in inadequate emergency access. Therefore, no mitigation is needed.

# **APPENDIX A**

## Project Site Plan



## SITE PLAN


$$1/16'' = 1'-0''$$

## ROOM MATRIX

	FIRST FLOOR (25.043 SF)	SECOND FLOOR (22.846 SF)	THIRD FLOOR (24.473 SF)	TOTAL (72.364 SF)
STANDARD DOUBLE QUEEN EXTENDED	2	15	18	35
STANDARD DOUBLE QUEEN ACCESSIBLE EXT.	0	1	1	2
DOUBLE QUEEN STUDIO	13	13	13	39
DOUBLE QUEEN STUDIO EXT.	0	1	1	2
ACCESSIBLE DOUBLE QUEEN STUDIO EXT.	1	1	0	2
STANDARD KING	2	2	2	6
STANDARD KING EXTENDED	1	3	3	7
STANDARD KING ACCESSIBLE EXT.	0	1	1	2
KING STUDIO	2	2	2	6
KING STUDIO ACCESSIBLE EXT.	1	1	2	4
<b>TOTAL NUMBER OF GUEST ROOMS</b>	<b>22</b>	<b>40</b>	<b>43</b>	<b>105</b>

## PARKING COUNT

GUEST ROOMS	105
REQUIRED PARKING SECTION 15 (A.2.b.(3)) (1 PARKING SPACE FOR EVERY 3 GUEST ROOMS)	108
REGULAR STALLS	108
TOTAL PARKING	108
ACCESSIBLE PARKING (INCLUDED ABOVE)	6 = OK


**ZONING CODE**


APN:	068-080-010
ZONING	C-2-MU-SC (GENERAL COMMERCIAL WITH MIXED-USE OVERLAY AND SCENIC CORRIDOR OVERLAY)
GENERAL PLAN	URBAN DEVELOPMENT BOUNDARIES

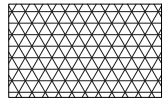
## THREE RIVERS COMMUNITY PLAN

MIXED-USE OVERLAY DISTRICT:	
HEIGHT	35 FT
SETBACKS:	
FRONT YARD	0 FT
SIDE YARD	0 FT
REAR YARD	0 FT
FLOOR AREA RATIO (FAR) - MAX ALLOWED	2
LOT AREA (SF)	122,403.6 SF
TOTAL BUILDING SF	72,364 SF
FAR	$0.6 \times 2 = \text{OK}$
FENCES, WALLS, AND SCREENING	NOT REQUIRED (LOT DOES NOT ABUT A "R" ZONE)

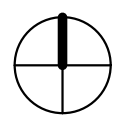
## SITE PLAN LEGEND


 ACCESSIBLE PATH OF TRAVEL, NO SLOPES IN DIRECTION OF TRAVEL EXCEEDING 5% AND NO CROSS SLOPES EXCEEDING 2%


 DETECTABLE WARNING SURFACE



DETECTABLE WARNING SURFACE



OWNER

CONTRACTOR

This drawing is not final or to be used for construction until  
it is signed by the architect and the owner

# PRELIMINARY DESIGN

# THREE RIVERS HIS

SIERRA DRIVE, THREE RIVERS, CA 93271

**NOT FOR CONSTRUCTION**

## SITE PLAN

Project Number  
19042

Drawn By  
JJD

Checked By  
JJD

# A1



# **APPENDIX B**

## Traffic Count Data Sheets

# National Data & Surveying ServicesIntersection Turning Movement Count

**Location:** SR 198 / Sierra Dr & Old 3 Rivers Rd

**City:** Three Rivers

**Control:** 1-Way Stop(WB)

**Project ID:** 18-02019-001

**Date:** 2018-02-03

## Total

NS/EW Streets:		SR 198 / Sierra Dr				SR 198 / Sierra Dr				Old 3 Rivers Rd				Old 3 Rivers Rd									
NOON	NORTHBOUND		SOUTHBOUND		EASTBOUND		WESTBOUND		EU		ER		EU		ER		EU		ER				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	WL	WT	WR	WU	TOTAL							
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0							
	0	46	5	0	3	25	0	0	0	0	0	3	0	4	0	0							
	0	51	5	1	4	18	0	0	0	0	0	4	0	2	0	0							
	0	57	2	1	4	22	0	0	0	0	0	5	0	7	0	0							
	0	63	1	0	5	34	0	0	0	0	0	1	0	6	0	0							
	0	60	3	0	2	35	0	0	0	0	0	3	0	3	1	0							
	0	56	2	0	4	31	0	0	0	0	0	3	0	1	0	0							
	0	57	3	0	7	24	0	0	0	0	0	4	0	3	0	0							
	0	58	4	0	2	28	0	0	0	0	0	2	0	1	0	0							
	TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL				
APPROACH %'s :		0	448	25	2	31	217	0	0	0	0	0	0	25	0	27	1	776					
PEAK HR :		11:30 AM - 12:30 PM				87.50%				0.00%				47.17%				50.94%				1.89%	
PEAK HR VOL :		0	236	8	1	15	122	0	0	0	0	0	0	12	0	17	1	412					
PEAK HR FACTOR :		0.000	0.937	0.667	0.250	0.750	0.871	0.000	0.000	0.000	0.000	0.000	0.000	0.600	0.000	0.607	0.250	0.936					
		0.957				0.878								0.625				0.936					
PM	NORTHBOUND		SOUTHBOUND		EASTBOUND		WESTBOUND		EU		ER		EU		ER		EU		ER				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	WL	WT	WR	WU	TOTAL							
	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0								
	0	41	1	0	0	69	0	0	0	0	0	3	0	3	0								
	0	4:15 PM	4	0	2	51	0	0	0	0	0	2	0	2	0								
	0	4:30 PM	5	0	2	56	0	0	0	0	0	1	0	2	0								
	0	4:45 PM	7	0	2	61	0	0	0	0	0	2	0	1	0								
	0	5:00 PM	5	0	5	58	0	0	0	0	0	2	0	0	0								
	0	5:15 PM	3	0	1	56	0	0	0	0	0	2	0	3	0								
	0	5:30 PM	1	0	4	33	0	0	0	0	0	4	0	0	0								
	0	5:45 PM	3	0	2	70	0	0	0	0	0	5	0	3	0								
	TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL				
APPROACH %'s :		0	234	29	0	18	454	0	0	0	0	0	0	21	0	13	0	769					
PEAK HR :		04:00 PM - 05:00 PM				3.81%				96.19%				61.76%				38.24%				0.00%	
PEAK HR VOL :		0	136	17	0	6	237	0	0	0	0	0	0	8	0	7	0	411					
PEAK HR FACTOR :		0.000	0.829	0.607	0.000	0.750	0.859	0.000	0.000	0.000	0.000	0.000	0.000	0.667	0.000	0.583	0.000	0.878					
		0.911				0.880								0.625				0.878					



# National Data & Surveying ServicesIntersection Turning Movement Count

Location: SR 198 / Sierra Dr & Old 3 Rivers Rd

City: Three Rivers

Control: 1-Way Stop(WB)

Project ID: 18-02019-001

Date: 2018-02-04




## Total




NS/EW Streets:		SR 198 / Sierra Dr				SR 198 / Sierra Dr				Old 3 Rivers Rd				Old 3 Rivers Rd			
NOON		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
11:00 AM		0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0
11:15 AM		0	36	4	0	1	36	0	0	0	0	0	0	2	0	2	0
11:30 AM		0	40	3	0	1	36	0	0	0	0	0	0	3	0	2	0
11:45 AM		0	27	2	0	0	30	0	0	0	0	0	0	2	0	2	0
12:00 PM		0	44	3	0	4	37	0	0	0	0	0	0	1	0	2	0
12:15 PM		0	58	1	0	3	45	0	0	0	0	0	0	2	0	6	0
12:30 PM		0	40	1	0	4	45	0	0	0	0	0	0	4	0	2	0
12:45 PM		0	45	3	0	2	41	0	0	0	0	0	0	7	0	0	0
		0	42	5	0	2	36	0	0	0	0	0	0	3	0	0	0
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s :		0	332	22	0	17	306	0	0	0	0	0	0	24	0	16	0
PEAK HR VOL :		0.00%	93.79%	6.21%	0.00%	5.26%	94.74%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	60.00%	0.00%	40.00%	0.00%
PEAK HR FACTOR :		0	187	8	0	13	168	0	0	0	0	0	0	14	0	10	0
		0.000	0.806	0.667	0.000	0.813	0.933	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.417	0.000
		0.826				0.923				0.750				0.750			
TOTAL		400				400				870				870			

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
4:00 PM		0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0
4:15 PM		0	19	5	0	2	46	0	0	0	0	0	0	3	0	1	0
4:30 PM		0	25	2	0	1	57	0	0	0	0	0	0	4	0	1	0
4:45 PM		0	16	1	0	2	33	0	0	0	0	0	0	2	0	1	0
5:00 PM		0	19	2	0	1	28	0	0	0	0	0	0	1	0	2	0
5:15 PM		0	12	3	0	2	29	0	0	0	0	0	0	2	0	0	0
5:30 PM		0	6	2	0	2	26	0	0	0	0	0	0	2	0	1	0
5:45 PM		0	9	6	0	1	32	0	0	0	0	0	0	3	0	0	0
		0	16	2	0	2	31	0	0	0	0	0	0	2	0	1	0
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s :		0	122	23	0	13	282	0	0	0	0	0	0	19	0	7	0
PEAK HR VOL :		0.00%	84.14%	15.86%	0.00%	4.41%	95.59%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	73.08%	0.00%	26.92%	0.00%
PEAK HR FACTOR :		0	79	10	0	6	164	0	0	0	0	0	0	10	0	5	0
		0.000	0.790	0.500	0.000	0.750	0.719	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.625	0.000
		0.824				0.733				0.750				0.750			
TOTAL		274				274				761				761			

# **APPENDIX C**




## SYNCHRO 10 Worksheets

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	457	1	1	248
Future Vol, veh/h	0	1	457	1	1	248
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	0	1	476	1	1	282
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	761	477	0	0	477	0
Stage 1	477	-	-	-	-	-
Stage 2	284	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	372	586	-	-	1050	-
Stage 1	622	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	372	586	-	-	1050	-
Mov Cap-2 Maneuver	372	-	-	-	-	-
Stage 1	621	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.2	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	586	1050	-	
HCM Lane V/C Ratio	-	-	0.002	0.001	-	
HCM Control Delay (s)	-	-	11.2	8.4	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Intersection						
Int Delay, s/veh	1.8					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	22	31	426	14	27	221
Future Vol, veh/h	22	31	426	14	27	221
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	96	96	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	35	49	444	15	31	251
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	765	452	0	0	459	0
Stage 1	452	-	-	-	-	-
Stage 2	313	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	370	605	-	-	1066	-
Stage 1	639	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	357	605	-	-	1066	-
Mov Cap-2 Maneuver	357	-	-	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	14.3	0	0.9			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	470	1066	-	
HCM Lane V/C Ratio	-	-	0.179	0.029	-	
HCM Control Delay (s)	-	-	14.3	8.5	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-	

**Intersection**




Int Delay, s/veh 0




Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	257	1	1	439
Future Vol, veh/h	0	1	257	1	1	439
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	91	91	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	0	1	282	1	1	499

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	784	283	0
Stage 1	283	-	-
Stage 2	501	-	-
Critical Hdwy	6.43	6.23	4.19
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	2.281
Pot Cap-1 Maneuver	361	754	1240
Stage 1	763	-	-
Stage 2	607	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	361	754	1240
Mov Cap-2 Maneuver	361	-	-
Stage 1	762	-	-
Stage 2	607	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	754	1240
HCM Lane V/C Ratio	-	-	0.001	0.001
HCM Control Delay (s)	-	-	9.8	7.9
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0




Intersection						
Int Delay, s/veh	0.8					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	14	12	245	31	11	428
Future Vol, veh/h	14	12	245	31	11	428
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	91	91	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	22	19	269	34	13	486
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	798	286	0	0	303	0
Stage 1	286	-	-	-	-	-
Stage 2	512	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	354	751	-	-	1219	-
Stage 1	760	-	-	-	-	-
Stage 2	600	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	349	751	-	-	1219	-
Mov Cap-2 Maneuver	349	-	-	-	-	-
Stage 1	749	-	-	-	-	-
Stage 2	600	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	13.5	0	0.2			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	464	1219	-	
HCM Lane V/C Ratio	-	-	0.089	0.01	-	
HCM Control Delay (s)	-	-	13.5	8	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	1	356	0	1	328
Future Vol, veh/h	1	1	356	0	1	328
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	1	1	429	0	1	353

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	784	429	0	-	429
Stage 1	429	-	-	-	-
Stage 2	355	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281
Pot Cap-1 Maneuver	361	624	-	0	1094
Stage 1	655	-	-	0	-
Stage 2	707	-	-	0	-
Platoon blocked, %			-		-
Mov Cap-1 Maneuver	361	624	-	-	1094
Mov Cap-2 Maneuver	361	-	-	-	-
Stage 1	654	-	-	-	-
Stage 2	707	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0	0
HCM LOS	B		




Minor Lane/Major Mvmt	NBTWBLn1	SBL	SBT
Capacity (veh/h)	- 457	1094	-
HCM Lane V/C Ratio	- 0.005	0.001	-
HCM Control Delay (s)	- 12.9	8.3	-
HCM Lane LOS	- B	A	-
HCM 95th %tile Q(veh)	- 0	0	-

Intersection						
Int Delay, s/veh	1.3					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	26	18	338	14	24	304
Future Vol, veh/h	26	18	338	14	24	304
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	83	83	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	35	24	407	17	26	327
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	795	416	0	0	424	0
Stage 1	416	-	-	-	-	-
Stage 2	379	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	355	634	-	-	1099	-
Stage 1	664	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	345	634	-	-	1099	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	645	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	14.8	0	0.6			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	424	1099	-	
HCM Lane V/C Ratio	-	-	0.138	0.023	-	
HCM Control Delay (s)	-	-	14.8	8.4	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-	



**Intersection**




Int Delay, s/veh 0




Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	1	152	0	1	308
Future Vol, veh/h	1	1	152	0	1	308
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	82	82	73	73
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	1	1	185	0	1	422




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	609	185	0
Stage 1	185	-	-
Stage 2	424	-	-
Critical Hdwy	6.43	6.23	-
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	-
Pot Cap-1 Maneuver	457	855	-
Stage 1	844	-	-
Stage 2	658	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	457	855	-
Mov Cap-2 Maneuver	457	-	-
Stage 1	843	-	-
Stage 2	658	-	-




Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	0
HCM LOS	B		




Minor Lane/Major Mvmt	NBTWBLn1	SBL	SBT
Capacity (veh/h)	- 596	1349	-
HCM Lane V/C Ratio	- 0.004	0.001	-
HCM Control Delay (s)	- 11.1	7.7	-
HCM Lane LOS	- B	A	-
HCM 95th %tile Q(veh)	- 0	0	-




Intersection						
Int Delay, s/veh	0.9					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	18	9	143	18	11	297
Future Vol, veh/h	18	9	143	18	11	297
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	82	82	73	73
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	24	12	174	22	15	407
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	622	185	0	0	196	0
Stage 1	185	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	449	855	-	-	1336	-
Stage 1	844	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	442	855	-	-	1336	-
Mov Cap-2 Maneuver	442	-	-	-	-	-
Stage 1	831	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	12.3	0	0.3			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	527	1336	-	
HCM Lane V/C Ratio	-	-	0.068	0.011	-	
HCM Control Delay (s)	-	-	12.3	7.7	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	




Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	24	457	40	5	248
Future Vol, veh/h	10	24	457	40	5	248
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	11	26	476	42	6	282
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	791	497	0	0	518	0
Stage 1	497	-	-	-	-	-
Stage 2	294	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	357	571	-	-	1013	-
Stage 1	609	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	355	571	-	-	1013	-
Mov Cap-2 Maneuver	355	-	-	-	-	-
Stage 1	605	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	13.1	0		0.2		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	484	1013	-	
HCM Lane V/C Ratio	-	-	0.076	0.006	-	
HCM Control Delay (s)	-	-	13.1	8.6	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Intersection						
Int Delay, s/veh	1.7					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	22	31	465	14	27	231
Future Vol, veh/h	22	31	465	14	27	231
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	96	96	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	35	49	484	15	31	263
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	817	492	0	0	499	0
Stage 1	492	-	-	-	-	-
Stage 2	325	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	345	575	-	-	1030	-
Stage 1	612	-	-	-	-	-
Stage 2	730	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	333	575	-	-	1030	-
Mov Cap-2 Maneuver	333	-	-	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	730	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	15	0	0.9			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	442	1030	-	
HCM Lane V/C Ratio	-	-	0.19	0.03	-	
HCM Control Delay (s)	-	-	15	8.6	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-	




Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	8	257	14	31	439
Future Vol, veh/h	26	8	257	14	31	439
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	91	91	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	28	9	282	15	35	499
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	859	290	0	0	297	0
Stage 1	290	-	-	-	-	-
Stage 2	569	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	326	747	-	-	1225	-
Stage 1	757	-	-	-	-	-
Stage 2	564	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	313	747	-	-	1225	-
Mov Cap-2 Maneuver	313	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	564	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	16		0		0.5	
HCM LOS	C					
Minor Lane/Major Mvmt		NBT	NBRWBLn1	SBL	SBT	
Capacity (veh/h)		-	-	363	1225	-
HCM Lane V/C Ratio		-	-	0.102	0.029	-
HCM Control Delay (s)		-	-	16	8	-
HCM Lane LOS		-	-	C	A	-
HCM 95th %tile Q(veh)		-	-	0.3	0.1	-




Intersection						
Int Delay, s/veh	0.8					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	14	12	258	31	11	454
Future Vol, veh/h	14	12	258	31	11	454
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	91	91	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	22	19	284	34	13	516
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	843	301	0	0	318	0
Stage 1	301	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	333	736	-	-	1204	-
Stage 1	748	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	328	736	-	-	1204	-
Mov Cap-2 Maneuver	328	-	-	-	-	-
Stage 1	737	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	14	0	0.2			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	441	1204	-	
HCM Lane V/C Ratio	-	-	0.094	0.01	-	
HCM Control Delay (s)	-	-	14	8	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	




Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	23	356	24	4	328
Future Vol, veh/h	11	23	356	24	4	328
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	12	25	429	29	4	353
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	805	444	0	0	458	0
Stage 1	444	-	-	-	-	-
Stage 2	361	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	350	612	-	-	1067	-
Stage 1	644	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	348	612	-	-	1067	-
Mov Cap-2 Maneuver	348	-	-	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	12.9	0	0.1			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	491	1067	-	
HCM Lane V/C Ratio	-	-	0.075	0.004	-	
HCM Control Delay (s)	-	-	12.9	8.4	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Intersection						
Int Delay, s/veh	1.3					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	26	18	362	14	24	314
Future Vol, veh/h	26	18	362	14	24	314
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	83	83	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	35	24	436	17	26	338
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	835	445	0	0	453	0
Stage 1	445	-	-	-	-	-
Stage 2	390	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	336	611	-	-	1072	-
Stage 1	644	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	326	611	-	-	1072	-
Mov Cap-2 Maneuver	326	-	-	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	15.4	0	0.6			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	403	1072	-	
HCM Lane V/C Ratio	-	-	0.146	0.024	-	
HCM Control Delay (s)	-	-	15.4	8.4	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-	



Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	7	152	8	20	308
Future Vol, veh/h	27	7	152	8	20	308
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	82	82	73	73
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	29	8	185	10	27	422
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	666	190	0	0	195	0
Stage 1	190	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	423	849	-	-	1337	-
Stage 1	840	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	412	849	-	-	1337	-
Mov Cap-2 Maneuver	412	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	13.5	0		0.5		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	461	1337	-	
HCM Lane V/C Ratio	-	-	0.08	0.02	-	
HCM Control Delay (s)	-	-	13.5	7.7	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-	

Intersection						
Int Delay, s/veh	0.8					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	18	9	151	18	11	323
Future Vol, veh/h	18	9	151	18	11	323
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	82	82	73	73
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	24	12	184	22	15	442
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	667	195	0	0	206	0
Stage 1	195	-	-	-	-	-
Stage 2	472	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	422	844	-	-	1325	-
Stage 1	836	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	416	844	-	-	1325	-
Mov Cap-2 Maneuver	416	-	-	-	-	-
Stage 1	823	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	12.7	0	0.3			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	501	1325	-	
HCM Lane V/C Ratio	-	-	0.072	0.011	-	
HCM Control Delay (s)	-	-	12.7	7.7	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	24	513	40	5	262
Future Vol, veh/h	10	24	513	40	5	262
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	11	26	534	42	6	298
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	865	555	0	0	576	0
Stage 1	555	-	-	-	-	-
Stage 2	310	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	323	529	-	-	964	-
Stage 1	573	-	-	-	-	-
Stage 2	741	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	321	529	-	-	964	-
Mov Cap-2 Maneuver	321	-	-	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	741	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	13.8	0	0.2			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	444	964	-	
HCM Lane V/C Ratio	-	-	0.083	0.006	-	
HCM Control Delay (s)	-	-	13.8	8.8	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	

**Intersection**

Int Delay, s/veh 3.9

**Movement** NWL NWR NET NER SWL SWTLane Configurations 

Traffic Vol, veh/h 42 76 476 87 36 237

Future Vol, veh/h 42 76 476 87 36 237

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - 0 - - 0

Grade, % 0 - 0 - - 0

Peak Hour Factor 63 63 96 96 88 88

Heavy Vehicles, % 3 3 9 9 9 9

Mvmt Flow 67 121 496 91 41 269

**Major/Minor** Minor1 Major1 Major2

Conflicting Flow All 893 542 0 0 587 0

Stage 1 542 - - - - -

Stage 2 351 - - - - -

Critical Hdwy 6.43 6.23 - - 4.19 -

Critical Hdwy Stg 1 5.43 - - - - -

Critical Hdwy Stg 2 5.43 - - - - -

Follow-up Hdwy 3.527 3.327 - - 2.281 -

Pot Cap-1 Maneuver 311 538 - - 954 -

Stage 1 581 - - - - -

Stage 2 710 - - - - -

Platoon blocked, % - - - - -

Mov Cap-1 Maneuver 295 538 - - 954 -

Mov Cap-2 Maneuver 295 - - - - -

Stage 1 551 - - - - -

Stage 2 710 - - - - -

**Approach** NW NE SW

HCM Control Delay, s 20.5 0 1.2

HCM LOS C

**Minor Lane/Major Mvmt** NET NERNWLn1 SWL SWT




Capacity (veh/h) - - 416 954 -




HCM Lane V/C Ratio - - 0.45 0.043 -

HCM Control Delay (s) - - 20.5 8.9 0




HCM Lane LOS - - C A A

HCM 95th %tile Q(veh) - - 2.3 0.1 -

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	8	277	14	31	507
Future Vol, veh/h	26	8	277	14	31	507
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	91	91	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	28	9	304	15	35	576
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	958	312	0	0	319	0
Stage 1	312	-	-	-	-	-
Stage 2	646	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	284	726	-	-	1202	-
Stage 1	740	-	-	-	-	-
Stage 2	520	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	272	726	-	-	1202	-
Mov Cap-2 Maneuver	272	-	-	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	520	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	17.8	0	0.5			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	319	1202	-	
HCM Lane V/C Ratio	-	-	0.116	0.029	-	
HCM Control Delay (s)	-	-	17.8	8.1	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-	

Intersection						
Int Delay, s/veh	4.2					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	64	25	264	56	68	466
Future Vol, veh/h	64	25	264	56	68	466
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	63	63	91	91	88	88
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	102	40	290	62	77	530
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1005	321	0	0	352	0
Stage 1	321	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	267	718	-	-	1169	-
Stage 1	733	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	242	718	-	-	1169	-
Mov Cap-2 Maneuver	242	-	-	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	27.6	0	1.1			
HCM LOS	D					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	297	1169	-	
HCM Lane V/C Ratio	-	-	0.476	0.066	-	
HCM Control Delay (s)	-	-	27.6	8.3	0	
HCM Lane LOS	-	-	D	A	A	
HCM 95th %tile Q(veh)	-	-	2.4	0.2	-	




Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↑			↑
Traffic Vol, veh/h	11	23	407	24	4	342
Future Vol, veh/h	11	23	407	24	4	342
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	83	83	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	12	25	490	29	4	368
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	881	505	0	0	519	0
Stage 1	505	-	-	-	-	-
Stage 2	376	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	316	565	-	-	1012	-
Stage 1	604	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	314	565	-	-	1012	-
Mov Cap-2 Maneuver	314	-	-	-	-	-
Stage 1	601	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	13.7	0	0.1			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	449	1012	-	
HCM Lane V/C Ratio	-	-	0.082	0.004	-	
HCM Control Delay (s)	-	-	13.7	8.6	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	

Intersection						
Int Delay, s/veh	2.7					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	45	60	371	61	30	322
Future Vol, veh/h	45	60	371	61	30	322
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	83	83	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	60	80	447	73	32	346
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	894	484	0	0	520	0
Stage 1	484	-	-	-	-	-
Stage 2	410	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	310	581	-	-	1011	-
Stage 1	618	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	298	581	-	-	1011	-
Mov Cap-2 Maneuver	298	-	-	-	-	-
Stage 1	594	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	18.1	0	0.7			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	413	1011	-	
HCM Lane V/C Ratio	-	-	0.339	0.032	-	
HCM Control Delay (s)	-	-	18.1	8.7	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	1.5	0.1	-	



**Intersection**

Int Delay, s/veh 1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	7	168	8	20	352
Future Vol, veh/h	27	7	168	8	20	352
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	82	82	73	73
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	29	8	205	10	27	482

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	746	210	0
Stage 1	210	-	-
Stage 2	536	-	-
Critical Hdwy	6.43	6.23	-
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	-
Pot Cap-1 Maneuver	380	828	-
Stage 1	823	-	-
Stage 2	585	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	369	828	-
Mov Cap-2 Maneuver	369	-	-
Stage 1	800	-	-
Stage 2	585	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.5	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	417	1314
HCM Lane V/C Ratio	-	-	0.089	0.021
HCM Control Delay (s)	-	-	14.5	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1

**Intersection**

Int Delay, s/veh 3

**Movement** NWL NWR NET NER SWL SWTLane Configurations 

Traffic Vol, veh/h 66 21 155 34 47 330

Future Vol, veh/h 66 21 155 34 47 330

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - 0 - - 0

Grade, % 0 - 0 - - 0

Peak Hour Factor 75 75 82 82 73 73

Heavy Vehicles, % 3 3 9 9 9 9

Mvmt Flow 88 28 189 41 64 452

**Major/Minor** Minor1 Major1 Major2

Conflicting Flow All 790 210 0 0 230 0

Stage 1 210 - - - - -

Stage 2 580 - - - - -

Critical Hdwy 6.43 6.23 - - 4.19 -

Critical Hdwy Stg 1 5.43 - - - - -

Critical Hdwy Stg 2 5.43 - - - - -

Follow-up Hdwy 3.527 3.327 - - 2.281 -

Pot Cap-1 Maneuver 358 828 - - 1298 -

Stage 1 823 - - - - -

Stage 2 558 - - - - -

Platoon blocked, % - - - - -

Mov Cap-1 Maneuver 334 828 - - 1298 -

Mov Cap-2 Maneuver 334 - - - - -

Stage 1 769 - - - - -

Stage 2 558 - - - - -

**Approach** NW NE SW

HCM Control Delay, s 18.1 0 1

HCM LOS C

**Minor Lane/Major Mvmt** NET NERNWLn1 SWL SWT

Capacity (veh/h) - - 390 1298 -

HCM Lane V/C Ratio - - 0.297 0.05 -




HCM Control Delay (s) - - 18.1 7.9 0

HCM Lane LOS - - C A A

HCM 95th %tile Q(veh) - - 1.2 0.2 -

**Intersection**




Int Delay, s/veh 0




Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	651	1	1	338
Future Vol, veh/h	0	1	651	1	1	338
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	0	1	678	1	1	367




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1048	679	0
Stage 1	679	-	-
Stage 2	369	-	-
Critical Hdwy	6.43	6.23	4.19
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	2.281
Pot Cap-1 Maneuver	251	450	881
Stage 1	502	-	-
Stage 2	697	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	251	450	881
Mov Cap-2 Maneuver	251	-	-
Stage 1	501	-	-
Stage 2	697	-	-




Approach	WB	NB	SB
HCM Control Delay, s	13	0	0
HCM LOS	B		




Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	450	881
HCM Lane V/C Ratio	-	-	0.002	0.001
HCM Control Delay (s)	-	-	13	9.1
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection						
Int Delay, s/veh	3.1					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	48	85	566	92	44	294
Future Vol, veh/h	48	85	566	92	44	294
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	52	92	590	96	48	320
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1054	638	0	0	686	0
Stage 1	638	-	-	-	-	-
Stage 2	416	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	249	475	-	-	876	-
Stage 1	524	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	232	475	-	-	876	-
Mov Cap-2 Maneuver	232	-	-	-	-	-
Stage 1	489	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	22.8	0	1.2			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NER	NWL	SWL	SWT	
Capacity (veh/h)	-	-	345	876	-	
HCM Lane V/C Ratio	-	-	0.419	0.055	-	
HCM Control Delay (s)	-	-	22.8	9.3	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	2	0.2	-	




Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	354	1	1	640
Future Vol, veh/h	0	1	354	1	1	640
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	0	1	385	1	1	696
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1084	386	0	0	386	0
Stage 1	386	-	-	-	-	-
Stage 2	698	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	239	660	-	-	1135	-
Stage 1	685	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	239	660	-	-	1135	-
Mov Cap-2 Maneuver	239	-	-	-	-	-
Stage 1	684	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.5	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	660	1135	-	
HCM Lane V/C Ratio	-	-	0.002	0.001	-	
HCM Control Delay (s)	-	-	10.5	8.2	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Intersection						
Int Delay, s/veh	3.3					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	69	29	326	65	72	569
Future Vol, veh/h	69	29	326	65	72	569
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	75	32	354	71	78	618
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1164	390	0	0	425	0
Stage 1	390	-	-	-	-	-
Stage 2	774	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	214	656	-	-	1098	-
Stage 1	682	-	-	-	-	-
Stage 2	453	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	191	656	-	-	1098	-
Mov Cap-2 Maneuver	191	-	-	-	-	-
Stage 1	608	-	-	-	-	-
Stage 2	453	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	31.1	0	1			
HCM LOS	D					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	242	1098	-	
HCM Lane V/C Ratio	-	-	0.44	0.071	-	
HCM Control Delay (s)	-	-	31.1	8.5	0	
HCM Lane LOS	-	-	D	A	A	
HCM 95th %tile Q(veh)	-	-	2.1	0.2	-	

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	1	515	0	1	441
Future Vol, veh/h	1	1	515	0	1	441
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	1	1	560	0	1	479
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1041	560	0	-	560	0
Stage 1	560	-	-	-	-	-
Stage 2	481	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	254	526	-	0	977	-
Stage 1	570	-	-	0	-	-
Stage 2	620	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	254	526	-	-	977	-
Mov Cap-2 Maneuver	254	-	-	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	15.6	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBTWBLn1		SBL	SBT		
Capacity (veh/h)	-		343	977	-	
HCM Lane V/C Ratio	-		0.006	0.001	-	
HCM Control Delay (s)	-		15.6	8.7	-	
HCM Lane LOS	-		C	A	-	
HCM 95th %tile Q(veh)	-		0	0	-	

Intersection						
Int Delay, s/veh	2.6					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	53	66	449	66	37	404
Future Vol, veh/h	53	66	449	66	37	404
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	58	72	488	72	40	434
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1038	524	0	0	560	0
Stage 1	524	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	255	551	-	-	977	-
Stage 1	592	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	241	551	-	-	977	-
Mov Cap-2 Maneuver	241	-	-	-	-	-
Stage 1	560	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	21.2	0	0.7			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	350	977	-	
HCM Lane V/C Ratio	-	-	0.37	0.041	-	
HCM Control Delay (s)	-	-	21.2	8.8	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	1.7	0.1	-	



Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	1	214	0	1	445
Future Vol, veh/h	1	1	214	0	1	445
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	1	1	233	0	1	484




Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	719	233	0	-	233
Stage 1	233	-	-	-	-
Stage 2	486	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281
Pot Cap-1 Maneuver	394	804	-	0	1294
Stage 1	803	-	-	0	-
Stage 2	616	-	-	0	-
Platoon blocked, %			-		-
Mov Cap-1 Maneuver	394	804	-	-	1294
Mov Cap-2 Maneuver	394	-	-	-	-
Stage 1	802	-	-	-	-
Stage 2	616	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBTWBLn1	SBL	SBT
Capacity (veh/h)	- 529	1294	-
HCM Lane V/C Ratio	- 0.004	0.001	-
HCM Control Delay (s)	- 11.8	7.8	-
HCM Lane LOS	- B	A	-
HCM 95th %tile Q(veh)	- 0	0	-

**Intersection**




Int Delay, s/veh 2.9




Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	72	24	190	40	51	395
Future Vol, veh/h	72	24	190	40	51	395
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	85	28	224	47	60	465




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	833	248	0
Stage 1	248	-	-
Stage 2	585	-	-
Critical Hdwy	6.43	6.23	-
Critical Hdwy Stg 1	5.43	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.527	3.327	-
Pot Cap-1 Maneuver	337	788	-
Stage 1	791	-	-
Stage 2	555	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	315	788	-
Mov Cap-2 Maneuver	315	-	-
Stage 1	740	-	-
Stage 2	555	-	-

Approach	NW	NE	SW
HCM Control Delay, s	18.9	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT
Capacity (veh/h)	-	-	371	1253
HCM Lane V/C Ratio	-	-	0.304	0.048
HCM Control Delay (s)	-	-	18.9	8
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.3	0.2

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	24	651	40	6	338
Future Vol, veh/h	10	24	651	40	6	338
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	11	26	678	42	7	367
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1080	699	0	0	720	0
Stage 1	699	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	240	438	-	-	850	-
Stage 1	491	-	-	-	-	-
Stage 2	688	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	238	438	-	-	850	-
Mov Cap-2 Maneuver	238	-	-	-	-	-
Stage 1	486	-	-	-	-	-
Stage 2	688	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	16.5	0		0.2		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)		-	-	351	850	-
HCM Lane V/C Ratio		-	-	0.105	0.008	-
HCM Control Delay (s)		-	-	16.5	9.3	-
HCM Lane LOS		-	-	C	A	-
HCM 95th %tile Q(veh)		-	-	0.3	0	-

Intersection						
Int Delay, s/veh	3.2					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	48	85	605	92	44	304
Future Vol, veh/h	48	85	605	92	44	304
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	96	96	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	52	92	630	96	48	330
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1104	678	0	0	726	0
Stage 1	678	-	-	-	-	-
Stage 2	426	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	233	450	-	-	846	-
Stage 1	502	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	217	450	-	-	846	-
Mov Cap-2 Maneuver	217	-	-	-	-	-
Stage 1	467	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	24.8	0	1.2			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	324	846	-	
HCM Lane V/C Ratio	-	-	0.446	0.057	-	
HCM Control Delay (s)	-	-	24.8	9.5	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	2.2	0.2	-	

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	8	354	14	31	640
Future Vol, veh/h	26	8	354	14	31	640
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	28	9	385	15	34	696
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1157	393	0	0	400	0
Stage 1	393	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	216	654	-	-	1122	-
Stage 1	680	-	-	-	-	-
Stage 2	458	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	205	654	-	-	1122	-
Mov Cap-2 Maneuver	205	-	-	-	-	-
Stage 1	647	-	-	-	-	-
Stage 2	458	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	22.4	0	0.4			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	244	1122	-	
HCM Lane V/C Ratio	-	-	0.151	0.03	-	
HCM Control Delay (s)	-	-	22.4	8.3	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-	

**Intersection**

Int Delay, s/veh 3.4

**Movement** NWL NWR NET NER SWL SWTLane Configurations 

Traffic Vol, veh/h 69 29 338 65 72 595

Future Vol, veh/h 69 29 338 65 72 595

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - 0 - - 0

Grade, % 0 - 0 - - 0

Peak Hour Factor 92 92 92 92 92 92

Heavy Vehicles, % 3 3 9 9 9 9

Mvmt Flow 75 32 367 71 78 647

**Major/Minor** Minor1 Major1 Major2

Conflicting Flow All 1206 403 0 0 438 0

Stage 1 403 - - - - -

Stage 2 803 - - - - -

Critical Hdwy 6.43 6.23 - - 4.19 -

Critical Hdwy Stg 1 5.43 - - - - -

Critical Hdwy Stg 2 5.43 - - - - -

Follow-up Hdwy 3.527 3.327 - - 2.281 -

Pot Cap-1 Maneuver 202 645 - - 1086 -

Stage 1 673 - - - - -

Stage 2 439 - - - - -

Platoon blocked, % - - - - -

Mov Cap-1 Maneuver 179 645 - - 1086 -

Mov Cap-2 Maneuver 179 - - - - -

Stage 1 598 - - - - -

Stage 2 439 - - - - -

**Approach** NW NE SW

HCM Control Delay, s 33.9 0 0.9

HCM LOS D

**Minor Lane/Major Mvmt** NET NERNWLn1 SWL SWT




Capacity (veh/h) - - 228 1086 -

HCM Lane V/C Ratio - - 0.467 0.072 -

HCM Control Delay (s) - - 33.9 8.6 0

HCM Lane LOS - - D A A




HCM 95th %tile Q(veh) - - 2.3 0.2 -

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	24	515	24	4	441
Future Vol, veh/h	11	24	515	24	4	441
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	12	26	560	26	4	479




Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1060	573	0	0	586
Stage 1	573	-	-	-	-
Stage 2	487	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281
Pot Cap-1 Maneuver	247	517	-	-	955
Stage 1	562	-	-	-	-
Stage 2	616	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	246	517	-	-	955
Mov Cap-2 Maneuver	246	-	-	-	-
Stage 1	559	-	-	-	-
Stage 2	616	-	-	-	-




Approach	WB	NB	SB
HCM Control Delay, s	15.4	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	384	955
HCM Lane V/C Ratio	-	-	0.099	0.005
HCM Control Delay (s)	-	-	15.4	8.8
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Intersection						
Int Delay, s/veh	2.7					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	53	66	473	66	37	414
Future Vol, veh/h	53	66	473	66	37	414
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	93	93
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	58	72	514	72	40	445
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1075	550	0	0	586	0
Stage 1	550	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	242	533	-	-	955	-
Stage 1	576	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	228	533	-	-	955	-
Mov Cap-2 Maneuver	228	-	-	-	-	-
Stage 1	544	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	22.4	0	0.7			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	334	955	-	
HCM Lane V/C Ratio	-	-	0.387	0.042	-	
HCM Control Delay (s)	-	-	22.4	8.9	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	1.8	0.1	-	



Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	8	214	8	20	445
Future Vol, veh/h	27	8	214	8	20	445
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	29	9	233	9	22	484
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	766	238	0	0	242	0
Stage 1	238	-	-	-	-	-
Stage 2	528	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	369	798	-	-	1284	-
Stage 1	799	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	361	798	-	-	1284	-
Mov Cap-2 Maneuver	361	-	-	-	-	-
Stage 1	781	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	14.6	0		0.3		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 413		1284	-	
HCM Lane V/C Ratio	-	- 0.092		0.017	-	
HCM Control Delay (s)	-	- 14.6		7.9	-	
HCM Lane LOS	-	- B		A	-	
HCM 95th %tile Q(veh)	-	- 0.3		0.1	-	

Intersection						
Int Delay, s/veh	2.9					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	72	24	198	40	51	420
Future Vol, veh/h	72	24	198	40	51	420
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	3	3	9	9	9	9
Mvmt Flow	85	28	233	47	60	494
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	871	257	0	0	280	0
Stage 1	257	-	-	-	-	-
Stage 2	614	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.19	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.281	-
Pot Cap-1 Maneuver	320	779	-	-	1243	-
Stage 1	784	-	-	-	-	-
Stage 2	538	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	299	779	-	-	1243	-
Mov Cap-2 Maneuver	299	-	-	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	538	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	19.9	0	0.9			
HCM LOS	C					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	353	1243	-	
HCM Lane V/C Ratio	-	-	0.32	0.048	-	
HCM Control Delay (s)	-	-	19.9	8	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	1.4	0.2	-	

# **APPENDIX D**

Chapter 400 of Caltrans' Highway Design Manual (HDM)

## CHAPTER 400 INTERSECTIONS AT GRADE

Intersections are planned points of conflict where two or more roadways join or cross. At-grade intersections are among the most complicated elements on the highway system, and control the efficiency, capacity, and safety for motorized and non-motorized users of the facility. The type and operation of an intersection is important to the adjacent property owners, motorists, bicyclists, pedestrians, transit operators, the trucking industry, and the local community.

There are two basic types of at grade intersections: crossing and circular. It is not recommended that intersections have more than four legs. Occasionally, local development and land uses create the need for a more complex intersection design. Such intersections may require a specialized intersection design to handle the specify traffic demands at that location. In addition to the guidance in this manual, see Traffic Operations Policy Directive (TOPD) Number 13-02: Intersection Control Evaluation (ICE) for direction and procedures on the evaluation, comparison and selection of the intersection types and control strategies identified in Index 401.5. Also refer to the Complete Streets Intersection Guide for further information.

### Topic 401 - Factors Affecting Design

#### Index 401.1 - General

At-grade intersections must handle a variety of conflicts among users, which includes truck, transit, pedestrians, and bicycles. These recurring conflicts play a major role in the preparation of design standards and guidelines. Arriving, departing, merging, turning, and crossing paths of moving pedestrians, bicycles, truck, and vehicular traffic have to be accommodated within a relatively small area. The objective of designing an intersection is to effectively balance the convenience, ease, and comfort of the users, as well as the human factors, with moving traffic (automobiles, trucks, motorcycles, transit vehicles, bicycles, pedestrians, etc.). The safety and mobility needs of motorist, bicyclist and pedestrians as well as their movement

patterns in intersections must be analyzed early in the planning phase and then followed through appropriately during the design phase of all intersections on the State highway. It is Departmental policy to develop integrated multimodal projects in balance with community goals, plans, and values.

The Complete Intersections: A Guide to Reconstructing Intersections and Interchanges for Bicyclists and Pedestrians contains a primer on the factors to consider when designing intersections. It is published by the California Division of Traffic Operations.

#### 401.2 Human Factors

- (1) *The Driver.* An appreciation of driver performance is essential to proper highway design and operation. The suitability of a design rests as much on how safely and efficiently drivers are able to use the highway as on any other criterion.

Motorist's perception and reaction time set the standards for sight distance and length of transitions. The driver's ability to understand and interpret the movements and crossing times of the other vehicle drivers, bicyclists, and pedestrians using the intersection is equally important when making decisions and their associated reactions. The designer needs to keep in mind the user's limitations and therefore design intersections so that they meet user expectation.

- (2) *The Bicyclist.* Bicyclist experience, skills and physical capabilities are factors in intersection design. Intersections are to be designed to help bicyclists understand how to traverse the intersection. Chapter 1000 provides intersection guidance for Class I and Class III bikeways that intersect the State highway system. The guidance in this chapter specifically relates to bicyclists that operate within intersections on the State highway system.
- (3) *The Pedestrian.* Understanding how pedestrians will use an intersection is critical because pedestrian volumes, their age ranges, physical ability, etc. all factor in to their startup time and the time it takes them to cross an intersection and thus, dictates how to design

the intersection to avoid potential conflicts with bicyclists and motor vehicles. The guidance in this chapter specifically relates to pedestrian travel within intersections on the State highway system. See Topic 105, Pedestrian Facilities, Design Information Bulletin 82 - "Pedestrian Accessibility Guidelines for Highway Projects," the AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, and the California Manual on Uniform Traffic Control Devices (California MUTCD) for additional guidance.

### 401.3 Traffic Considerations

Good intersection design clearly indicates to bicyclists and motorists how to traverse the intersection (see Figure 403.6A). Designs that encourage merging traffic to yield to through bicycle and motor vehicle traffic are desirable.

The size, maneuverability, and other characteristics of bicycles and motorized vehicles (automobiles, trucks, transit vehicles, farm equipment, etc.) are all factors that influence the design of an intersection. The differences in operating characteristics between bicycles and motor vehicles should be considered early in design.

Table 401.3 compares vehicle characteristics to intersection design elements.

A design vehicle is a convenient means of representing a particular segment of the vehicle population. See Topic 404 for a further discussion of the uses of design vehicles.

Transit vehicles and how their stops interrelate with an intersection, pedestrian desired walking patterns and potential transfers to other transit facilities are another critical factor to understand when designing an intersection. Transit stops and their placement needs to take into account the required maintenance operations that will be needed and usually supplied by the Transit Operator.

### 401.4 The Physical Environment

In highly developed urban areas, where right of way is usually limited, the volume of vehicular traffic, pedestrians, and bicyclists may be large, street parking exists, and transit stops (for both buses and light rail) are available. All interact in a variety of movements that contribute to and add to the

complexity of a State highway and can result in busy intersections.

Industrial development may require special attention to the movement of large trucks.

Rural areas where farming occurs may require special attention for specialized farm equipment. In addition, rural cities or town centers (rural main streets) also require special attention.

Rural intersections in farm areas with low traffic volumes may have special visibility problems or require shadowing of left-turn vehicles from high speed approach traffic.

**Table 401.3**

Vehicle Characteristics	Intersection Design Element Affected
Length	Length of storage lane
Width	Lane width
Height	Clearance to overhead signs and signals
Wheel base	Corner radius and width of turning lanes
Acceleration	Tapers and length of acceleration lane
Deceleration	Tapers and length of deceleration lane

There are many factors to be considered in the design of intersections, with the goal to achieve a functional, safe and efficient intersection for all users of the facility. The location and level of use by various modes will have an impact on intersection design, and therefore should be considered early in the design process. In addition to current levels of use, it is important to consider future travel patterns for vehicles, including trucks; pedestrian and bicycle demand and the future expansion of transit.

### 401.5 Intersection Type

Intersection types are characterized by their basic geometric configuration, and the form of intersection traffic control that is employed:

*(1) Geometric Configurations*

- (a) Crossing-Type Intersections - “Tee” and 4-legged intersections
- (b) Circular Intersections –roundabouts, traffic circles, rotaries; however, only roundabouts are acceptable for State highways.
- (c) Alternative Intersection Designs – various effective geometric alternatives to traditional designs that can reduce crashes and their severity, improve operations, reduce congestion and delay typically by reducing or altering the number of conflict points; these alternatives include geometric design features such as intersections with displaced left-turns or variations on U-turns.

*(2) Intersection Control strategies, See California MUTCD and Traffic Operations Policy Directive (TOPD) Number 13-02, Intersection Control Evaluation for procedures and guidance on how to evaluate, compare and select from among the following intersection control strategies:*

- (a) Two-Way Stop Controlled - for minor road traffic
- (b) All-Way Stop Control
- (c) Signal Control
- (d) Yield Control (Roundabout)

Historically, crossing-type intersections with signal or “STOP”-control have been used on the State highway system. However, other intersection types, given the appropriate circumstances may enhance intersection performance through fewer or less severe crashes and improve operations by reducing overall delay. Alternative intersection geometric designs should be considered and evaluated early in the project scoping, planning and decision-making stages, as they may be more efficient, economical and safer solutions than traditional designs. Alternative intersection designs can effectively balance the safety and mobility needs of the motor vehicle drivers, transit riders, bicyclists and pedestrians using the intersection.

**401.6 Transit**

Transit use may range from periodic buses, handled as part of the normal mix of vehicular traffic, to Bus

Rapid Transit (BRT) or light rail facilities which can have a large impact on other users of the intersection. Consideration of these modes should be part of the early planning and design of intersections.

**Topic 402 - Operational Features Affecting Design****402.1 Capacity**

Adequate capacity to handle peak period traffic demands is a basic goal of intersection design.

- (1) *Unsignalized Intersections.* The “Highway Capacity Manual”, provides methodology for capacity analysis of unsignalized intersections controlled by “STOP” or “YIELD” signs. The assumption is made that major street traffic is not affected by the minor street movement. Unsignalized intersections generally become candidates for signalization when traffic backups begin to develop on the cross street or when gaps in traffic are insufficient for drivers to yield to crossing pedestrians. See the California MUTCD, for signal warrants. Changes to intersection controls must be coordinated with District Traffic Branch.
- (2) *Signalized Intersections.* See Topic 406 for analysis of simple signalized intersections, including ramps. The analysis of complex and alternative intersections should be referred to the District Traffic Branch; also see Traffic Operations Policy Directive (TOPD) Number 13-02.
- (3) *Roundabout Intersections.* See TOPD Number 13-02 for screening process and the Intersection Control Evaluation(ICE) Process Informational Guide for operational analysis methods and tools.

**402.2 Collisions**

- (1) *General.* Intersections have a higher potential for conflict compared to other sections of the highway because travel is interrupted, traffic streams cross, and many types of turning movements occur.

The type of traffic control affects the type of collisions. Signalized intersections tend to have more rear end and same-direction

sideswipes than intersections with “STOP”-control on minor legs. Roundabouts experience few angle or crossing collisions. Roundabouts reduce the frequency and severity of collisions, especially when compared to the performance of signalized intersections in high speed environments. Other alternative intersection types are configurations to consider for minimizing the number of conflict points.

(2) *Undesirable Geometric Features.*

- Inadequate approach sight distance.
- Inadequate corner sight distance.
- Steep grades.
- Five or more approaches.
- Presence of curves within intersections(unless at roundabouts).
- Inappropriately large curb radii.
- Long pedestrian crossing distances.
- Intersection Angle <75 degrees (see Topic 403).

### 402.3 On-Street Parking

On-street parking generally decreases through-traffic capacity, impedes traffic flow, and increases crash potential. Where the primary service of the arterial is the movement of vehicles, it may be desirable to prohibit on-street parking on State highways in urban and suburban expressways and rural arterial sections. However, within urban and suburban areas and in rural communities located on State highways, on-street parking should be considered in order to accommodate existing land uses. Where adequate off-street parking facilities are not available, the designer should consider on-street parking, so that the proposed highway improvement will be compatible with the land use. On-street parking as well as off-street parking needs to comply with DIB82. See AASHTO, A Policy on Geometric Design of Highways and Streets for additional guidance related to on-street parking.

### 402.4 Consider All Users

Intersections should accommodate all users of the facility, including vehicles, bicyclists, pedestrians and transit. Bicycles have all the rights and responsibilities as motorist per the California

Vehicle Code, but should have separate consideration of their needs, even separate facilities if volumes warrant. Pedestrians should not be prohibited from crossing one or more legs of an intersection, unless no other safe alternative exists. Pedestrians can be prohibited from crossing one or more legs of an intersection if a reasonable alternate route exists and there is a demonstrated need to do so. All pedestrian facilities shall be ADA compliant as outlined in DIB 82. Transit needs should be determined early in the planning and design phase as their needs can have a large impact on the performance of an intersection. Transit stops in the vicinity of intersections should be evaluated for their effect on the safety and operation of the intersection(s) under study. See Topic 108 for additional information.

### 402.5 Speed-Change Areas

Speed-change areas for vehicles entering or leaving main streams of traffic are beneficial to the safety and efficiency of an intersection. Entering traffic merges most efficiently with through traffic when the merging angle is less than 15 degrees and when speed differentials are at a minimum.

## Topic 403 - Principles of Channelization

### 403.1 Preference to Major Movements

The provision of direct free-flowing high-standard alignment to give preference to major movements is good channelization practice. This may require some degree of control of the minor movements such as stopping, funneling, or even eliminating them. These controlling measures should conform to natural paths of movement and should be introduced gradually to promote smooth and efficient operation.

### 403.2 Areas of Conflict

Large multilane undivided intersection areas are undesirable. The hazards of conflicting movements are magnified when motorists, bicyclists, and pedestrians are unable to anticipate movements of other users within these areas. Channelization reduces areas of conflict by separating or regulating traffic movements into definite paths of travel by the use of pavement markings or traffic islands.

Multilane undivided intersections, even with signalization, are more difficult for pedestrians to cross. Providing pedestrian refuge islands enable pedestrians to cross fewer lanes at a time.

See Index 403.7 for traffic island guidance when used as pedestrian refuge. Curb extensions shorten crossing distance and increase visibility. See Index 303.4 for curb extensions.

### 403.3 Angle of Intersection

A right angle (90°) intersection provides the most favorable conditions for intersecting and turning traffic movements. Specifically, a right angle provides:

- The shortest crossing distance for motor vehicles, bicycles, and pedestrians.
- Sight lines which optimize corner sight distance and the ability of motorists to judge the relative position and speed of approach traffic.
- Intersection geometry that can reduce vehicle turning speeds so collisions are more easily avoided and the severity of collisions are minimized.
- Intersection geometry that sends a message to turning bicyclists and motorists that they are making a turning movement and should yield as appropriate to through traffic on the roadway they are leaving, to traffic on the receiving roadway, and to pedestrians crossing the intersection.

Minor deviations from right angles are generally acceptable provided that the potentially detrimental impact on visibility and turning movements for large trucks (see Topic 404) can be mitigated. However, large deviations from right angles may decrease visibility, hamper certain turning operations, and will increase the size of the intersection and therefore crossing distances for bicyclists and pedestrians, may encourage high speed turns, and may reduce yielding by turning traffic. When a right angle cannot be provided due to physical constraints, the interior angle should be designed as close to 90 degrees as is practical, but should not be less than 75 degrees. Mitigation should be considered for the affected intersection design features. (See Figure 403.3A). A 75 degree angle does not unreasonably increase the crossing distance or generally decrease visibility. Class II

bikeway crossings at railroads follow similar guidance to Class I bikeway crossings at railroads, see Index 1003.5(3), and Figure 403.3B.

A characteristic of skewed intersection angles is that they result in larger intersections.

When existing intersection angles are less than 75 degrees, the following retrofit improvement strategies should be considered:

- Realign the subordinate intersection legs if the new alignment and intersection location(s) can be designed without introducing new geometric or operational deficiencies.
- Provide acceleration lanes for difficult turning movements due to radius or limited visibility.
- Restrict problematic turning movements; e.g. for minor road left turns with potentially limited visibility.
- Provide refuge areas for pedestrians at very long crossings.

For additional guidance on the above and other improvement strategies, consult with the District Design Liaison or HQ Traffic Liaison.

Particular attention should be given to skewed angles on curved alignment with regards to sight distance and visibility. Crossroads skewed to the left have more restricted visibility for drivers of vans and trucks than crossroads skewed to the right. In addition, severely skewed intersection angles, coupled with steep downgrades (generally over 4 percent) can increase the potential for high centered vehicles to overturn where the vehicle is on a downgrade and must make a turn greater than 90 degrees onto a crossroad. These factors should be considered in the design of skewed intersections.

### 403.4 Points of Conflict

Channelization separates and clearly defines points of conflict within the intersection. Bicyclists, pedestrians and motorists should be exposed to only one conflict or confronted with one decision at a time.

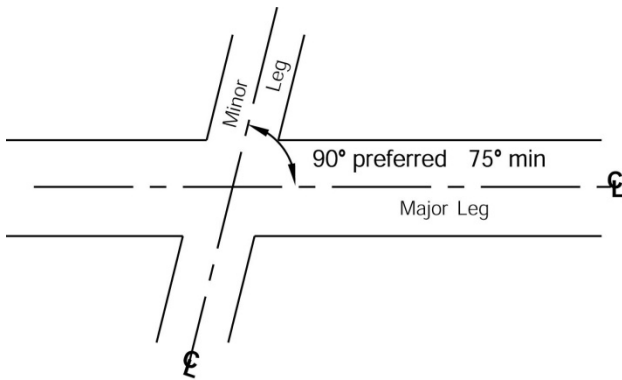
Speed-change areas for diverging traffic should provide adequate length clear of the through lanes to permit vehicles to decelerate after leaving the through lanes.



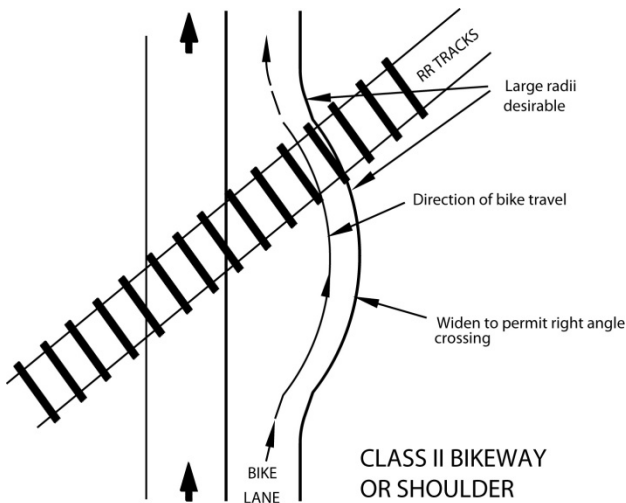
March 7, 2014

See AASHTO, A Policy on Geometric Design of Highways and Streets for additional guidance on speed-change lanes.

**Figure 403.3A**  
**Angle of Intersection**  
**(Minor Leg Skewed to the Right)**



**Figure 403.3B**  
**Class II Bikeway**  
**Crossing Railroad**



#### 403.5 (Currently Not In Use)

#### 403.6 Turning Traffic

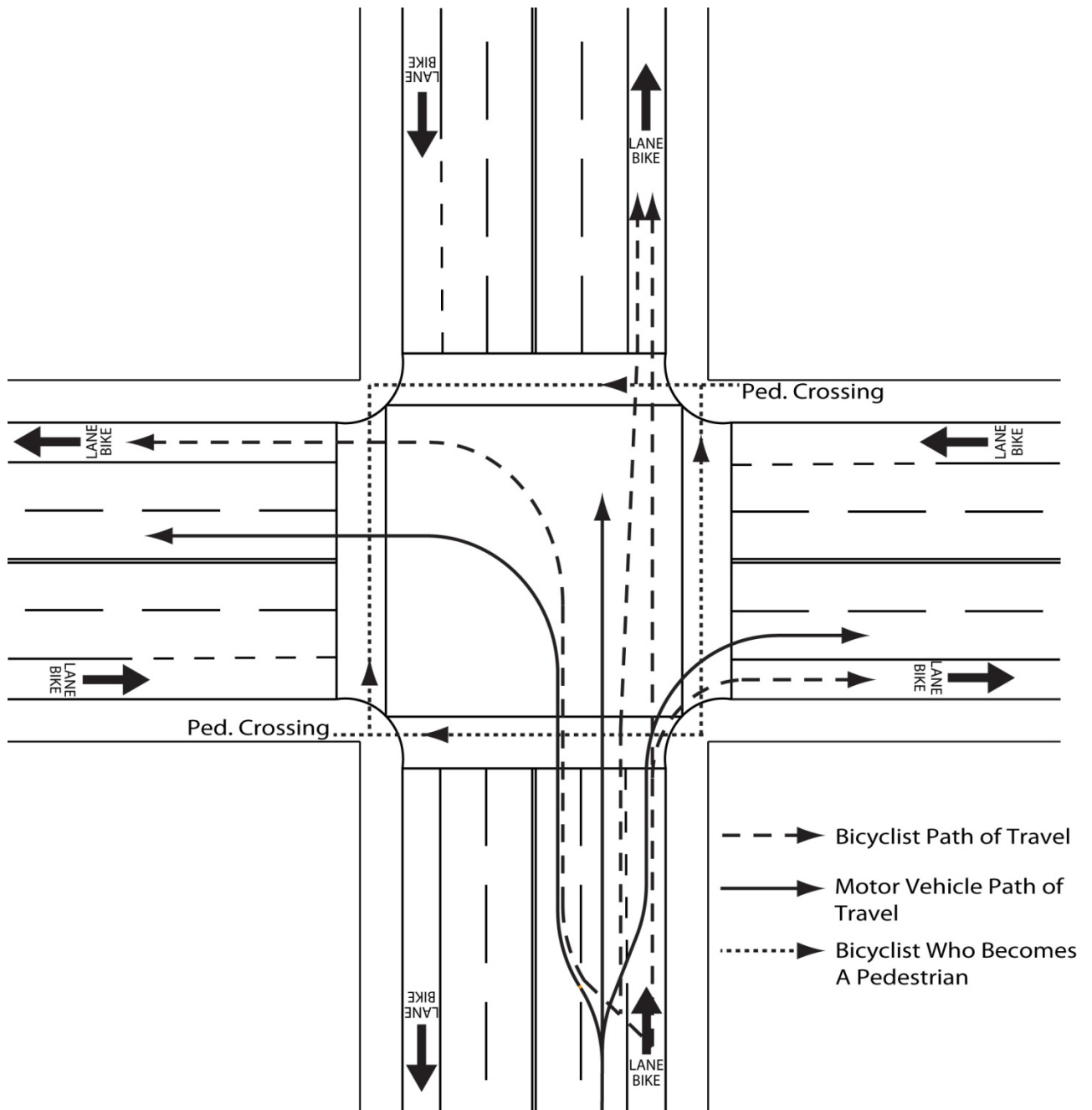
A separate turning lane removes turning movements from the intersection area. Abrupt changes in alignment or sight distance should be avoided, particularly where traffic turns into a separate turning lane from a high-standard through facility.

For wide medians, consider the use of offset left-turn lanes at both signalized and unsignalized intersections. Opposing left-turn lanes are offset or shifted as far to the left as practical by reducing the width of separation immediately before the intersection. Rather than aligning the left-turn lane exactly parallel with and adjacent to the through lane, the offset left-turn lane is separated from the adjacent through lane. Offset left-turn lanes provide improved visibility of opposing through traffic. For further guidance on offset left-turn lanes, see AASHTO, A Policy on Geometric Design of Highways and Streets.

- (1) *Treatment of Intersections with Right-Turn-Only Lanes.* Most motor vehicle/bicycle collisions occur at intersections. For this reason, intersection design should be accomplished in a manner that will minimize confusion by motorists and bicyclists, eliminate ambiguity and induce all road users to operate in accordance with the statutory rules of the road in the California Vehicle Code. Right-turn-only lanes should be designed to meet user expectations and reduce conflicts between vehicles and bicyclists.

Figure 403.6A illustrates a typical at-grade intersection of multilane streets without right-turn-only lanes. Bike lanes or shoulders are included on all approaches. Some common movements of motor vehicles and bicycles are shown. A prevalent crash type is between straight-through bicyclists and right-turning motorists, who do not yield to through bicyclists.

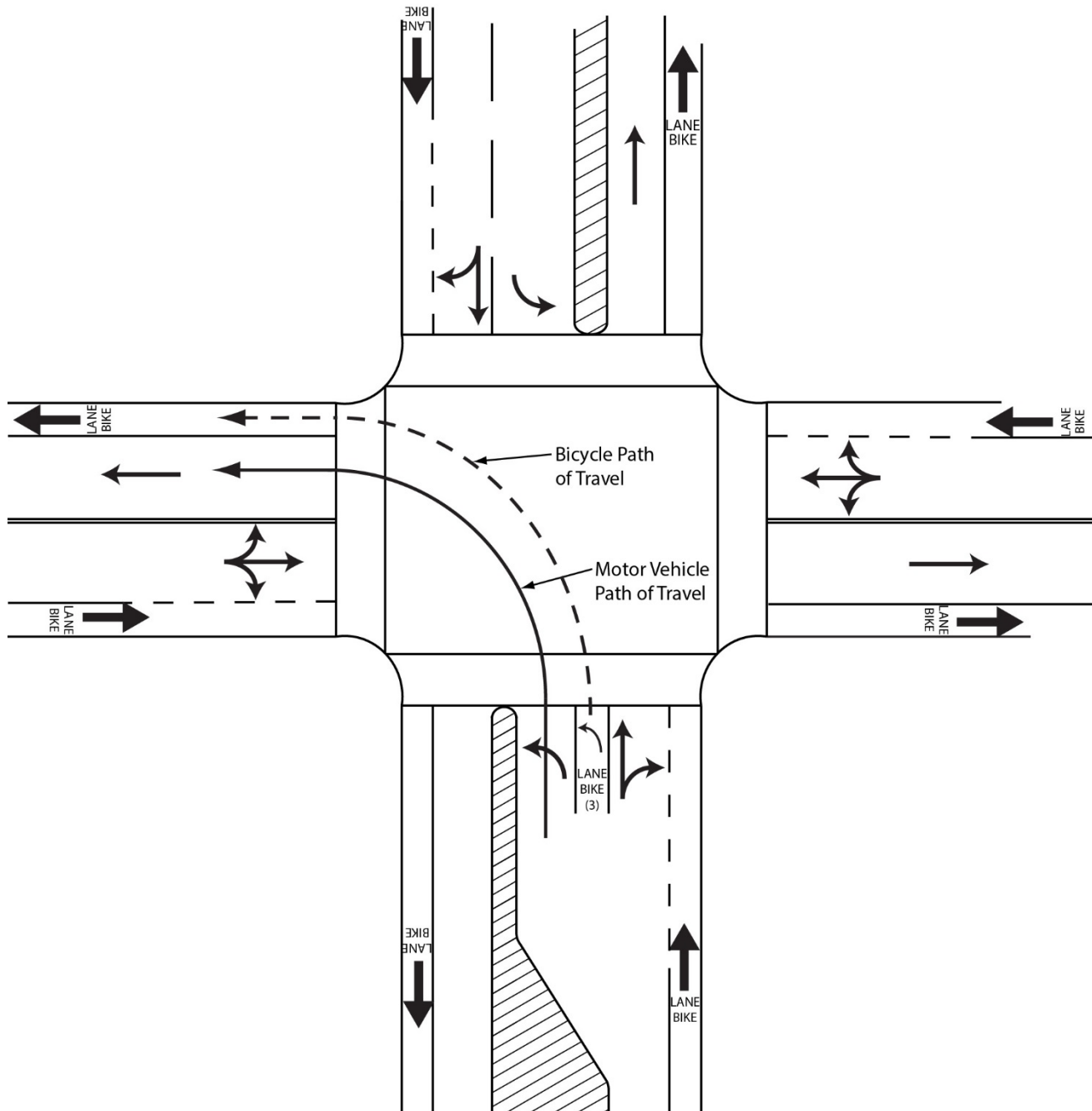
Optional right-turn lanes should not be used in combination with right-turn-only lanes on roads where bicycle travel is permitted. The use of optional right-turn lanes in combination with right-turn-only lanes is not recommended in any case where a Class II bike lane is present. This may increase the need for dual or triple right-turn-only lanes, which have

**Figure 403.6A****Typical Bicycle and Motor Vehicle Movements at Intersections of Multilane Streets without Right-Turn-Only Lanes**

NOTE:

Only one direction is shown for clarity.

**Figure 403.6B**  
**Bicycle Left-Turn-Only Lane**



NOTES:

- (1) For bicycle lane markings, see the California MUTCD.
- (2) Bicycle detectors are necessary for signalized intersections.
- (3) Left-turn bicycle lane should have receiving bike lane or shoulder.

challenges with visibility between turning vehicles and pedestrians. Multiple right-turn-only lanes should not be free right-turns when there is a pedestrian crossing. If there is a pedestrian crossing on the receiving leg of multiple right-turn-only lanes, the intersection should be controlled by a pedestrian signal head, or geometrically designed such that pedestrians cross only one turning lane at a time.

Locations with right-turn-only lanes should provide a minimum 4-foot width for bicycle use between the right-turn and through lane when bikes are permitted, except where posted speed is greater than 40 mph, the minimum width should be 6 feet. Configurations that create a weaving area without defined lanes should not be used.

For signing and delineation of bicycle lanes at intersections, consult District Traffic Operations.

Figure 403.6B depicts an intersection with a left-turn-only bicycle lane, which should be considered when bicycle left-turns are common. A left-turn-only bicycle lane may be considered at any intersection and should always be considered as a tool to provide mobility for bicyclists. Signing and delineation options for bicycle left-turn-only lanes are shown in the California MUTCD.

- (2) *Design of Intersections at Interchanges.* The design of at-grade intersections at interchanges should be accomplished in a manner that will minimize confusion of motorists, bicyclists, and pedestrians. Higher speed, uncontrolled entries and exits from freeway ramps should not be used at the intersection of the ramps with the local road. The smallest curb return radius should be used that accommodates the design vehicle. Intersections with interior angles close to 90 degrees reduce speeds at conflict points between motorists, bicyclists, and pedestrians. The intersection skew guidance in Index 403.3 applies to all ramp termini at the local road.

### 403.7 Refuge Areas

Traffic islands should be used to provide refuge areas for bicyclists and pedestrians. See Index 405.4 for further guidance.

### 403.8 Prohibited Turns

Traffic islands may be used to direct bicycle and motorized vehicle traffic streams in desired directions and prevent undesirable movements. Care should be taken so that islands used for this purpose accommodate convenient and safe pedestrian and bicycle crossings, drainage, and striping options. See Topic 303.

### 403.9 Effective Signal Control

At intersections with complex turning movements, channelization is required for effective signal control. Channelization permits the sorting of approaching bicycles and motorized vehicles which may move through the intersection during separate signal phases. Pedestrians may also have their own signal phase. This requirement is of particular importance when traffic-actuated signal controls are employed.

The California MUTCD has warrants for the placement of signals to control vehicular, bicycle and pedestrian traffic. Pedestrian activated devices, signals or beacons are not required, but must be evaluated where directional, multilane, pedestrian crossings occur. These locations may include:

- Mid-block street crossings;
- Channelized turn lanes;
- Ramp entries and exits; and
- Roundabouts.

The evaluation, selection, programming and use of a chosen device should be done with guidance from District Traffic Operations.

### 403.10 Installation of Traffic Control Devices

Channelization may provide locations for the installation of essential traffic control devices, such as "STOP" and directional signs. See Index 405.4 for information about the design of traffic islands.

### 403.11 Summary

- Give preference to the major move(s).

- Reduce areas of conflict.
- Reduce the duration of conflicts.
- Cross traffic at right angles or skew no more than 75 degrees. (90 degrees preferred.)
- Separate points of conflict.
- Provide speed-change areas and separate turning lanes where appropriate.
- Provide adequate width to shadow turning traffic.
- Restrict undesirable moves with traffic islands.
- Coordinate channelization with effective signal control.
- Install signs in traffic islands when necessary but avoid building conflicts one or more modes of travel.
- Consider all users.

### 403.12 Other Considerations

- An advantage of curbed islands is they can serve as pedestrian refuge. Where curbing is appropriate, consideration should be given to mountable curbs. See Topic 303 for more guidance.
- Avoid complex intersections that present multiple choices of movement to the motorist and bicyclist.
- Traffic safety should be considered. Collision records provide a valuable guide to the type of channelization needed.

## Topic 404 - Design Vehicles

### 404.1 General

Any vehicle, whether car, bus, truck, or recreational vehicle, while turning a curve, covers a wider path than the width of the vehicle. The outer front tire can generally follow a circular curve, but the inner rear tire will swing in toward the center of the curve.

Some terminology is vital to understanding the engineering concepts related to design vehicles. See Index 62.4 Interchanges and Intersection at Grade for terminology.

### 404.2 Design Considerations

It may not be necessary to provide for design vehicle turning movements at all intersections along the State route if the design vehicle's route is restricted or it is not expected to use the cross street frequently. Discuss with Traffic Operations and the local agency before a turning movement is not provided. The goal is to minimize possible conflicts between vehicles, bicycles, pedestrians, and other users of the roadway, while providing the minimum curb radii appropriate for the given situation.

Both the tracking width and swept width should be considered in the design of roadways for use of the roadway by design vehicles.

Tracking width lines delineate the path of the vehicle tires as the vehicle moves through the turn.

Swept width lines delineate the path of the vehicle body as the vehicle moves through the turn and will therefore always exceed the tracking width. The following list of criteria is to be used to determine whether the roadway can accommodate the design vehicle.

#### (1) *Traveled way.*

- (a) To accommodate turn movements (e.g., at intersections, driveways, alleys, etc.), the travel way width and intersection design should be such that tracking width and swept width lines for the design vehicle do not cross into any portion of the lane for opposing traffic. Encroachment into the shoulder and bike lane is permitted.

- (b) Along the portion of roadway where there are no turning options, vehicles are required to stay within the lane lines. **The tracking and swept widths lines for the design vehicle shall stay within the lane as defined in Index 301.1 and Table 504.3A.** This includes no encroachment into Class II bike lanes.

- (2) *Shoulders.* Both tracking width and swept width lines may encroach onto paved shoulders to accommodate turning. For design projects where the tracking width lines are shown to encroach onto paved shoulders, the shoulder pavement structure should be engineered to sustain the weight of the design vehicle. See Index 613 for general traffic loading

considerations and Index 626 for tied rigid shoulder guidance. At corners where no sidewalks are provided and pedestrians are using the shoulder, a paved refuge area may be provided outside the swept width of turning vehicle.

- (3) *Curbs and Gutters.* Tires may not mount curbs. If curb and gutter are present and any portion of the gutter pan is likewise encroached, the gutter pan must be engineered to match the adjacent shoulder pavement structure. See Index 613.5(2)(c) for gutter pan design guidance.
- (4) *Edge of Pavement.* To accommodate a turn, the swept width lines may cross the edge of pavement provided there are no obstructions. The tracking width lines shall remain on the pavement structure, including the shoulder, provided that the shoulder is designed to support vehicular traffic. If truck volumes are high, consideration of a wider shoulder is encouraged in order to preserve the pavement edge.
- (5) *Bicycle Lanes.* Where bicycle lanes are considered, the design guidance noted above applies. Vehicles are permitted to cross a bicycle lane to initiate or complete a turning movement or for emergency parking on the shoulder. See the California MUTCD for Class II bike lane markings.

To accommodate turn movements (e.g., intersections, driveways, alleys, etc. are present), both tracking width and swept width lines may cross the broken white painted bicycle lane striping in advance of the right-turn, entering the bicycle lane when clear to do so.

- (6) *Sidewalks.* Tracking width and swept width lines must not encroach onto sidewalks or pedestrian refuge areas, without exception.
- (7) *Obstacles.* Swept width lines may not encroach upon obstacles including, but not limited to, curbs, islands, sign structures, traffic delineators/channelizers, traffic signals, lighting poles, guardrails, trees, cut slopes, and rock outcrops.
- (8) *Appurtenances.* Swept width lines do not include side mirrors or other appurtenances allowed by the California Vehicle Code, thus,

accommodation to non-motorized users of the facility and appurtenances should be considered.

If both the tracking width and swept width lines meet the design guidance listed above, then the geometry is adequate for that design vehicle. Consideration should be given to pedestrian crossing distance, motor vehicle speeds, truck volumes, alignment, bicycle lane width, sight distance, and the presence of on-street parking.

Note that the STAA Design Vehicle has a template with a 56-foot (minimum) and a 67-foot (longer) radius and the California Legal Design Vehicle has a template with 50-foot (minimum) and 60-foot (longer) radii. The longer radius templates are more conservative. The longer radius templates develop less swept width and leave a margin of error for the truck driver. The longer radius templates should be used for conditions where the vehicle may not be required to stop before entering the intersection.

The minimum radius template can be used if the longer radius template does not clear all obstacles. The minimum radius templates demonstrate the tightest turn that the vehicles can navigate, assuming a speed of less than 10 miles per hour.

For offtracking lane width requirements on freeway ramps, see Topic 504.

### 404.3 Design Tools

District Truck Managers should be consulted early in the project to ensure compliance with the design vehicle guidance contained in Topic 404. Consult local agencies to verify the location of local truck routes. Essentially, two options are available – templates or computer software.

- The turning templates in Figures 404.5A through G are a design aid for determining the swept width and/or tracking width of large vehicles as they maneuver through a turn. The templates can be used as overlays to evaluate the adequacy of the geometric layout of a curve or intersection when reproduced on clear film and scaled to match the highway drawings. These templates assume a vehicle speed of less than 10 miles per hour.
- Computer software such as AutoTURN or AutoTrak can draw the swept width and/or tracking width along any design curve within a CADD drawing program such as MicroStation

or AutoCAD. Dimensions taken from the vehicle diagrams in Figures 404.5A through G may be inputted into the computer program by creating a custom vehicle if the vehicle is not already included in the software library. The software can also create a vehicle turn template that conforms to any degree curve desired.

#### 404.4 Design Vehicles and Related Definitions

(1) *The Surface Transportation Assistance Act of 1982 (STAA).*

(a) **STAA Routes.** STAA allows certain longer trucks called STAA trucks to operate on the National Network. After STAA was enacted, the Department evaluated State routes for STAA truck access and created Terminal Access and Service Access routes which, together with the National Network, are called the STAA Network. Terminal Access routes allow STAA access to terminals and facilities. Service Access routes allow STAA trucks one-mile access off the National Network, but only at identified exits and only for designated services. Service Access routes are primarily local roads. A “Truck Route Map,” indicating the National Network routes and the Terminal Access routes is posted on the Department’s Office of Commercial Vehicle Operations website and is also available in printed form.

(b) **STAA Design Vehicle.** The STAA design vehicle is a truck tractor-semitrailer combination with a 48-foot semitrailer, a 43-foot kingpin-to-rear-axle (KPRA) distance, an 8.5-foot body and axle width, and a 23-foot truck tractor wheelbase. Note, a truck tractor is a non-load-carrying vehicle. There is also a STAA double (truck tractor-semitrailer-trailer); however, the double is not used as the design vehicle due to its shorter turning radius. The STAA Design Vehicle is shown in Figures 404.5A and B.

The STAA Design Vehicle in Figures 404.5A or B should be used on the National Network, Terminal Access, California Legal, and Advisory routes.

(c) **STAA Vehicle – 53-Foot Trailer.** Another category of vehicle allowed only on STAA routes has a maximum 53-foot trailer, a maximum 40-foot KPRA for two or more axles, a maximum 38-foot KPRA for a single axle, and unlimited overall length. This vehicle is not to be used as the design vehicle as it is not the worst case for offtracking due to its shorter KPRA. The STAA Design Vehicle should be used instead.

(2) *California Legal.*

(a) **California Legal Routes.** Virtually all State routes off the STAA Network are California Legal routes. There are two types of California Legal routes, the regular California Legal routes and the KPRA Advisory Routes. Advisory routes have signs posted that state the maximum KPRA length that the route can accommodate without the vehicle offtracking outside the lane. KPRA advisories range from 30 feet to 38 feet, in 2-foot increments. California Legal vehicles are allowed to use both types of California Legal routes. California Legal vehicles can also use the STAA Network. However, STAA trucks are not allowed on any California Legal routes. The Truck Route Map indicating the California Legal routes is posted on the Department’s Office of Commercial Vehicle Operations website.

(b) **California Legal Design Vehicle.** The California Legal vehicle is a truck tractor-semitrailer with the following dimensions: the maximum overall length is 65 feet; the maximum KPRA distance is 40 feet for semitrailers with two or more axles, and 38 feet for semitrailers with a single axle; the maximum width is 8.5 feet. There are also two categories of California Legal doubles (truck tractor-semitrailer-trailer); however, the doubles are not used as the design vehicle due to their shorter turning radii. The California Legal Design Vehicle is shown in Figures 404.5C and D.

The California Legal Design Vehicle in Figures 404.5C and D should only be used

when the STAA design vehicle is not feasible and with concurrence from the District Truck Manager.

(3) *40-Foot Bus.*

- (a) 40-Foot Bus Routes. All single-unit vehicles, including buses and motor trucks up to 40 feet in length, are allowed on virtually every route in California.
- (b) 40-Foot Bus Design Vehicle. The 40-Foot Bus Design Vehicle shown in Figure 404.5E is an AASHTO standard. Its 25-foot wheelbase and 40-foot length are typical of city transit buses and some intercity buses. At intersections where truck volumes are light or where the predominate truck traffic consists of mostly 3-axle units, the 40-foot bus may be used. Its wheel path sweeps a greater width than 3-axle delivery trucks, as well as smaller buses such as school buses.

(4) *45-Foot Bus & Motorhome.*

- (a) 45-Foot Bus & Motorhome Routes. The “45-foot bus and motorhome” refers to bus and motorhomes over 40 feet in length, up to and including 45 feet in length. These longer buses and motorhomes are allowed in California, but only on certain routes.

The 45-foot tour bus became legal on the National Network in 1991 and later allowed on some State routes in 1995. The 45-foot motorhome became legal in California in 2001, but only on those routes where the 45-foot bus was already allowed. A Bus and Motorhome Map indicating where these longer buses and motorhomes are allowed and where they are not allowed is posted on the Department’s Office of Commercial Vehicle Operations website.

- (b) 45-Foot Bus and Motorhome Design Vehicle. The 45-Foot Bus & Motorhome Design Vehicle shown in Figure 404.5F is used by Caltrans for the longest allowable bus and motorhome. Its wheelbase is 28.5 feet. It is also similar to the AASHTO standard 45-foot bus. Typically this should be the smallest design vehicle

used on a State highway. It may be used where the State highway intersects local streets without commercial or industrial traffic.

The 45-Foot Bus and Motorhome Design Vehicle shown in Figure 404.5F should be used in the design of all interchanges and intersections on all green routes indicated on the Bus and Motorhome Map for both new construction and rehabilitation projects. Check also the longer standard design vehicles on these routes as required – the STAA Design Vehicle and the California Legal Design Vehicle in Indexes 404.3(1) and (2).

(5) *60-Foot Articulated Bus.*

- (a) 60-Foot Articulated Bus Routes. The articulated bus is allowed a length of up to 60 feet per CVC 35400(b)(3)(A). This bus is used primarily by local transit agencies for public transportation. There is no master listing of such routes. Local transit agencies should be contacted to determine possible routes within the proposed project.
- (b) 60-Foot Articulated Bus Design Vehicle. The 60-Foot Articulated Bus Design Vehicle shown in Figure 404.5G is an AASHTO standard. The routes served by these buses should be designed to accommodate the 60-Foot Articulated Bus Design Vehicle.

### 404.5 Turning Templates & Vehicle Diagrams

Figures 404.5A through G are computer-generated turning templates at an approximate scale of 1"=50' and their associated vehicle diagrams for the design vehicles described in Index 404.3. The radius of the template is measured to the outside front wheel path at the beginning of the curve. Figures 404.5A through G contain the terms defined as follows:

- (1) *Tractor Width* - Width of tractor body.
- (2) *Trailer Width* - Width of semitrailer body.
- (3) *Tractor Track* - Tractor axle width, measured from outside face of tires.



- (4) *Trailer Track* – Semitrailer axle width, measured from outside face of tires.
- (5) *Lock To Lock Time* - The time in seconds that an average driver would take under normal driving conditions to turn the steering wheel of a vehicle from the lock position on one side to the lock position on the other side. The default in AutoTurn software is 6 seconds.
- (6) *Steering Lock Angle* - The maximum angle that the steering wheels can be turned. It is further defined as the average of the maximum angles made by the left and right steering wheels with the longitudinal axis of the vehicle.
- (7) *Articulating Angle* - The maximum angle between the tractor and semitrailer.

## Topic 405 - Intersection Design Standards

### 405.1 Sight Distance

- (1) *Stopping Sight Distance*. See Index 201.1 for minimum stopping sight distance requirements.
- (2) *Corner Sight Distance*.
  - (a) General--At unsignalized intersections a substantially clear line of sight should be maintained between the driver of a vehicle, bicyclist or pedestrian waiting at the crossroad and the driver of an approaching vehicle. Line of sight for all users should be included in right of way, in order to preserve sight lines.

Adequate time must be provided for the waiting user to either cross all lanes of through traffic, cross the near lanes and turn left, or turn right, without requiring through traffic to radically alter their speed.

The values given in Table 405.1A provide 7-1/2 seconds for the driver on the crossroad to complete the necessary maneuver while the approaching vehicle travels at the assumed design speed of the main highway. The 7-1/2 second criterion is normally applied to all lanes of through traffic in order to cover all possible maneuvers by the vehicle at the crossroad. However, by providing the standard corner

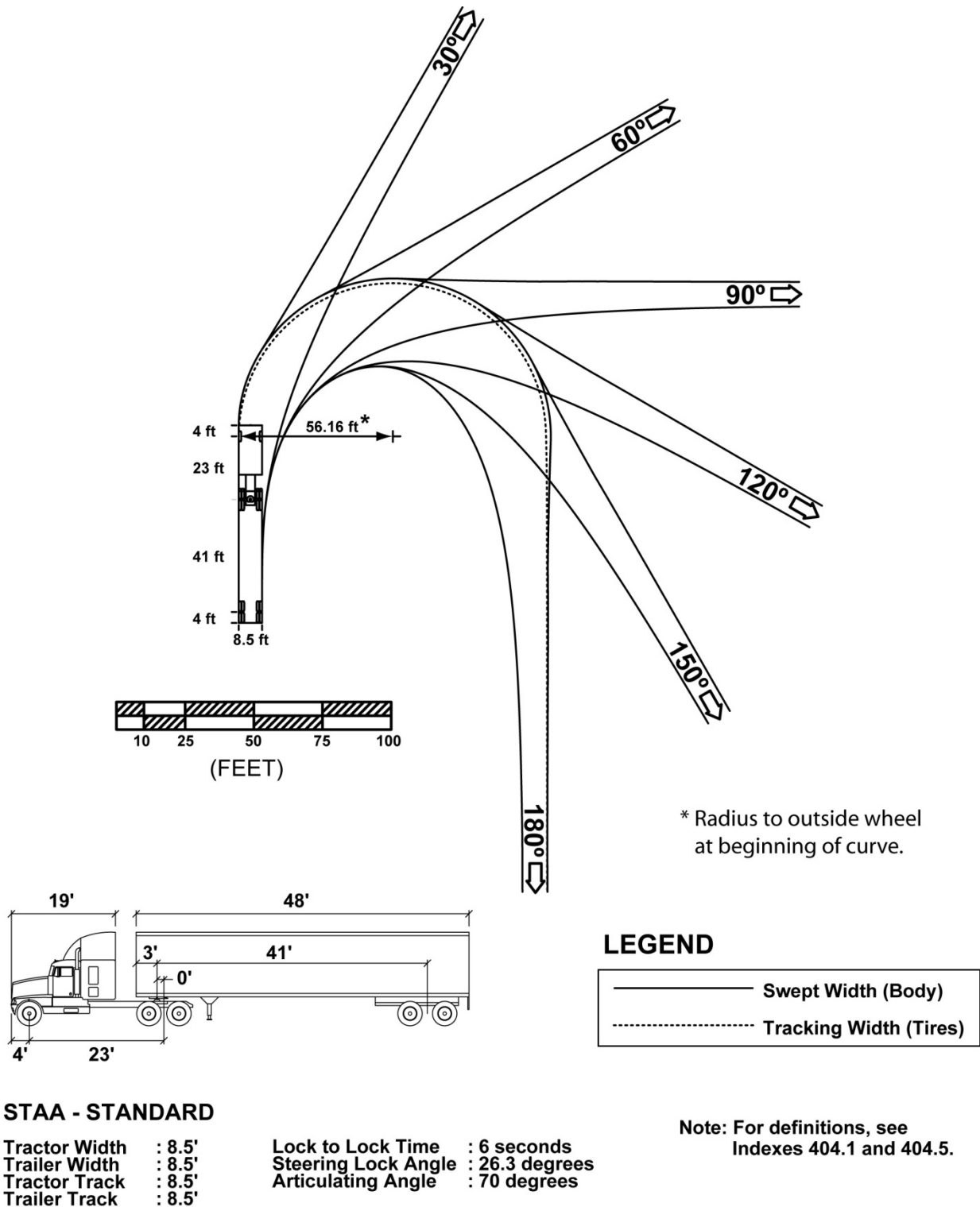
sight distance to the lane nearest to and farthest from the waiting vehicle, adequate time should be obtained to make the necessary movement. On multilane highways a 7-1/2 second criterion for the outside lane, in both directions of travel, normally will provide increased sight distance to the inside lanes. Consideration should be given to increasing these values on downgrades steeper than 3 percent and longer than 1 mile (see Index 201.3), where there are high truck volumes on the crossroad, or where the skew of the intersection substantially increases the distance traveled by the crossing vehicle.

In determining corner sight distance, a set back distance for the vehicle waiting at the crossroad must be assumed. **Set back for the driver of the vehicle on the crossroad shall be a minimum of 10 feet plus the shoulder width of the major road but not less than 15 feet.** Line of sight for corner sight distance is to be determined from a 3 and 1/2-foot height at the location of the driver of the vehicle on the minor road to a 4 and 1/4-foot object height in the center of the approaching lane of the major road as illustrated in Figure 504.3J. If the major road has a median barrier, a 2-foot object height should be used to determine the median barrier set back.

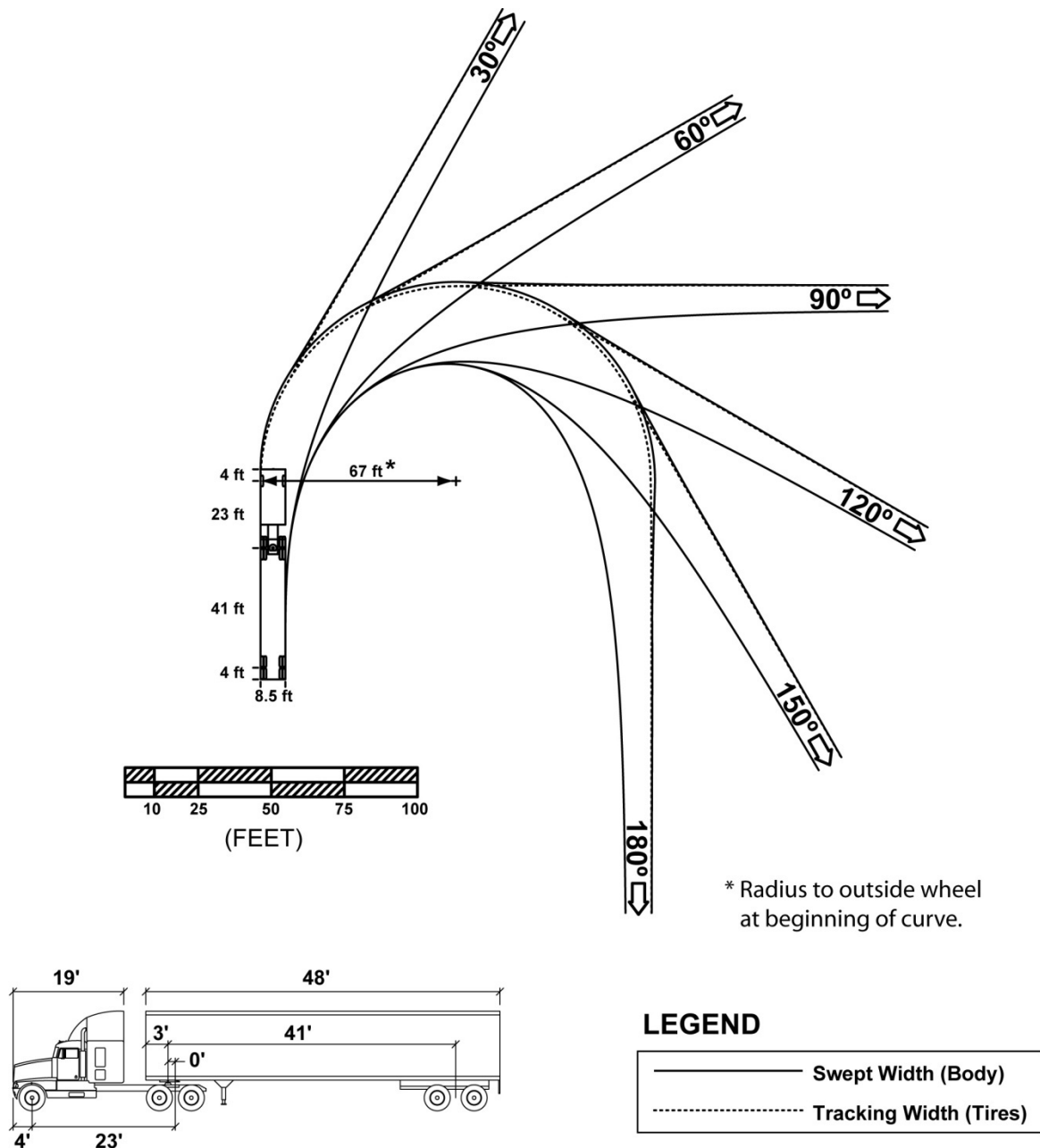
In some cases the cost to obtain 7-1/2 seconds of corner sight distances may be excessive. High costs may be attributable to right of way acquisition, building removal, extensive excavation, or immitigable environmental impacts. In such cases a lesser value of corner sight distance, as described under the following headings, may be used.

- (b) Public Road Intersections (Refer to Topic 205)--At unsignalized public road intersections (see Index 405.7) corner sight distance values given in Table 405.1A should be provided.

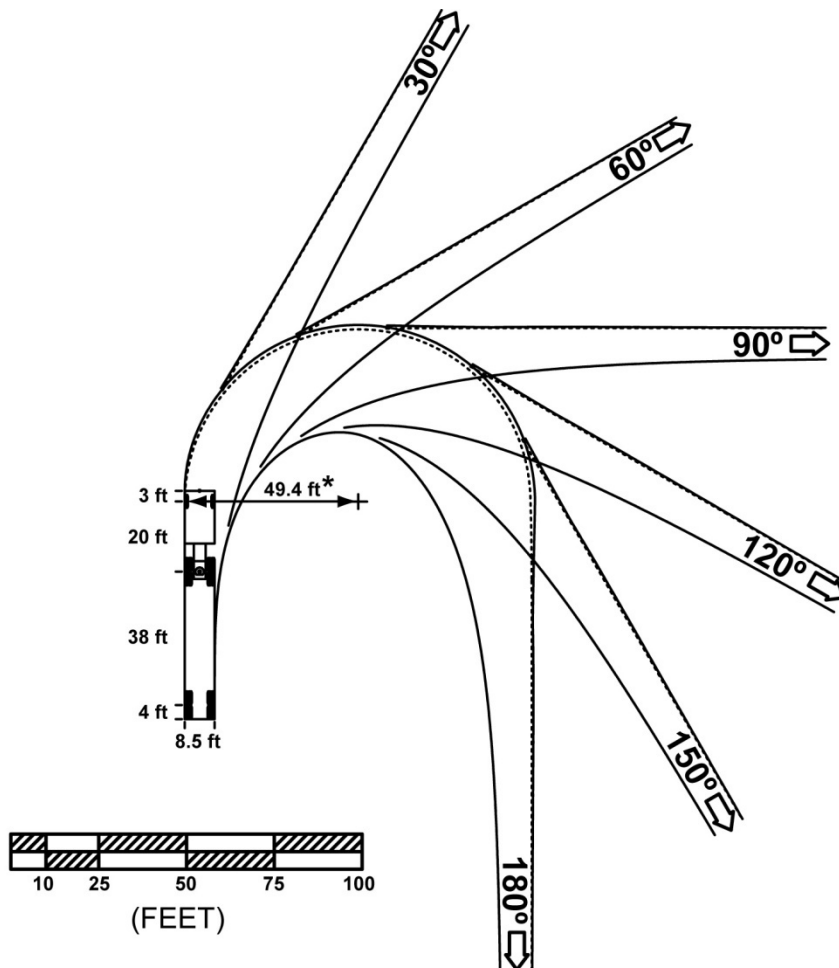
**Figure 404.5A**  
**STAA Design Vehicle**  
**56-Foot Radius**



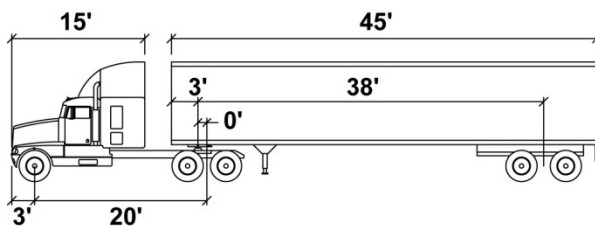
**Figure 404.5B**  
**STAA Design Vehicle**  
**67-Foot Radius**



**Figure 404.5C**  
**California Legal Design Vehicle**  
**50-Foot Radius**



\* Radius to outside wheel  
at beginning of curve.



### LEGEND

- Swept Width (Body)
- Tracking Width (Tires)

#### CA LEGAL - 65 FT

Tractor Width : 8.5'  
 Trailer Width : 8.5'  
 Tractor Track : 8.5'  
 Trailer Track : 8.5'

Lock to Lock Time : 6 seconds  
 Steering Lock Angle : 26.3 degrees  
 Articulating Angle : 70 degrees

Note: For definitions, see  
Indexes 404.1 and 404.5.

**Figure 404.5D**  
**California Legal Design Vehicle**  
**60-Foot Radius**

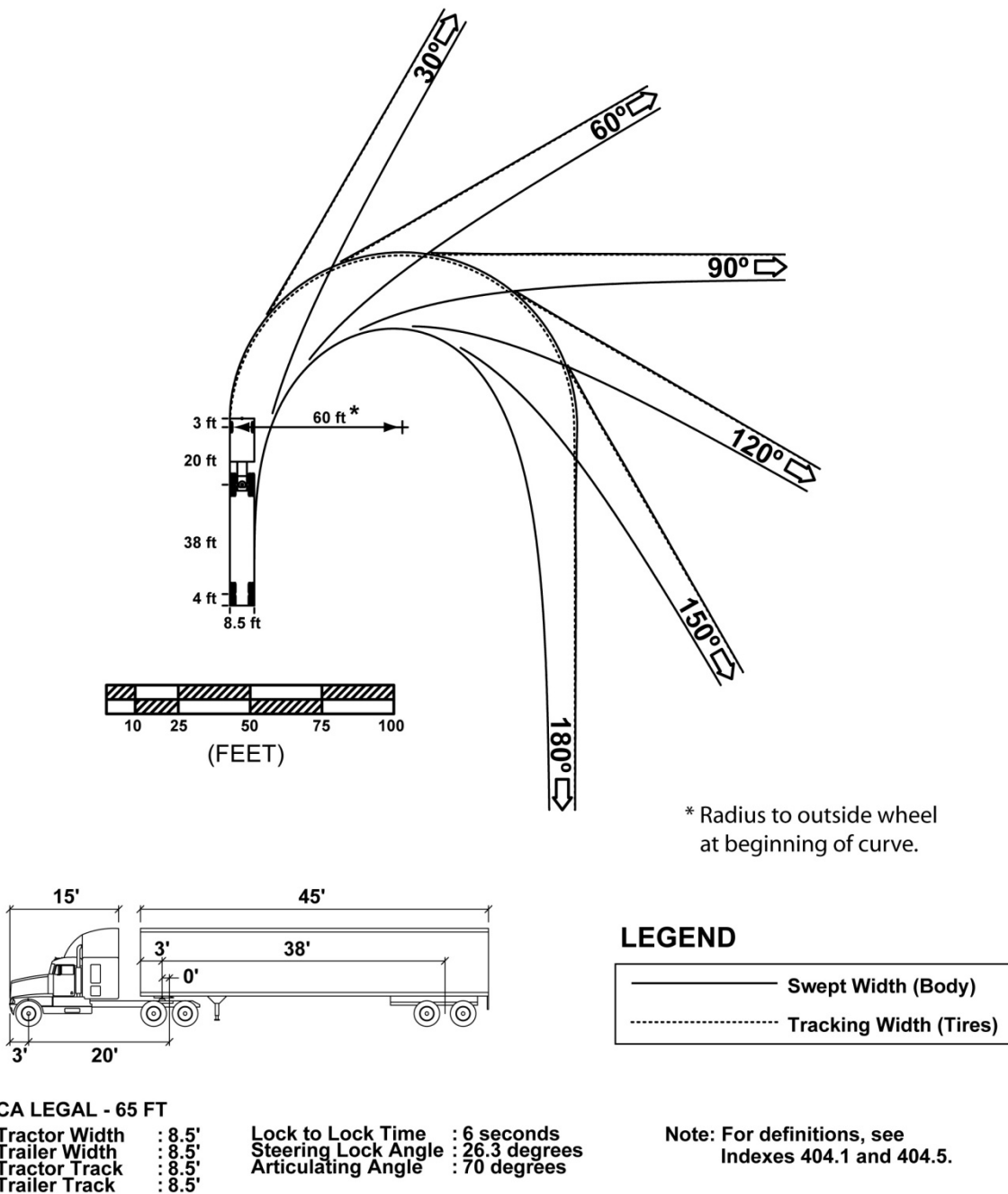
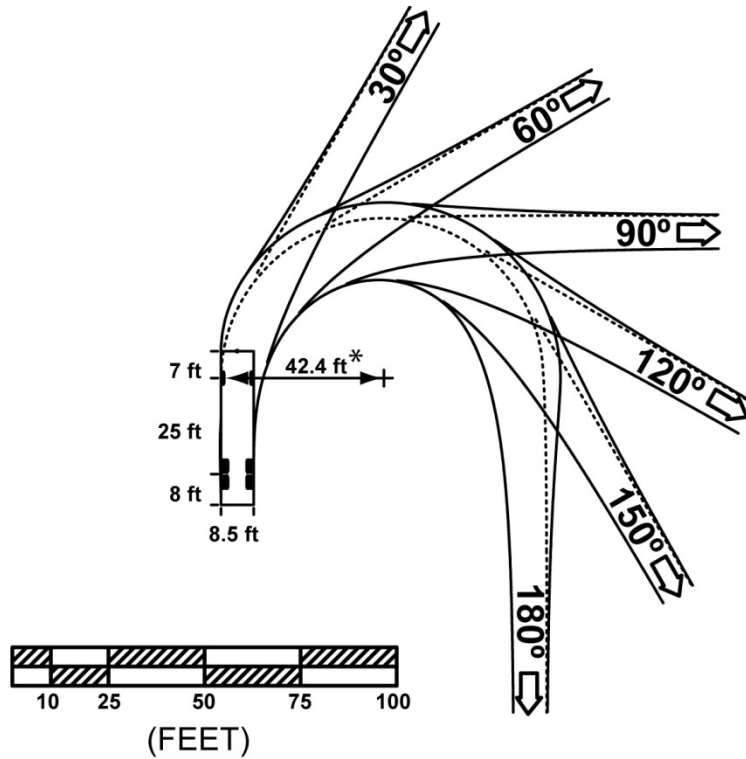
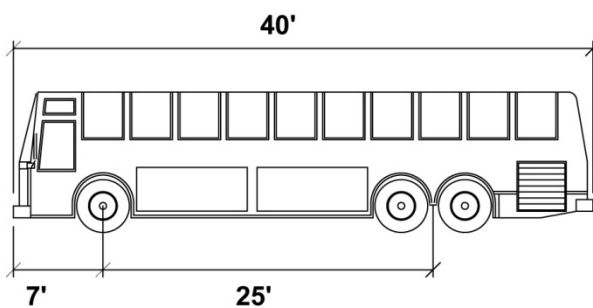


Figure 404.5E

## 40-Foot Bus Design Vehicle



\* Radius to outside wheel  
at beginning of curve.



## LEGEND

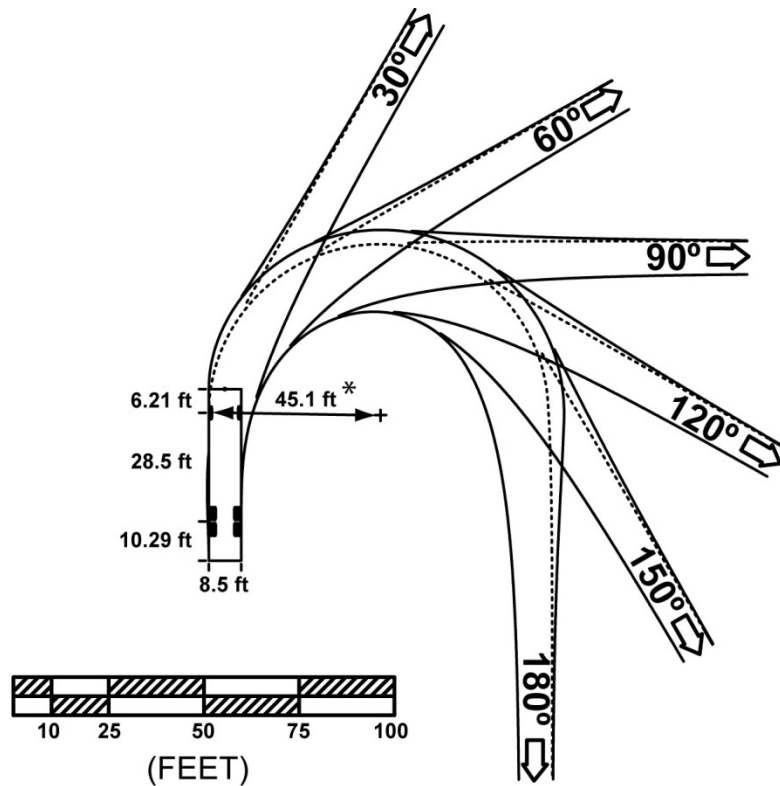
—————	Swept Width (Body)
-----	Tracking Width (Tires)

## 40' BUS

Width : 8.5'  
 Track : 8.5'  
 Lock to Lock Time : 6 seconds  
 Steering Lock Angle: 41.0 degrees

Note: For definitions, see  
Indexes 404.1 and 404.5.

**Figure 404.5F**  
**45-Foot Bus & Motorhome Design Vehicle**



\* Radius to outside wheel  
at beginning of curve.

### LEGEND

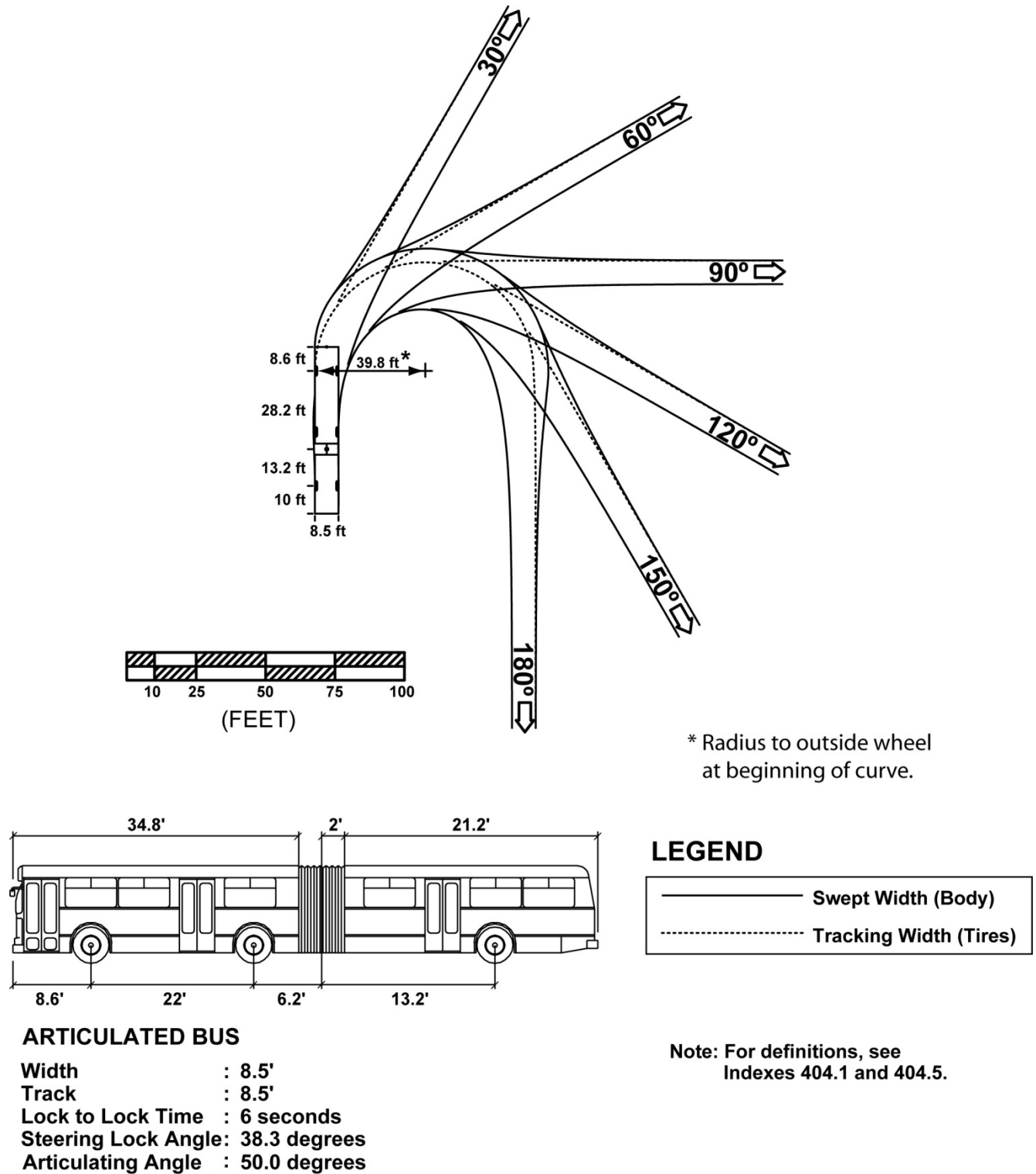
—————	Swept Width (Body)
-----	Tracking Width (Tires)

### 45' BUS

Width : 8.5'  
Track : 8.5'  
Lock to Lock Time : 6 seconds  
Steering Lock Angle: 44.3 degrees

Note: For definitions, see  
Indexes 404.1, and 404.5.

**Figure 404.5G**  
**60-Foot Articulated Bus Design Vehicle**





At signalized intersections the values for corner sight distances given in Table 405.1A should also be applied whenever possible. Even though traffic flows are designed to move at separate times, unanticipated conflicts can occur due to violation of signal, right turns on red, malfunction of the signal, or use of flashing red/yellow mode.

**Table 405.1A  
Corner Sight Distance  
(7-1/2 Second Criteria)**

Design Speed (mph)	Corner Sight Distance (ft)
25	275
30	330
35	385
40	440
45	495
50	550
55	605
60	660
65	715
70	770

Where restrictive conditions exist, similar to those listed in Index 405.1(2)(a), the minimum value for corner sight distance at both signalized and unsignalized intersections shall be equal to the stopping sight distance as given in Table 201.1, measured as previously described.

- (c) Private Road Intersections (Refer to Index 205.2) and Rural Driveways (Refer to Index 205.4)--**The minimum corner sight distance shall be equal to the stopping sight distance as given in Table 201.1, measured as previously described.**
- (d) Urban Driveways (Refer to Index 205.3)--Corner sight distance requirements as described above are not applied to urban driveways.
- (3) Decision Sight Distance. At intersections where the State route turns or crosses another State route, the decision sight distance values

given in Table 201.7 should be used. In computing and measuring decision sight distance, the 3.5-foot eye height and the 0.5-foot object height should be used, the object being located on the side of the intersection nearest the approaching driver.

The application of the various sight distance requirements for the different types of intersections is summarized in Table 405.1B.

**Table 405.1B  
Application of Sight Distance  
Requirements**

Intersection Types	Sight Distance		
	Stopping	Corner	Decision
Private Roads	X	X <sup>(1)</sup>	
Public Streets and Roads	X	X	
Signalized Intersections	X	(2)	
State Route Intersections & Route Direction Changes, with or without Signals	X	X	X

NOTES:

- (1) Per Index 405.1(2)(c), the minimum corner sight distance shall be equal to the stopping sight distance as given in Table 201.1. See Index 405.1(2)(a) for setback requirements.
- (2) Apply corner sight distance requirements at signalized intersections whenever possible due to unanticipated violations of the signals or malfunctions of the signals. See Index 405.1(2)(b).
- (4) *Acceleration Lanes for Turning Moves onto State Highways.* At rural intersections, with "STOP" control on the local cross road, acceleration lanes for left and right turns onto the State facility should be considered. At a minimum, the following features should be evaluated for both the major highway and the cross road:
- divided versus undivided
  - number of lanes

- design speed
- gradient
- lane, shoulder and median width
- traffic volume and composition of highway users, including trucks and transit vehicles
- turning volumes
- horizontal curve radii
- sight distance
- proximity of adjacent intersections
- types of adjacent intersections

For additional information and guidance, refer to AASHTO, A Policy on Geometric Design of Highways and Streets, the Headquarters Traffic Liaison, the District Design Liaison, and the Project Delivery Coordinator.

## 405.2 Left-turn Channelization

- (1) *General.* The purpose of a left-turn lane is to expedite the movement of through traffic by, controlling the movement of turning traffic, increasing the capacity of the intersection, and improving safety characteristics.

The District Traffic Branch normally establishes the need for left-turn lanes.

- (2) *Design Elements.*

- (a) **Lane Width – The lane width for both single and double left-turn lanes on State highways shall be 12 feet.**

**For conventional State highways with posted speeds less than or equal to 40 miles per hour and AADTT (truck volume) less than 250 per lane that are in urban, city or town centers (rural main streets), the minimum lane width shall be 11 feet.**

When considering lane width reductions adjacent to curbed medians, refer to Index 303.5 for guidance on effective roadway width, which may vary depending on drivers' lateral positioning and shy distance from raised curbs.

- (b) **Approach Taper --** On conventional highways without a median, an approach

taper provides space for a left-turn lane by moving traffic laterally to the right. The approach taper is unnecessary where a median is available for the full width of the left-turn lane. Length of the approach taper is given by the formula on Figures 405.2A, B and C.

Figure 405.2A shows a standard left-turn channelization design in which all widening is to the right of approaching traffic and the deceleration lane (see below) begins at the end of the approach taper. This design should be used in all situations where space is available, usually in rural and semi-rural areas or in urban areas with high traffic speeds and/or volumes.

Figures 405.2B and 405.2C show alternate designs foreshortened with the deceleration lane beginning at the 2/3 point of the approach taper so that part of the deceleration takes place in the through traffic lane. Figure 405.2C is shortened further by widening half (or other appropriate fraction) on each side. These designs may be used in urban areas where constraints exist, speeds are moderate and traffic volumes are relatively low.

- (c) **Bay Taper --** A reversing curve along the left edge of the traveled way directs traffic into the left-turn lane. The length of this bay taper should be short to clearly delineate the left-turn move and to discourage through traffic from drifting into the left-turn lane. Table 405.2A gives offset data for design of bay tapers. In urban areas, lengths of 60 feet and 90 feet are normally used. Where space is restricted and speeds are low, a 60-foot bay taper is appropriate. On rural high-speed highways, a 120-foot length is considered appropriate.
- (d) **Deceleration Lane Length --** Design speed of the roadway approaching the intersection should be the basis for determining deceleration lane length. It is desirable that deceleration take place entirely off the through traffic lanes. Deceleration lane lengths are given in Table 405.2B; the bay taper length is

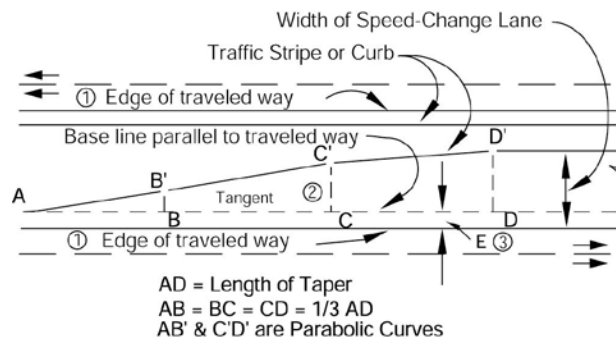
included. Where partial deceleration is permitted on the through lanes, as in Figures 405.2B and 405.2C, design speeds in Table 405.2B may be reduced 10 miles per hour to 20 miles per hour for a lower entry speed. In urban areas where cross streets are closely spaced and deceleration lengths cannot be achieved, the District Traffic branch should be consulted for guidance.

- (e) **Storage Length** -- At unsignalized intersections, storage length may be based on the number of turning vehicles likely to arrive in an average 2-minute period during the peak hour. At a minimum, space for 2 vehicles should be provided at 25 feet per vehicle. If the peak hour truck traffic is 10 percent or more, space for at least one passenger car and one truck should be provided. Bus usage may require a longer storage length and should be evaluated if their use is anticipated.

At signalized intersections, the storage length may be based on one and one-half to two times the average number of vehicles that would store per signal cycle depending on cycle length, signal phasing, and arrival and departure rates. At a minimum, storage length should be calculated in the same manner as unsignalized intersection. The District Traffic Branch should be consulted for this information.

When determining storage length, the end of the left-turn lane is typically placed at least 3 feet, but not more than 30 feet, from the nearest edge of shoulder of the intersecting roadway. Although often set by the placement of a crosswalk line or limit line, the end of the storage lane should always be located so that the appropriate turning template can be accommodated.

**Table 405.2A**  
**Bay Taper for Median**  
**Speed-change Lanes**



LENGTH OF TAPER - feet			OFFSET DISTANCE		
60	90	120	DD' = 10'	DD' = 11'	DD' = 12'
Distance From Point "A"					
-	-	-	0.00	0.00	0.00
5	7.5	10.0	0.16	0.17	0.19
10	15.0	20.0	0.62	0.69	0.75
15	22.5	30.0	1.41	1.55	1.69
B'	20	30.0	2.50	2.75	3.00
	30	45.0	5.00	5.50	6.00
C'	40	60.0	7.50	8.25	9.00
	45	67.5	8.59	9.45	10.31
	50	75.0	9.38	10.31	11.25
	55	82.5	9.84	10.83	11.81
	60	90.0	10.00	11.00	12.00

**NOTES:**

- (1) The table gives offsets from a base line parallel to the edge of traveled way at intervals measured from point "A". Add "E" for measurements from edge of traveled way.
- (2) Where edge of traveled way is a curve, neither base line nor taper between B & C will be a tangent. Use proportional offsets from B to C.
- (3) The offset "E" is usually 2 ft along edge of traveled way for curbed medians; Use "E" = 0 ft. for striped medians.

**Table 405.2B**  
**Deceleration Lane Length**

Design Speed (mph)	Length to Stop (ft)
30	235
40	315
50	435
60	530

- (3) *Double Left-turn Lanes.* At signalized intersections on multilane conventional highways and on multilane ramp terminals, double left-turn lanes should be considered if the left-turn demand is 300 vehicles per hour or more. The lane widths and other design elements of left-turn lanes given under Index 405.2(2) applies to double as well as single left-turn lanes.

The design of double left-turn lanes can be accomplished by adding one or two lanes in the median. See "Guidelines for Reconstruction of Intersections", published by Headquarters, Division of Traffic Operations, for the various treatments of double left-turn lanes.

- (4) *Two-way Left-turn Lane (TWLTL).* The TWLTL consists of a striped lane in the median of an arterial and is devised to address the special capacity and safety problems associated with high-density strip development. It can be used on 2-lane highways as well as multilane highways. Normally, the District Traffic Operations Branch should determine the need for a TWLTL.

**The minimum width for a TWLTL shall be 12 feet (see Index 301.1).** The preferred width is 14 feet. Wider TWLTL's are occasionally provided to conform with local agency standards. However, TWLTL's wider than 14 feet are not recommended, and in no case should the width of a TWLTL exceed 16 feet. Additional width may encourage drivers in opposite directions to use the TWLTL simultaneously.

### 405.3 Right-turn Channelization

- (1) *General.* For right-turning traffic, delays are less critical and conflicts less severe than for left-turning traffic. Nevertheless, right-turn lanes can be justified on the basis of capacity, analysis, and crash experience.

In rural areas a history of high speed rear-end collisions may warrant the addition of a right-turn lane.

In urban areas other factors may contribute to the need such as:

- High volumes of right-turning traffic causing backup and delay on the through lanes.
- Conflicts between crossing pedestrians and right-turning vehicles and bicycles.
- Frequent rear-end and sideswipe collisions involving right-turning vehicles.

Where right-turn channelization is proposed, lower speed right-turn lanes should be provided to reduce the likelihood of conflicts between vehicles, pedestrians, and bicyclists.

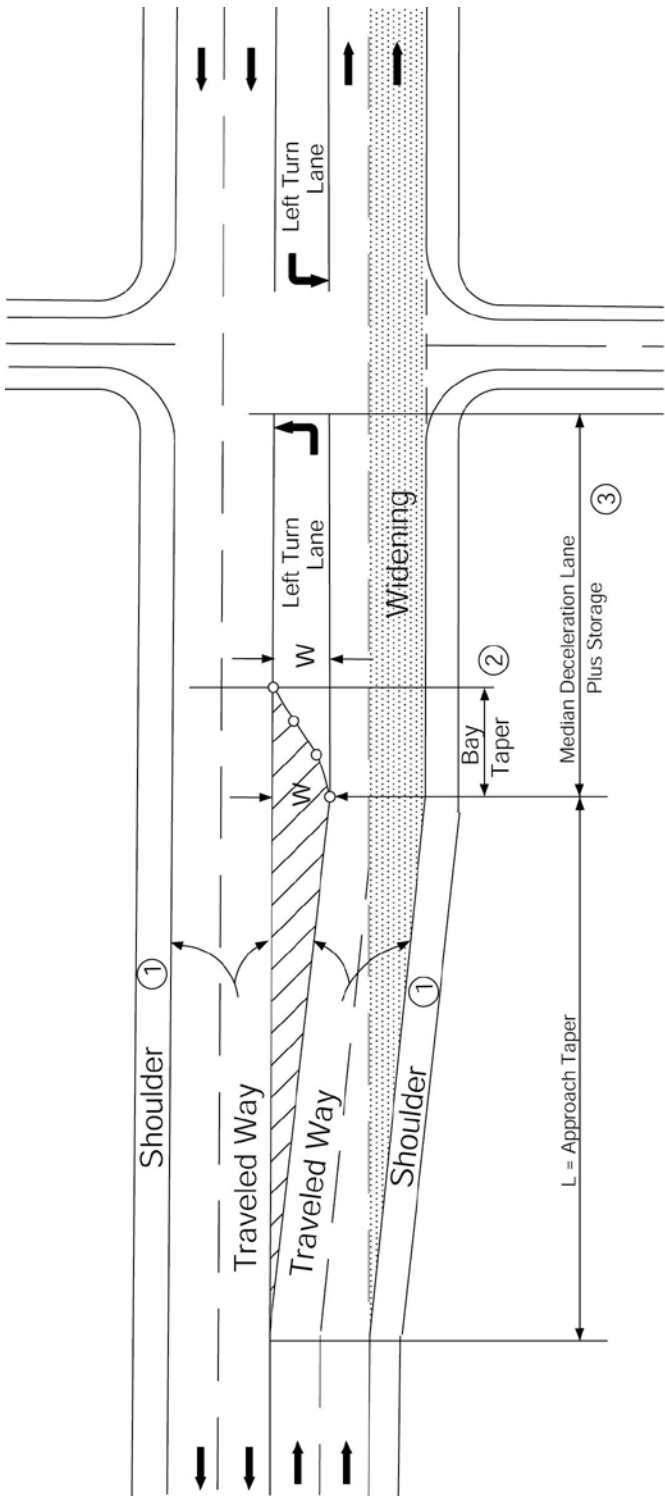
#### (2) *Design Elements.*

- (a) Lane and Shoulder Width--**Index 301.1 shall be used for right-turn lane width requirements. Shoulder width shall be a minimum of 4 feet.** Although not desirable, lane and shoulder widths less than those given above can be considered for right-turn lanes under the following conditions pursuant to Index 82.2:

- In urban, city or town centers (rural main streets) with posted speeds less than 40 miles per hour in severely constrained situations, if truck or bus use is low, consideration may be given to reducing the right-turn lane width to 10 feet.
- Shoulder widths may also be considered for reduction under constricted situations. Whenever possible, at least a 2-foot shoulder should be provided where the right-turn lane is adjacent to a curb. Entire omission of the shoulder should only be considered in constrained situations and where an 11-foot lane can be constructed.

Gutter pans can be included within a shoulder, but cannot be included as part of the travel lane width. Additional right of way for a future right-turn lane should be considered when an intersection is being designed.

Figure 405.2A  
Standard Left-turn Channelization



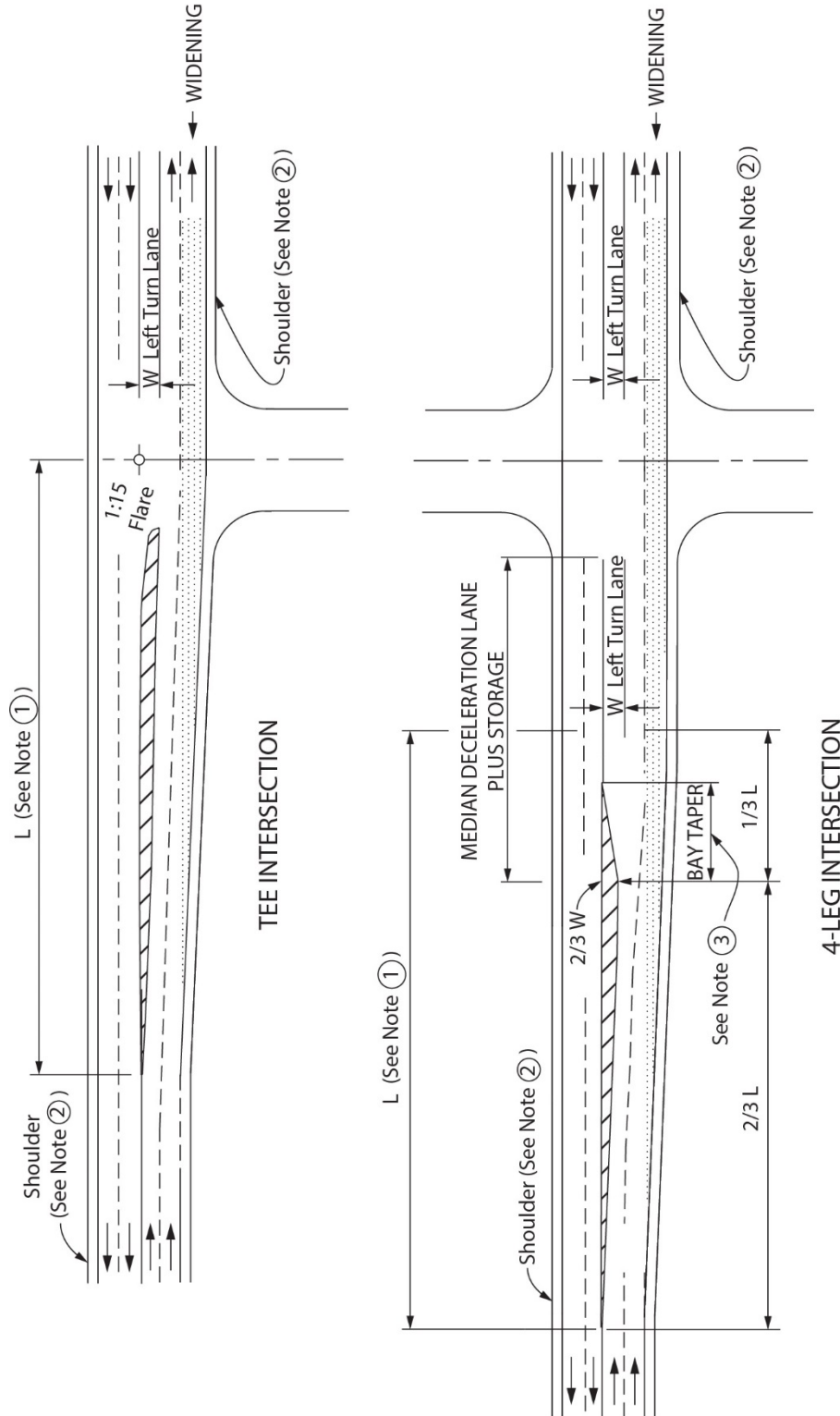
EQUATION:  $L = \text{Use } WV, \text{ for } V \geq 45 \text{ mph}$   
Or  $WV^2/60, \text{ for } V < 45 \text{ mph}$

Where  $L$  = Length of Approach Taper - feet  
 $V$  = Design Speed - mph  
 $W$  = Width of Median Lane - feet

NOTES:

- ① Where width is restricted, shoulder width may be reduced and parking restricted with an approved design exception pursuant to Index 82.2. For bicycle use, a minimum 4-foot shoulder is required (5-foot if gutter is present).
- ② Bay taper length = 60 feet to 120 feet. (See Table 405.2A)
- ③ For deceleration lane length see Table 405.2B.
- ④ Where both sides of roadway are widened, use a fraction of "W" that is proportional to widening on each side.

**Figure 405.2B**  
**Minimum Median Left-turn Channelization**  
**(Widening on one Side of Highway)**



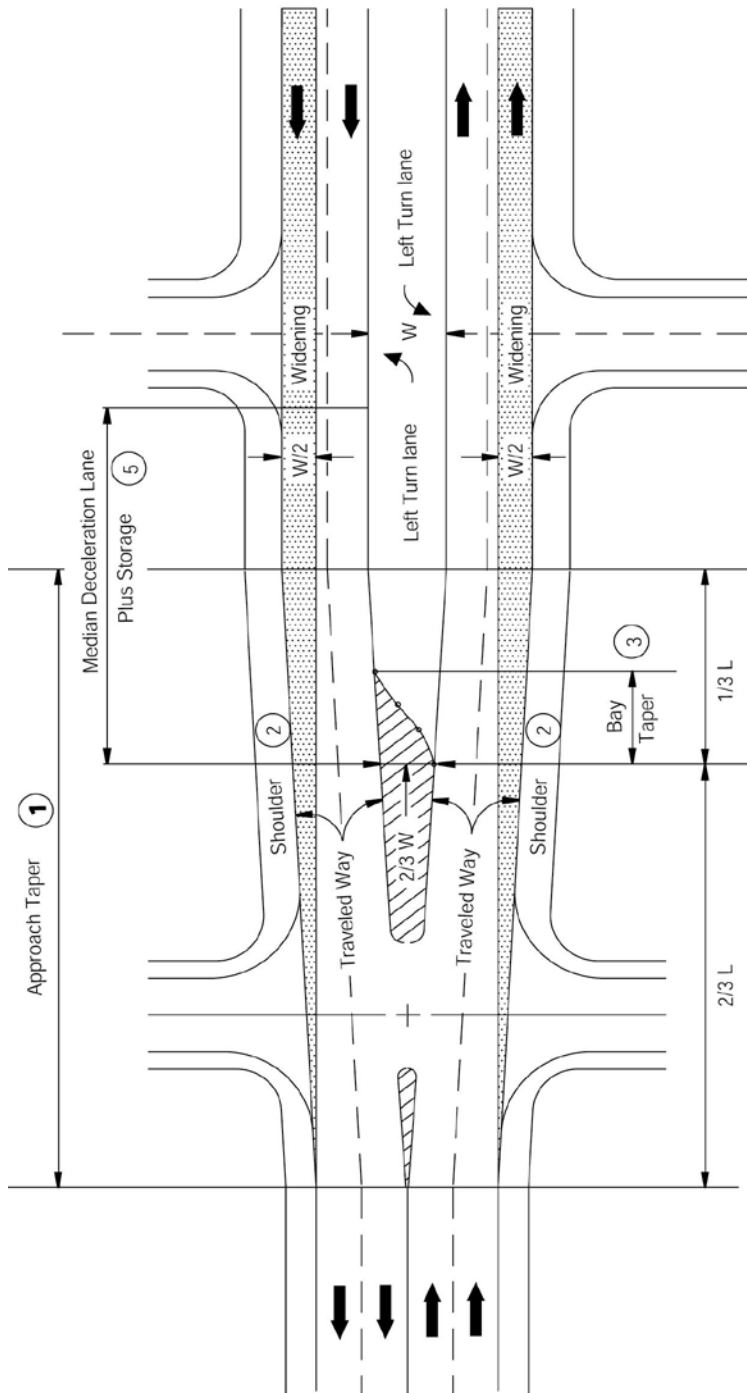
NOTES:

- ①  $L = 500$  feet Maximum
- ② Where width is restricted, shoulder width may be reduced and parking restricted with an approved design exception pursuant to Index 82.2. For bicycle use, a minimum 4-foot shoulder is required (5-foot if gutter is required)
- ③ Bay Taper Length 60 feet to 120 feet (See Table 405.2A)

EQUATION

Use  $WW$ , for  $V \geq 45$  mph  
 $L =$  Or  $WW^2/60$ , for  $V < 45$  mph  
 Where:  
 $L$  = Length of Transition - feet  
 $W$  = Width of Median Lane - feet  
 $V$  = Design Speed - mph

**Figure 405.2C**  
**Minimum Median Left-turn Channelization**  
**(Widening on Both Sides in Urban Areas with Short Blocks)**



**NOTES:**

- ① L = 500 feet Maximum
- ② Where width is restricted, shoulder width may be reduced and parking restricted with an approved design exception pursuant to Index 82.2. For bicycle use, a minimum 4 feet shoulder is required (5 feet if gutter is present).
- ③ Bay taper length = 60 feet to 120 feet. (See Table 405.2A)
- ④ Assumes equal widening each side. Where widening is unequal, use a fraction that is proportional to widening on each side.
- ⑤ For deceleration lane length see Table 405.2B.

**EQUATION: ④**

$$L = \begin{cases} \text{Use } (1/2)WV, & \text{for } V \geq 45\text{mph} \\ \text{Or } WV^2/120, & \text{for } V < 45\text{mph} \end{cases}$$

Where L = Length of Approach Taper - feet

W = Width of Median Lane - feet

V = Design Speed - mph

- (b) Curve Radius--Where pedestrians are allowed to cross a free right-turning roadway, the curve radius should be such that the operating speed of vehicular traffic is no more than 20 miles per hour at the pedestrian crossing. See NCHRP Report 672, "Roundabouts: An Informational Guide" for guidance on the determination of design speed (fastest path) for turning vehicles. See Index 504.3(3) for additional information.
  - (c) Tapers--Approach tapers are usually unnecessary since main line traffic need not be shifted laterally to provide space for the right-turn lane. If, in some rare instances, a lateral shift were needed, the approach taper would use the same formula as for a left-turn lane.

Bay tapers are treated as a mirror image of the left-turn bay taper.
  - (d) Deceleration Lane Length--The conditions and principles of left-turn lane deceleration apply to right-turn deceleration. Where full deceleration is desired off the high-speed through lanes, the lengths in Table 405.2B should be used. Where partial deceleration is permitted on the through lanes because of limited right of way or other constraints, average running speeds in Table 405.2B may be reduced 10 miles per hour to 20 miles per hour for a lower entry speed. For example, if the main line speed is 50 miles per hour and a 10 miles per hour deceleration is permitted on the through lanes, the deceleration length may be that required for 40 miles per hour.
  - (e) Storage Length--Right-turn storage length is determined in the same manner as left-turn storage length. See Index 405.2(2)(e).
- (3) *Right-turn Lanes at Off-ramp Intersections.* Diamond off-ramps with a free right-turn at the local street and separate right-turn off-ramps around the outside of a loop will likely cause conflict as traffic volumes increase. Serious conflicts occur when the right-turning vehicle must weave across multiple lanes on the local street in order to turn left at a major cross street close to the ramp terminal. Furthermore, free

right-turns create sight distance issues for pedestrians and bicyclists crossing the off-ramp, or pedestrians crossing the local road. Also, rear-end collisions can occur as right-turning drivers slow down or stop waiting for a gap in local street traffic. Free right-turns usually end up with "YIELD", "STOP", or signal controls thus defeating their purpose of increasing intersection capacity.

#### 405.4 Traffic Islands

A traffic island is an area between traffic lanes for channelization of bicycle and vehicle movements or for pedestrian refuge. An island may be defined by paint, raised pavement markers, curbs, pavement edge, or other devices. The California MUTCD should be referenced when considering the placement of traffic islands at signalized and unsignalized locations. For splitter island guidance at roundabouts, see Index 405.10(13).

Traffic islands usually serve more than one function. These functions may be:

- (a) Channelization to confine specific traffic movements into definite channels;
- (b) Divisional to separate traffic moving in the same or opposite direction; and
- (c) Refuge, to aid users crossing the roadway.

Generally, islands should present the least potential conflict to approaching or crossing bicycles and vehicles, and yet perform their intended function.

- (1) *Design of Traffic Islands.* Island sizes and shapes vary from one intersection to another. They should be large enough to command attention. Channelizing islands should not be less than 50 square feet in area, preferably 75 square feet. Curbed, elongated divisional median islands should not be less than 4 feet wide and 20 feet long. All traffic islands placed in the path of a pedestrian crossing must comply with DIB 82. See the Standard Plans for typical island passageway details.

The approach end of each island should be offset 3 feet to the left and 5 feet to the right of approaching traffic, using standard 1:15 parabolic flares, and clearly delineated so that it does not surprise the motorist or bicyclist. These offsets are in addition to the shoulder



widths shown in Table 302.1. Table 405.4 gives standard parabolic flares to be used in island design. On curved alignment, parabolic flares may be omitted for small triangular traffic islands whose sides are less than 25 feet long.

The approach nose of a divisional island should be highly visible day and night with appropriate use of signs (reflectorized or illuminated) and object markers. The approach nose should be offset 3 feet from the through traffic to minimize accidental impacts.

- (2) *Delineation of Traffic Islands.* Generally, islands should present the least potential conflict to approaching traffic and yet perform their intended function. See Index 303.2 for appropriate curb type. Islands may be designated as follows:

- (a) Raised paved areas outlined by curbs.
- (b) Flush paved areas outlined by pavement markings.
- (c) Unpaved areas (small unpaved areas should be avoided).

On facilities with posted speeds over 40 miles per hour, the use of any type of curb is discouraged. Where curbs are to be used, they should be located at or outside of the shoulder edge, as discussed in Index 303.5.

In rural areas, painted channelization supplemented with raised pavement markers may be more appropriate than a raised curbed channelization. This design is as forgiving as possible and decreases the consequence of a driver's or bicyclist's failure to detect or recognize the curbed island. Consideration for snow removal operations should be determined where appropriate.

In urban areas, posted speeds less than or equal to 40 miles per hour allow more frequent use of curbed islands. Local agency requirements and matching existing conditions are factors to consider.

(3) *Pedestrian Refuge*

Pedestrian refuge islands allow pedestrians to cross fewer lanes at a time while judging conflicts separately. They also provide a refuge

so slower pedestrians can wait for a gap in traffic while reducing total crossing distance.

At unsignalized intersections in rural city/town centers (rural main streets), suburban, or urban areas, a pedestrian refuge should be provided between opposing traffic where pedestrians are allowed to cross 2 or more through traffic lanes in one direction of travel, at marked or unmarked crosswalks. Pedestrian islands at signalized crosswalks should be considered, taking into account crossing distance and pedestrian activity. Note that signalized pedestrian crossings must be timed to allow for pedestrians to cross. See the California MUTCD, Chapter 4E, for further guidance.

Traffic islands used as pedestrian refuge are to be large enough to provide a minimum of 6 feet in the direction of pedestrian travel, without exception.

All traffic islands placed in the path of a pedestrian crossing must be accessible, refer to DIB 82 and the Standard Plans for further guidance. An example of a traffic island that serves as a pedestrian refuge is shown on Figure 405.4.

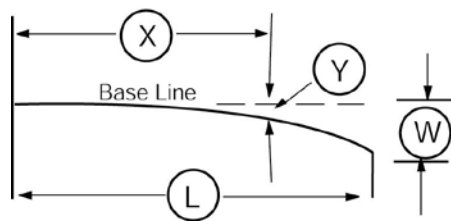
## 405.5 Median Openings

- (1) *General.* Median openings, sometimes called crossovers, provide for crossings of the median at designated locations. Except for emergency passageways in a median barrier, median openings are not allowed on urban freeways.

Median openings on expressways or divided conventional highways should not be curbed except when the median between openings is curbed, or it is necessary for delineation of traffic signal standards and other necessary hardware, or for protection of pedestrians. In these special cases B4 curbs should be used. An example of a median opening design is shown on Figure 405.5.

- (2) *Spacing and Location.* By a combination of interchange ramps and emergency passageways, provisions for access to the opposite side of a freeway may be provided for law enforcement, emergency, and maintenance vehicles to avoid extreme out-of-direction travel. Access should not be more frequent

**Table 405.4**  
**Parabolic Curb Flares Commonly Used**

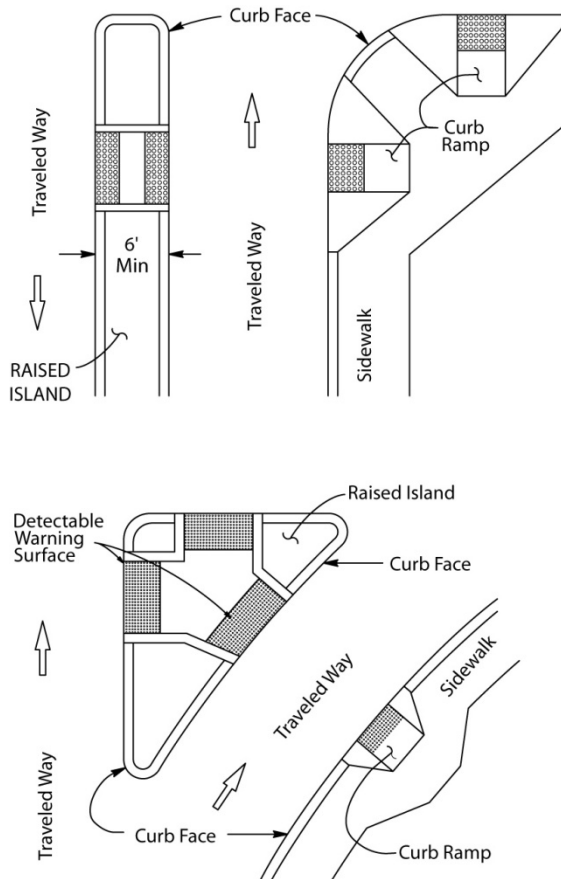


$$Y = \frac{W X^2}{L^2}$$

- (L) = Length of flare in feet  
(W) = Maximum offset in feet  
(X) = Distance along base line in feet  
(Y) = Offset from base line in feet

(W) is shown in table thus  

OFFSET IN FEET FOR GIVEN "X" DISTANCE																
Distance (L) Length of Flare	(X) 10	15	20	25	30	40	45	50	60	70	75	80	90	100	110	120
<b>1:5 FLARES</b>																
25	0.80	1.80	3.20	5.00												
50	0.40		1.60		3.60	6.40		10.00								
<b>1:10 FLARES</b>																
50	0.20		0.80		1.80	3.20		5.00								
100	0.10		0.40		0.90	1.60		2.50	3.60	4.90		6.40	8.10	10.00		
<b>1:15 FLARES</b>																
45	0.15		0.59		1.33	2.37	3.00									
75	0.09		0.36		0.80	1.42		2.22	3.20	4.36	5.00					
90	0.07		0.30		0.67	1.19		1.85	2.67	3.63		4.74	6.00			
120	0.06		0.22		0.50	0.89		1.39	2.00	2.72		3.56	4.50	5.56	6.72	8.00

**Figure 405.4****Pedestrian Refuge Island**

than at three-mile intervals. See Chapter 7 of the Traffic Manual for additional information on the design of emergency passageways.

Emergency passageways should be located only where decision sight distance is available (see Table 201.7).

Median openings at close intervals on other types of highways create conflicts with high speed through traffic. Median openings should be spaced at intervals no closer than 1600 feet. If a median opening falls within 300 feet of an access opening, it should be placed opposite the access opening.

- (3) *Length of Median Opening.* For any three or four-leg intersection on a divided highway, the length of the median opening should be at least as great as the width of the crossroads pavement, median width, and shoulders. An

important factor in designing median openings is the path of the design vehicle making a minimum left turn at 5 miles per hour to 10 miles per hour. The length of median opening varies with width of median and angle of intersecting road.

Usually a median opening of 60 feet is adequate for 90 degree intersections with median widths of 22 feet or greater. When the median width is less than 22 feet, a median opening of 70 feet is needed. When the intersection angle is other than 90 degrees, the length of median opening should be established by using truck turn templates (see Index 404.3).

- (4) *Cross Slope.* The cross slope in the median opening should be limited to 5 percent. Crossovers on curves with super elevation exceeding 5 percent should be avoided. This cross slope may be exceeded when an existing 2-lane roadbed is converted to a 4-lane divided highway. The elevation of the new construction should be based on the 5 percent cross slope requirement when the existing roadbed is raised to its ultimate elevation.
- (5) *References.* For information related to the design of intersections and median openings, "A Policy on Geometric Design of Highways and Streets," AASHTO, should be consulted.

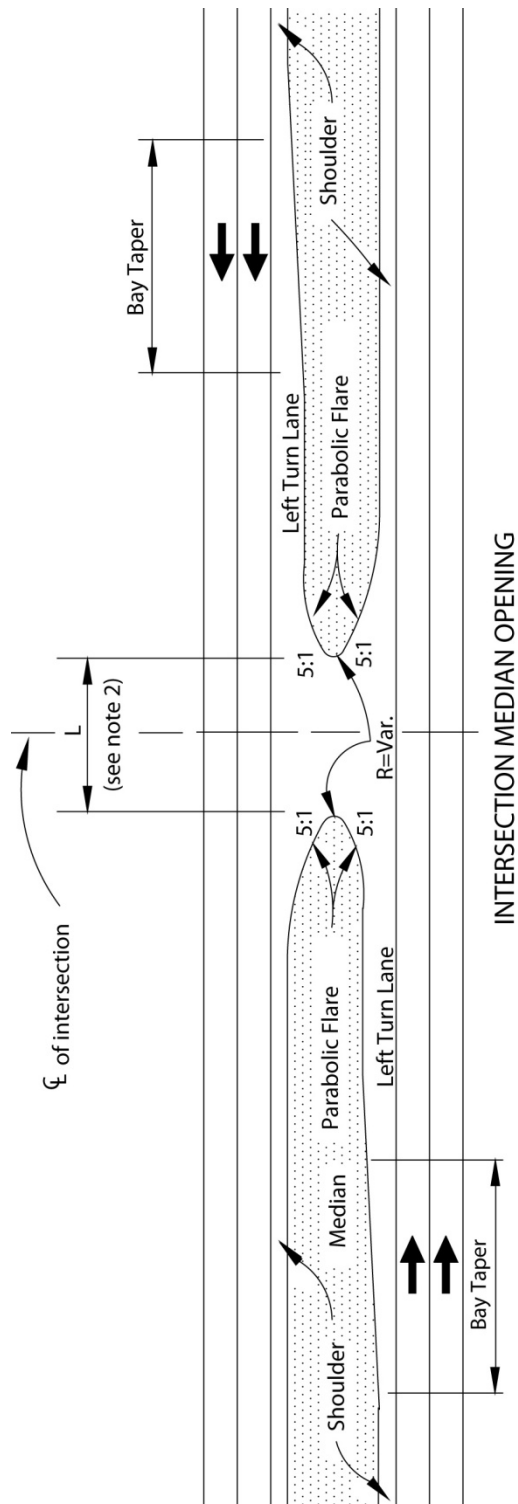
### 405.6 Access Control

The basic guidance which govern the extent to which access rights are to be acquired at interchanges (see Topic 104, Index 205.1 and 504.8 and the PDPM) also apply to intersections at grade on expressways. Cases of access control which frequently occur at intersections are shown in Figure 405.7. This illustration does not presume to cover all situations. Where required by traffic conditions, access should be extended in order to ensure proper operation of the expressway lanes. Reasonable variations which observe the basic principles referred to above are acceptable.

However, negative impacts on the mobility needs of pedestrians, bicyclists, equestrians, and transit users need to be assessed. Pedestrians and bicyclists are sensitive to additional out of direction travel.

Figure 405.5

## Typical Design for Median Openings



## NOTES:

- ① For length of bay taper, see Table 405.2A.
- ②  $L$  = Length of median opening: varies with width of median and angle of intersecting road. Usually for  $90^\circ$  intersection,  $L = 60$  feet for median of 22 feet and wider.  $L = 70$  feet for medians narrower than 22 feet.
- ③ See Index 405.2.
- ④ Pedestrian and bicycle features are not shown on figure.

### 405.7 Public Road Intersections

The basic design to be used at right-angle public road intersections on the State Highway System is shown in Figure 405.7. The essential elements are sight distance (see Index 405.1) and the treatment of the right-turn on and off the main highway. Encroachment into opposing traffic lanes by the turning vehicle should be avoided or minimized.

- (1) *Right-turn Onto the Main Highway.* The combination of a circular curve joined by a 2:1 taper on the crossroads and a 75-foot taper on the main highway is designed to fit the wheel paths of the appropriate turning template chosen by the designer.

It is desirable to keep the right-turn as tight as practical, so the “STOP” or “YIELD” sign on the minor leg can be placed close to the intersection.

- (2) *Right-turn Off the Main Highway.* The combination of a circular curve joined by a 150-foot taper on the main highway and a 4:1 taper on the crossroads is designed to fit the wheel paths of the appropriate turning template and to move the rear of the vehicle off the main highway. Deceleration and storage lanes may be provided when necessary (see Index 405.3).

- (3) *Alternate Designs.* Offsets are given in Figure 405.7 for right angle intersections. For skew angles, roadway curvature, and possibly other reasons, variations to the right-angle design are permitted, but the basic rule is still to approximate the wheel paths of the design vehicle.

A three-center curve is an alternate treatment that may be used at the discretion of the designer.

Intersections are major consideration in bicycle path design as well. See Indexes 403.6 and 1003.1(4) for general bicycle path intersection design guidance. Also see Section 5.3 of the AASHTO Guide for the Planning, Design, and Operation of Bicycle Facilities.

### 405.8 City Street Returns and Corner Radii

The pavement width and corner radius at city street intersections is determined by the type of vehicle to

be accommodated and the mobility needs of pedestrians and bicyclists, taking into consideration the amount of available right of way, the types of adjoining land uses, the place types, the roadway width, and the number of lanes on the intersecting street.

At urban intersections, the California truck or the Bus Design Vehicle template may be used to determine the corner radius. Where STAA truck access is allowed, the STAA Design Vehicle template should be used giving consideration to factors mentioned above. See Index 404.3.

Smaller radii of 15 feet to 25 feet are appropriate at minor cross streets where few trucks or buses are turning. Local agency standards may be appropriate in urban and suburban areas.

Encroachment into opposing traffic lanes must be avoided.

### 405.9 Widening of 2-lane Roads at Signalized Intersections

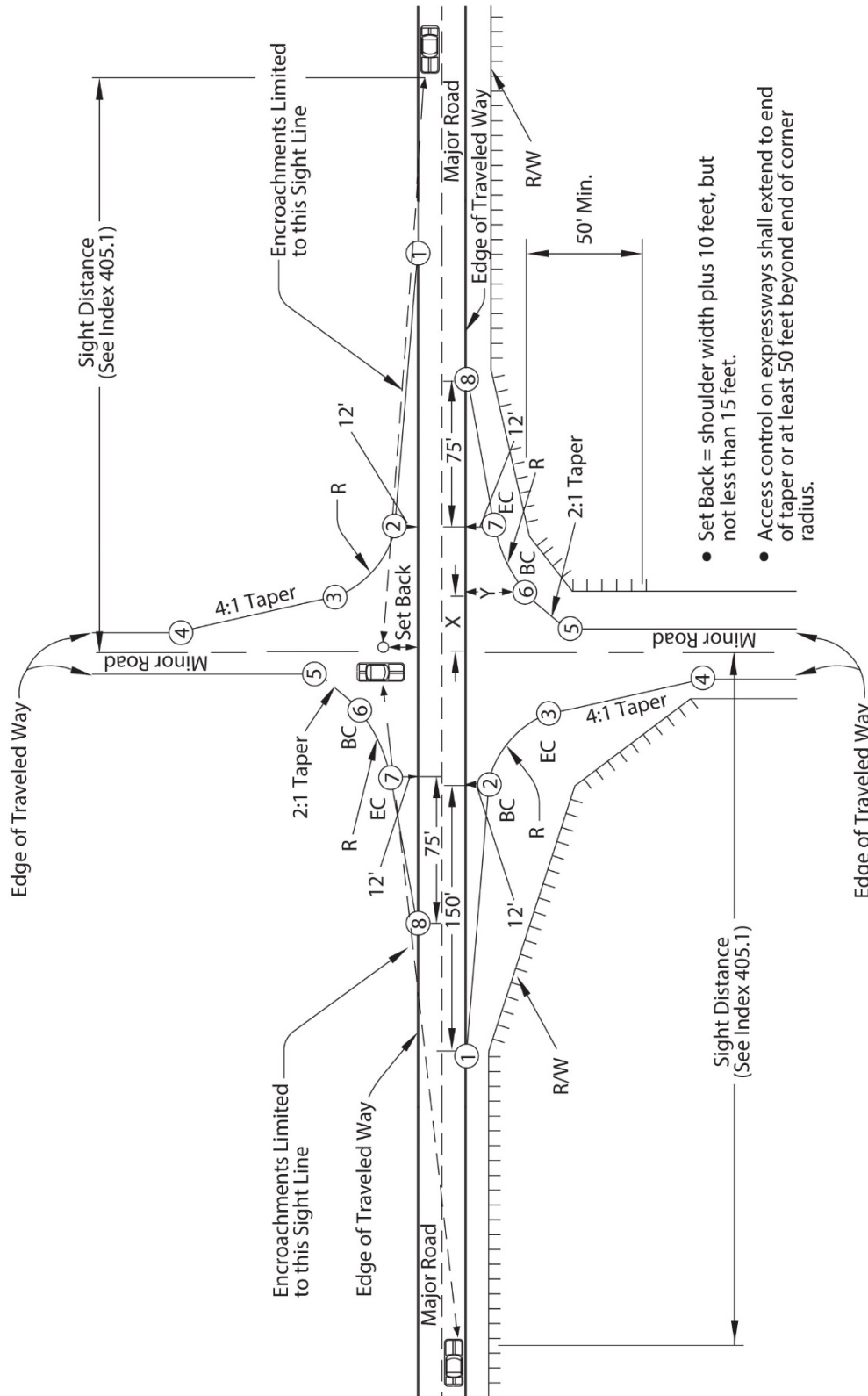
Two-lane State highways may be widened at intersections to 4-lanes whenever signals are installed. Sometimes it may be necessary to widen the intersecting road. The minimum design is shown in Figure 405.9. More elaborate treatment may be warranted by the volume and pattern of traffic movements. Unusual turning movement patterns may possibly call for a different shape of widening.

The impact on pedestrian and bicycle traffic mobility of larger intersections should be assessed before a decision is made to widen an intersection.

### 405.10 Roundabouts

Roundabout intersections on the State highway system must be developed and evaluated in accordance with National Cooperative Highway Research Program (NCHRP) Report 672 entitled “Roundabouts: An Informational Guide, 2nd ed.” (NCHRP Guide 2) dated October 2010 and Traffic Operations Policy Directive (TOPD) Number 13-02. Also see Index 401.5 for general information and guidance. See Figure 405.10 Roundabout Geometric Elements for nomenclature associated with roundabouts. Signs, striping and markings at roundabouts are to comply with the California MUTCD.

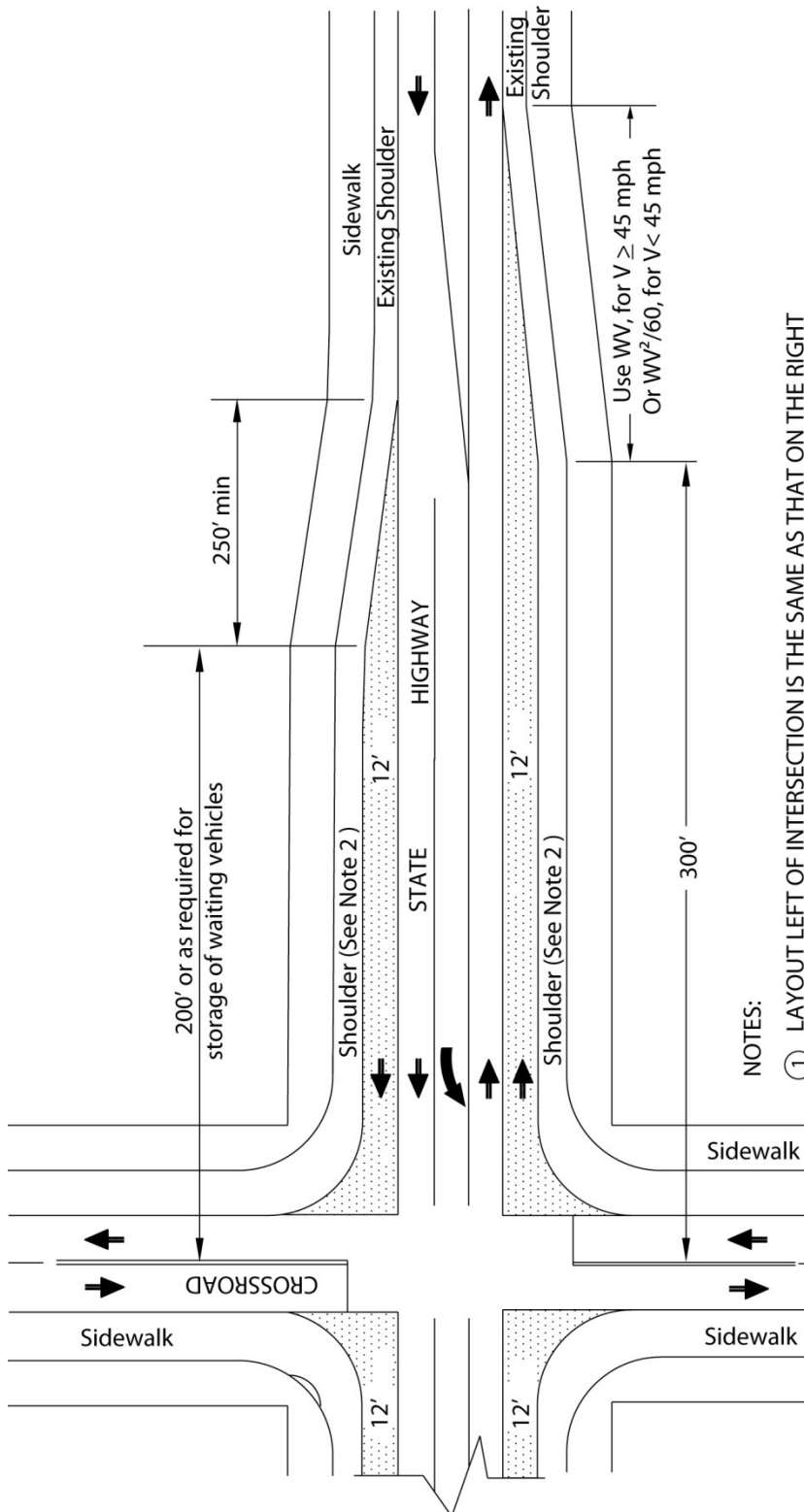
**Figure 405.7**  
**Public Road Intersections**



X - Distance measured from centerline of minor road along major road - feet.  
Y - Offset distance measured from edge of traveled way of major road to any given point - feet.

Radius of Curve	Design Vehicle	Pt ①		Pt ②		Pt ③		Pt ④		Pt ⑤		Pt ⑥		Pt ⑦		Pt ⑧	
		X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
30'	Bus	204.20	0.0	54.20	12.0	27.49	34.63	12.0	96.58	12.0	40.66	18.23	28.21	40.32	12.0	115.32	0.0
40'	California	215.08	0.0	65.08	12.0	29.46	42.17	12.0	112.03	12.0	53.35	21.87	33.61	51.33	12.0	126.33	0.0
50'	STAA	226.09	0.0	76.09	12.0	31.57	49.71	12.0	127.98	12.0	75.63	30.31	39.01	67.13	12.0	142.13	0.0

**Figure 405.9**  
**Widening of Two-lane Roads at Signalized Intersections**



NOTES:

- ① LAYOUT LEFT OF INTERSECTION IS THE SAME AS THAT ON THE RIGHT
- ② WHERE WIDTH IS RESTRICTED SHOULDER WIDTH MAY BE REDUCED AND PARKING RESTRICTED WITH AN APPROVED DESIGN EXCEPTION PURSUANT TO INDEX 82.2.
- ③ FOR BICYCLE USE IN RURAL AREAS NON MAIN STREET PLACE TYPES, THE BIKE LANE IN THIS FIGURE IS PART OF THE SHOULDER. SEE INDEX 302.1 FOR FURTHER GUIDANCE.
- ④ CURB RAMPS NOT SHOWN. CURB RAMPS ARE TO BE PROVIDED PER DIB 82.

WIDENING

A roundabout is a form of circular intersection in which traffic travels counterclockwise around a central island and entering traffic must yield to the circulating traffic. Roundabouts feature, among other things, a central island, a circulatory roadway, and splitter islands on each approach. Roundabouts rely upon two basic and important operating principles:

- (a) Speed reduction at the entry and through the intersection will be achieved through geometric design and,
- (b) The yield-at-entry rule, which requires traffic entering the intersection to yield to traffic that is traveling in the circulatory roadway.

Benefits of roundabouts are:

- Fewer conflict points typically result in fewer collisions with less severity. Over half of vehicle to vehicle points of conflict associated with intersections are eliminated with the use of a roundabout. Additionally, a roundabout separates the points of conflict which eases the ability of the users to identify a conflict and helps prevent conflicts from becoming collisions.
- Roundabouts are designed to reduce the vehicular speeds at intersections. Lower speeds lessens the vehicular collision severity. Likewise, studies indicate that pedestrian and bicyclist collisions with motorized vehicles at lower speeds significantly reduce their severity.
- Roundabouts allow continuous free flow of vehicles and bicycles when no conflicts exist. This results in less noise and air pollution and reduces overall delays at roundabout intersections.

Except as indicated in this Index, the standards elsewhere in this manual do not apply to roundabouts. For the application of design standards, the approach ends of the splitter islands define the boundary of a roundabout intersection, see Figure 405.10. The design standards elsewhere in this manual apply to the approach legs beyond the approach ends of the splitter islands.

*(1) Design Period.*

First consider the design of a single lane roundabout per the design period guidance in

Index 103.2. If a second lane is not needed until 10 or more years, it may be better to phase the improvements. Construct the first phase of the roundabout so at the 20-year design period, an additional lane can be easily added. In order to comply with the 10-year design period guidance provided in Index 103.2, the initial project must provide the right of way needed for utility relocations, a shared-use path designed for a Class I Bikeway, and all other features other than pavement, lighting, and striping in their ultimate locations.

In some locations, it may not be practical to build a single lane roundabout that will operate for 10 years. Geometric constraints and other conflicts may preclude widening to the ultimate configuration. In such cases, other intersection configurations or control strategies addressed in Index 401.5 may need to be considered.

When staging improvements, see NCHRP Guide 2, Section 6.12.

*(2) Design Vehicles - See Topic 404.*

The turning path for the design vehicle, see Index 404.5, dictates many of the roundabout dimensions. The design vehicle tracking and swept width are to be used when designing all the entries and exits, where design vehicles are unrestricted (see Index 404.2), and the circulatory roadway. The percentage of trucks and their lane utilization is an important consideration on multilane roundabouts when determining if the design will allow trucks to stay within their own lane or encroach into the adjacent lane. If permit vehicles larger than the design vehicle occasionally use the proposed roundabout, they can be accommodated by having removable signs or other removable features in the central island or around the circular path to ensure their swept path can negotiate the roundabout. Roundabouts should not be overdesigned for the occasional permit vehicle.

To accurately simulate the design vehicle swept width traveling through a roundabout, the minimum speed of the design vehicle used in computer simulation software (e.g., Auto



TURN) should be 10 mph through the roundabout.

(3) *Inscribed Circle Diameter.*

At single lane roundabouts, the size of the inscribed circle is largely dependent upon the turning requirements of the design vehicle. The inscribed circle diameter must be large enough to accommodate: (a) the STAA design vehicle for all roundabouts on the National Network and on Terminal Access routes; and, (b) the California Legal design vehicle on all non-STAA route intersections on California Legal routes and California Legal KPRA Advisory routes, while maintaining adequate deflection curvature to ensure appropriate travel speeds for smaller vehicles. The design vehicle is to navigate the roundabout with the front tractor wheels off the truck apron, if one is present. Transit vehicles, fire engines and single-unit delivery vehicles are also to be able to navigate the roundabout without using the truck apron, if one is present. The inscribed circle diameter for a single lane roundabout generally ranges between 105 feet to 150 feet to accommodate the California Legal design vehicle and 130 feet to 180 feet to accommodate the STAA design vehicle.

At multilane roundabouts, the inscribed circle diameter is to achieve adequate alignment of the natural vehicle path while maintaining deflection curvature to ensure appropriate travel speeds. To achieve both of these design objectives requires a slightly larger diameter than used for a single lane roundabout. The inscribed circle diameter for a multilane (2-lane) roundabout generally ranges between 150 feet to 220 feet to accommodate the California Legal design vehicle for non-STAA route intersections on California Legal routes and California Legal KPRA Advisory routes, and 165 feet to 220 feet to accommodate the STAA design vehicle for roundabouts on the National Network and on Terminal Access routes. Similar to a single lane roundabout, the design vehicle is to be able to navigate a multilane roundabout with the front tractor wheels staying off the truck apron, if one is present. Transit vehicles, fire engines and single-unit delivery vehicles are also to be

able to navigate the roundabout without using the truck apron, if one is present.

(4) *Entry Speeds.*

Lowering the speed of vehicles entering and traveling through the roundabout is a primary design objective that is achieved by approach alignment and entry geometry.

The following entry speeds should not be exceeded:

- Single lane roundabouts, 25 mph.
- Multilane roundabouts, 30 mph.

For fastest path evaluation, see NCHRP Guide 2, Section 6.7.1.

(5) *Exit Design.*

Similar to entry design, exit design flexibility is required to achieve the optimal balance between competing design variables and project objectives to provide adequate capacity and, essentially, safety while minimizing excessive property impacts and costs. Thus, the selection of a curved versus tangential design is to be based upon the balance of each of these criteria. Exit design is influenced by the place type, pedestrian demand, bicyclist needs, the design vehicle and physical constraints. The exit curb radii are usually larger than the entry curb radii in order to minimize the likelihood of congestion and crashes at the exits. However, the desire to minimize congestion at the exits needs to be balanced with the need to maintain an appropriate operating speed through the pedestrian crossing. Therefore, the exit path radius should not be significantly greater than the circulating path radius to ensure low speeds are maintained at the pedestrian crossing.

(6) *Number of Legs Serving the Roundabout.*

Intersections with more than four legs are often difficult to manage operationally. Roundabouts are a proven traffic control device in such situations. However, it is necessary to ensure that the design vehicle can maneuver through all unrestricted legs of the roundabout.

(7) *Pedestrian Use.*

Sidewalks around the circular roadway are to be designed as shared-use paths, see Index 405.10(8)(c). However, the guidance in Design Information Bulletin (DIB) 82 Pedestrian Accessibility Guidelines for Highway Projects must also be followed when designing these shared-use facilities around a roundabout. If there is a difference in the standards, the guidance in DIB 82 is to be followed. In addition,

- (a) Pedestrian curb ramps need to be differentiated from bike ramps:
  - The detectable warning surface (truncated domes) differentiates a pedestrian curb ramp from a bicycle ramp.
  - Detectable warning surface is required on curb ramps. They are not to be used on a bike ramp.
- (b) Truck aprons and mountable curbs are not to be placed in the pedestrian crossing areas.
- (c) See the California MUTCD for the signs and markings used at roundabouts.

(8) *Bicyclist Use.*

- (a) General. Bicyclists may choose to travel in the circular roadway of a roundabout by taking a lane, while others may decide to travel using the shared-use path to bypass the circular roadway. Therefore, the approach and circular roadways, as well as the shared-use path all need to be designed for the mobility needs of bicyclists. See the California MUTCD for the signs and markings used at roundabouts.
- (b) Bicyclist Use of the Circular Roadway. Single lane roundabouts do not require bicyclists to change lanes in the circular roadway to select the appropriate lane for their direction of travel, so they tend to be comfortable for bicyclists to use. Even two-lane roundabouts, which may have straighter paths of travel that can lead to faster vehicular traveling speeds, appear

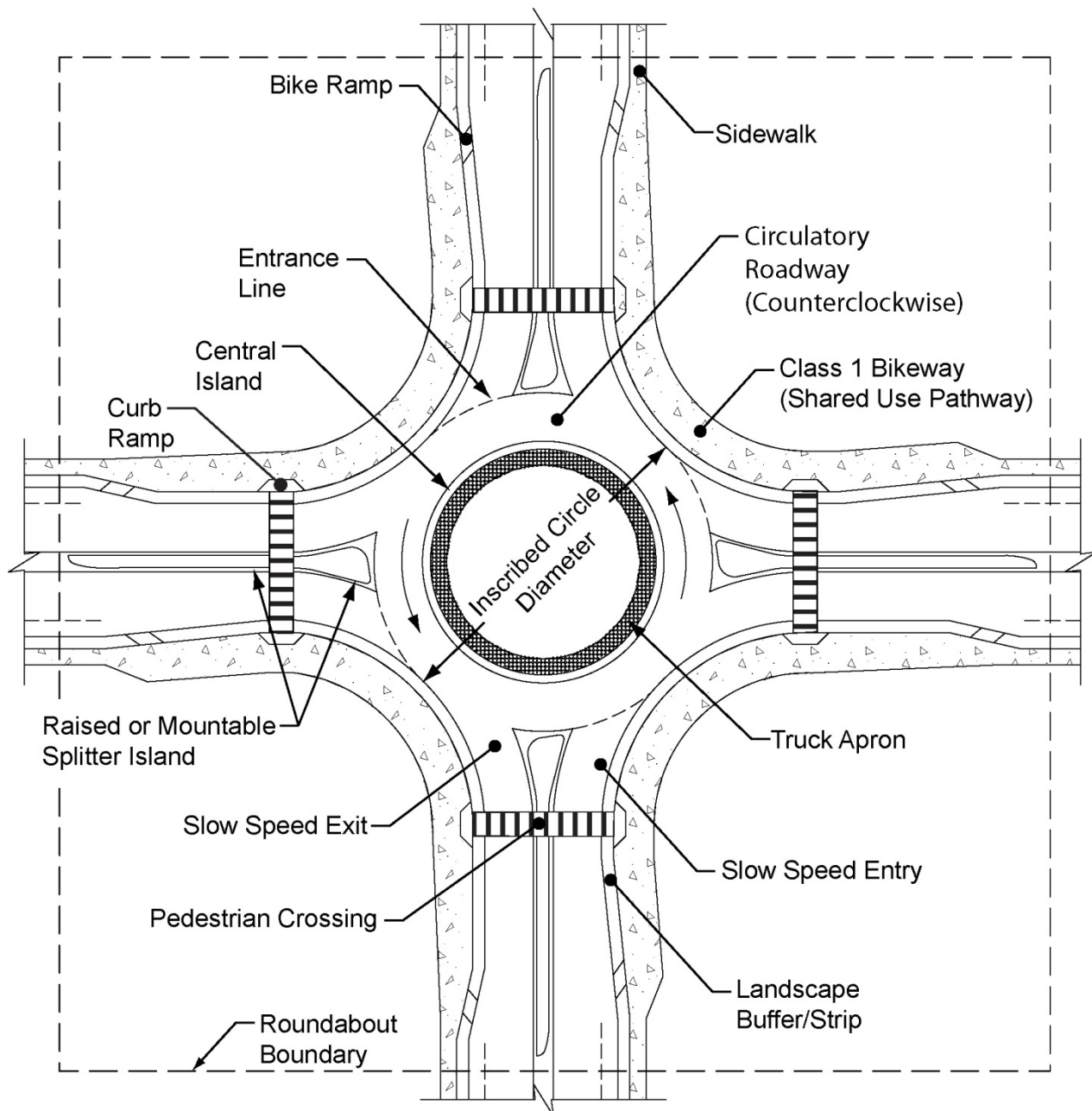
to be comfortable for bicyclists that prefer to travel like vehicles. Roundabouts that have more than two circular lanes can create complexities in signing and striping (see the California MUTCD for guidance), and their operating speed may cause some bicyclists to decide to bypass the circular roadway and use the bicycle ramp that provides access to the shared-use path around the roundabout.

- (c) Bicyclists Use of the Shared-Use Path. The shared-use path is to be designed using the guidance in Index 1003.1 for Class I Bikeways and in NCHRP Guide 2 Section 6.8.2.2. However, the accessibility guidance in DIB 82 must also be followed when designing these shared-use facilities around a roundabout. If there is a difference in the standards, the accessibility guidance in DIB 82 is to be followed to ensure the facility is accessible to pedestrians with disabilities.

Bicycle ramps are to be located to avoid confusion as curb ramps for pedestrians. Also see Index 405.10(7) for guidance on how to differentiate the two types of ramps. The design details and width of the ramp are also important to the bicyclist. Bicyclists approaching the bicycle ramp need to be provided the choice of merging left into the lane or moving right to use the bicycle ramp. Bicycle ramps should be placed at a 35 to 45 degree angle to the departure roadway and the sidewalk to enable the bicyclists to use the ramp and discourage bicyclists from entering the shared-use path at a speed that is detrimental to the pedestrians. The shared-use path should be designated as Class I Bikeways; however, appropriate regulatory signs may need to be posted if the local jurisdiction has a law(s) that prohibit bicyclists from riding on a sidewalk.

A landscape buffer or strip between the shared-use/Class I Bikeway and the circular roadway of the roundabout is needed and should be a minimum of 2 feet wide.

**Figure 405.10**  
**Roundabout Geometric Elements**



**NOTE:**

This figure is provided to only show nomenclature and is not to be used for design details.

Pedestrian crossings may also be used by bicyclists; thus, these shared-use crossings need to be designed for both bicyclist and pedestrian needs.

(9) *Transit Use.*

Transit vehicles and buses will not have difficulty negotiating a roundabout when it has been designed using the California Legal design vehicle or the STAA design vehicle. However, to minimize passenger discomfort, a roundabout should be designed such that the transit vehicle or bus does not use the truck apron, if one is present.

(10) *Stopping Sight Distance and Visibility.*

See Index 201.1 for stopping sight distance guidance at roundabouts.

It is desirable to create a domed or mounded central island, between 3.5 to 6 feet high, to focus attention on the approach and through roundabout alignment. A domed central island provides a visual screen from downstream alignment and other distractions.

(11) *Speed Consistency.*

Consistency in operating speeds between the various movements within the roundabout can minimize collisions between traffic streams. The operating speeds between competing traffic streams and between consecutive geometric elements should be minimized such that the maximum speed differential between them is no more than 15 mph; it is preferred that the operating speed differential be less than 10 mph.

(12) *Path Alignment (Natural Path).*

As two traffic streams approach the roundabout in adjacent lanes, drivers and bicyclists will be guided by lane markings up to the entrance line. At the yield point, they will continue along their natural trajectory into the circulatory roadway. The speed and orientation of the design vehicle at the entrance line determines what can be described as its natural path. The geometry of the exits also affects the natural path that the design vehicle travels. The natural path of two

vehicles are not to overlap, see NCHRP Guide 2, Section 6.7.2.

(13) *Splitter Islands.*

Splitter islands (also called separator islands, divisional islands, or median islands) will be provided on all roundabouts. The purpose is to provide refuge for pedestrians, assist in controlling speeds, guide traffic into the roundabout, physically separate entering and exiting traffic streams, and deter wrongway movements.

The total length of the raised island should be at least 50 feet although 100 feet is desirable. On higher speed roadways, splitter island lengths of 150 feet or more is beneficial. Additionally, the splitter island should extend beyond the end of the exit curve to prevent exiting traffic from crossing into the path of approaching traffic. The splitter island width should be a minimum of 6 feet at the pedestrian crossing to adequately provide refuge for pedestrians.

Posted speeds on the approach roadway greater than or equal to 45 mph require the splitter island length, as measured from the inscribed circle diameter, to be 200 feet. In some instances, a longer splitter island may be desirable. Concrete curb is to be provided on the right side of the approach roadway equal to the length of the splitter island from the inscribed circle diameter.

(14) *Access Control.*

The access control standards in Index 504.3(3) and 504.8 apply to roundabouts at interchange ramp intersections. The dimensions shown in Index 504.8 are to be measured from the inscribed circle diameter.

Driveways should not be placed within 100 feet from the inscribed circle diameter.

(15) *Lighting.*

Lighting is required at all roundabouts. See the Traffic Manual Chapter 9 as well as consult with the District Traffic Operations Branch.

*(16) Landscaping.*

Landscaping should be designed such that drivers and bicyclists can observe the signing and shape of the roundabout as they approach, allowing adequate visibility for making decisions within the roundabout. The landscaping of the central island can enhance the intersection by making it a focal point, by promoting lower speeds and by breaking the headlight glare of oncoming vehicles or bicycles. It is desirable to create a domed or mounded central island, between 3.5 to 6 feet high, to increase the visibility of the intersection on the approach. Contact the District Landscape Architecture Unit to provide technical assistance in designing the roundabout landscaping.

*(17) Vertical Clearance.*

The vertical clearance guidance provided in Index 309.2 applies to roundabouts.

*(18) Drainage Design.*

See Chapter 800 to 890 for further guidance.

*(19) Maintenance.*

In climate regions where snowfall occurs and the use of snow removal equipment is necessary, consider tapering the approach ends of curbs. Contact the District Maintenance Engineer and appropriate Regional Manager for maintenance strategies and practices including seasonal operations, maintenance resources, and specialized equipment. Special equipment or procedures may be needed. Maintenance responsibilities may also include multiple state, county, and city agencies where coordination of maintenance efforts and funding is needed.

- (a) Ramp Intersection Analysis--For the typical local street interchange there is usually a critical intersection of a ramp and the crossroads that establishes the capacity of the interchange. The capacity of a point where lanes of traffic intersect is 1500 vehicles per hour. This is expressed as intersecting lane vehicles per hour (ILV/hr). Table 406 gives values of ILV/hr for various traffic flow conditions.

If a single-lane approach at a normal intersection has a demand volume of 1000 vph, for example, then the intersecting single-lane approach volume cannot exceed 500 vph without delay.

The three examples that follow illustrate the simplicity of analyzing ramp intersections using this 1500 ILV/hr concept.

- (b) Diamond Interchange--The critical intersection of a diamond type interchange must accommodate demands of three conflicting travel paths. As traffic volumes approach capacity, signalization will be needed. For the spread diamond (Figure 406A), basic capacity analysis is made on the assumption that 3-phase signalization is employed. For the tight diamond (Figure 406B), it is assumed that 4-phase signal timing is used.
- (c) 2 Quadrant Cloverleaf--Because this interchange design (Figure 406C) permits 2-phase signalization, it will have higher capacities on the approach roadways. The critical intersection is shared two ways instead of three ways as in the diamond case.

## Topic 406 - Ramp Intersection Capacity Analysis

The following procedure for ramp intersection analysis may be used to estimate the capacity of any signalized intersection where the phasing is relatively simple. It is useful in analyzing the need for additional turning and through traffic lanes. For a more complete analysis refer to the Highway Capacity Manual.

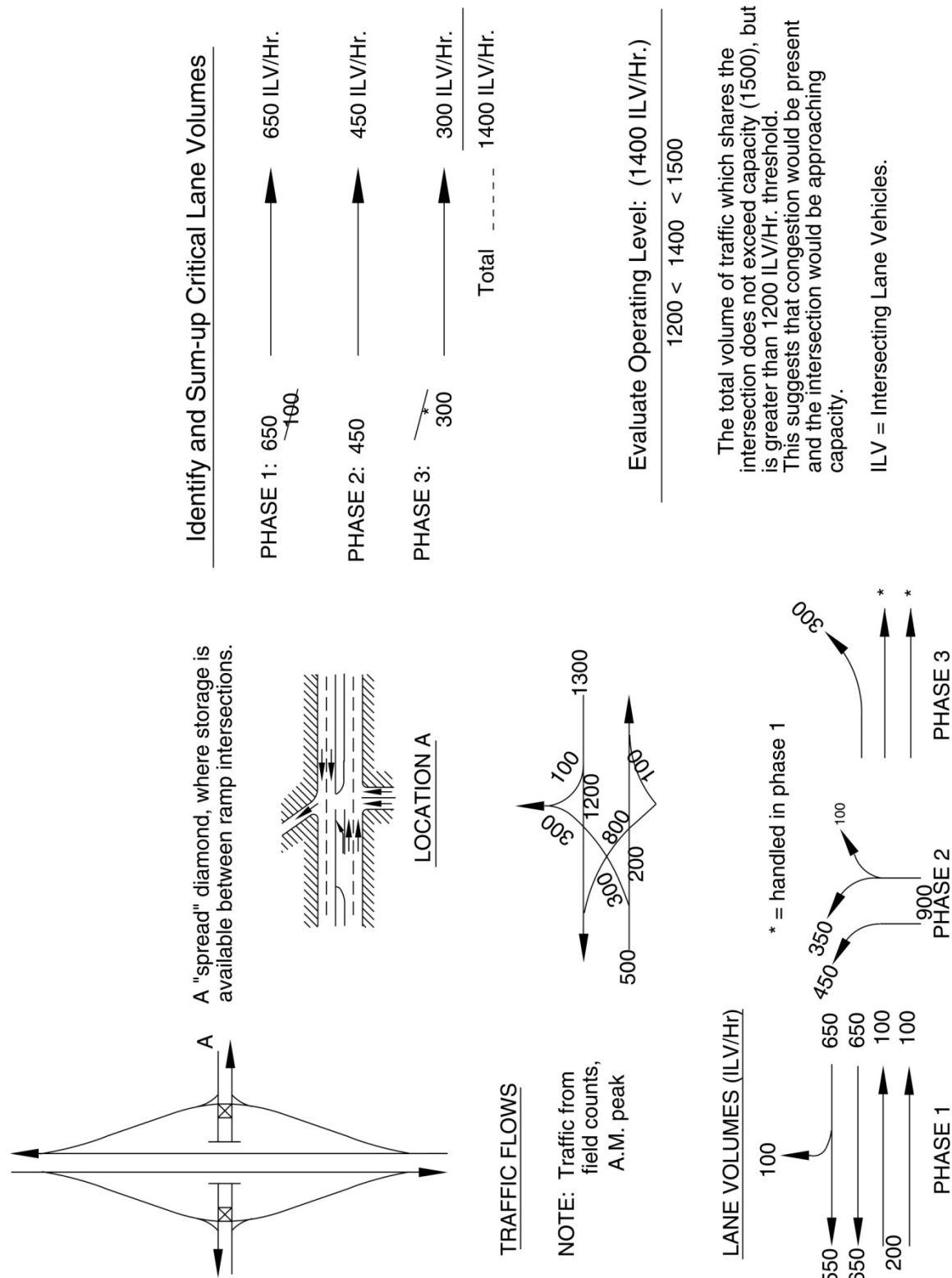
**Table 406****Vehicle Traffic Flow Conditions at Intersections at Various Levels of Operation**

<i>ILV/hr</i>	Description
<hr/>	
<i>&lt; 1200:</i>	
	Stable flow with slight, but acceptable delay. Occasional signal loading may develop. Free midblock operations.
<hr/>	
<i>1200-1500:</i>	
	Unstable flow with considerable delays possible. Some vehicles occasionally wait two or more cycles to pass through the intersection. Continuous backup occurs on some approaches.
<hr/>	
<i>1500 (Capacity):</i>	
	Stop-and-go operation with severe delay and heavy congestion <sup>(1)</sup> . Traffic volume is limited by maximum discharge rates of each phase. Continuous backup in varying degrees occurs on all approaches. Where downstream capacity is restrictive, mainline congestion can impede orderly discharge through the intersection.

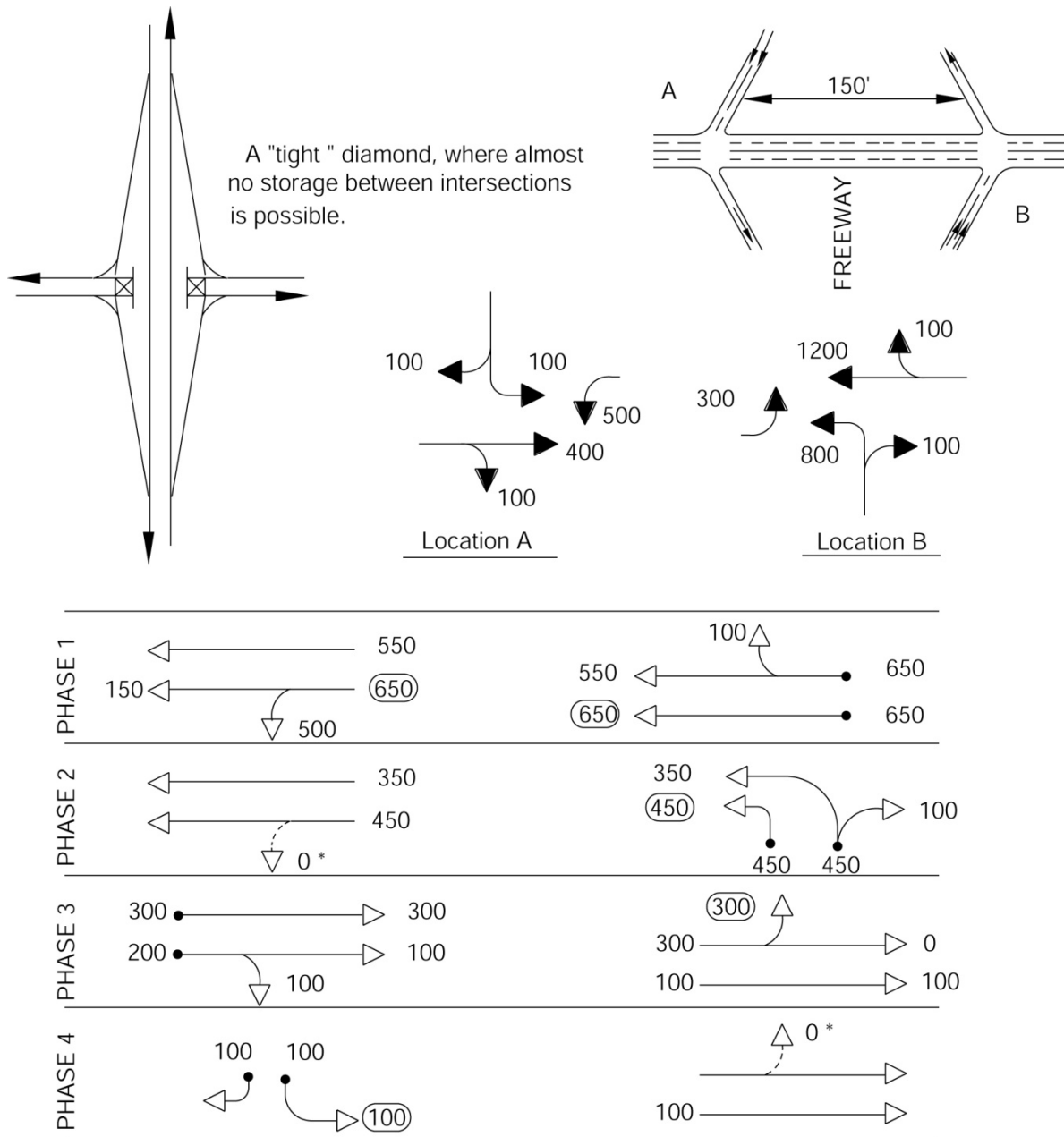
**NOTE:**

- (1) The amount of congestion depends on how much the ILV/hr value exceeds 1500. Observed flow rates will normally not exceed 1500 ILV/hr, and the excess will be delayed in a queue.

Figure 406A  
Spread Diamond



**Figure 406B**  
**Tight Diamond**



\*NOTE: When no storage at all is permitted, left-turn movement is cleared during this phase.

Critical Lane Volumes:

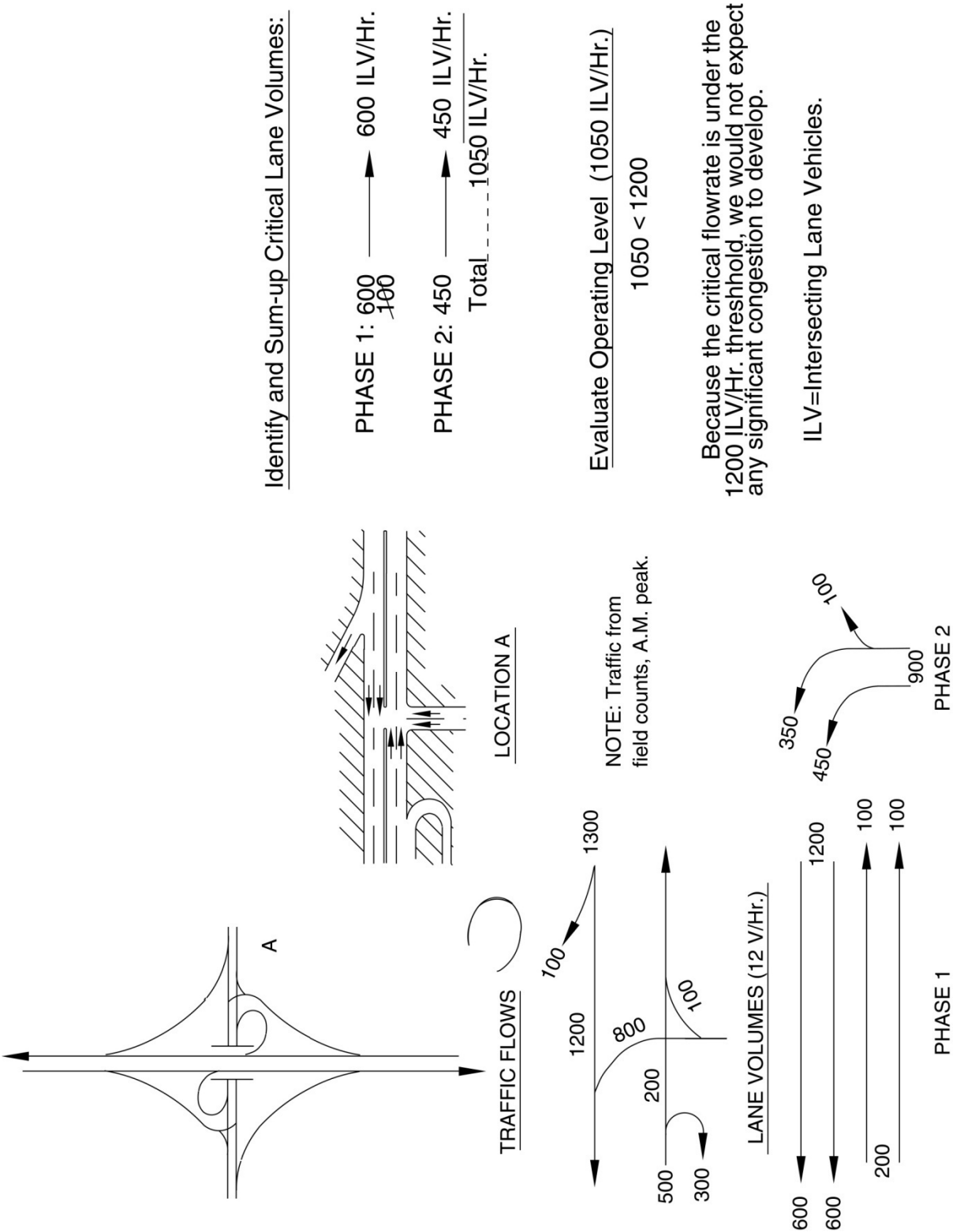
650  
450  
300  
100

ILV=Intersecting Lane Vehicles.

1500 ILV/Hr.



Figure 406C  
Two-quadrant Cloverleaf



# Attachment “F”

## Wastewater

**HAMPTON INN & SUITES  
REPORT OF WASTE DISCHARGE  
TECHNICAL REPORT**

---

**WASTEWATER TREATMENT SYSTEM  
FOR THE PROPOSED**

**HAMPTON INN & SUITES**

**40758 SIERRA DRIVE, THREE RIVERS, CALIFORNIA 93271  
APN #068-100-010 and #068-080-010**

**Prepared by ALD GENERAL ENGINEERING, INC.**

**September 8, 2020**

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Appendix D	ORENCO Design Review Letter

## **1.0 BACKGROUND**

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### ***1.1 INTRODUCTION***

This report is prepared pursuant to the guidance in State Water Resources Control Board Order WQ 2014-0153-DWQ, Attachment B-1.

This report provides details for the proposed Hampton Inn Hotel and future service station, market, and subway, or equivalent, onsite wastewater treatment system in Three Rivers, California (See Appendix B for Vicinity Map and Site Plan).

The project is comprised of two undeveloped parcels (APN# 068-080-010<sup>1</sup> and 068-100-010<sup>2</sup>) that cumulatively comprise 4.39 acres and are located at 40758 Sierra Drive in Three Rivers, California<sup>3</sup>. The site is located on the east side of Highway 198 about 1.2 miles south of Three Rivers in Tulare County, California (See Appendix B for Vicinity Map and Site Plan). These properties are owned by Satwant Sanghera. The proposed development of the aforementioned parcels has site limitations (e.g. setbacks to wells, available space) that require the installation of a single wastewater system for the two parcels.

The proposed Hampton Inn Hotel (APN #068-080-010) is a 105-room hotel (185 beds) that will provide lodging for the traveling public. The calculated total average monthly influent rate for the hotel is 13,725 gpd. The future Commercial Development on frontage lot (APN #068-100-010) includes a service station with 3 pump islands<sup>4</sup> and a market, and Subway restaurant, or equivalent<sup>5</sup>. The calculated total average monthly influent rate for the future development of the frontage lot, based on uses identified by the client, is 3,420 gpd. The cumulative anticipated flow is 17,145 gallons per day. The proposed facilities will be located at the site shown in Appendix B.

The proposed wastewater treatment facility will be constructed in two phases. Phase I will include all wastewater treatment facilities, with the exception of the STEP tank (septic tank with effluent pump) independently sized for the future commercial development of the frontage. The STEP tank is the sole component for Phase II (See Appendix B for Site Plan and Figure 1 for visualization of Phase I and II).

### ***1.2 FACILITY DESCRIPTION – GENERAL OVERVIEW***

The proposed wastewater treatment facility is a media bed filtration system (Orenco AX-MAX system) with disinfection (ultraviolet treatment process), producing tertiary treated water which is discharged to the proposed subsurface drip field. The system is designed with the capability to treat a maximum flow of 17,145 gallons per day. The system will run 24 hours a day over 365 days a year.

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<sup>1</sup> 2.81 acres

<sup>2</sup> 1.58 acres

<sup>3</sup> Section 26, Township 17 South, Range 28 East, Mount Diablo Base and Meridian.

<sup>4</sup> 2 multi-pump dispensers per island

<sup>5</sup> Or equivalent type of restaurant with limited/minimal amounts of FOG (Fats, Oils, and Grease). Cumulative Grease and Oil contribution to the advanced treatment unit below 25 mg/L.

## 2.0 WASTEWATER TREATMENT FACILITY

---

### 2.1 DOMESTIC WASTEWATER CHARACTERIZATION (UNTREATED WASTEWATER)

Wastewater will be generated at the proposed hotel by domestic sources that include: sinks, toilets, showers, laundry, and limited food preparation and associated dish washing/dish washer. The proposed hotel will serve breakfast, which consists of reheating prepackaged food in their food prep area and washing of cook wear used in the reheating process. All dinnerware and flatware will be disposable.

Wastewater will be generated at the future development of the frontage lot (service station and market, and Subway restaurant) primarily via a public restroom (e.g. sinks, toilets) and limited food production for a Subway Restaurant, or equivalent.

#### 2.1.1 Anticipated Flow Rates

The anticipated domestic wastewater flow rates for the proposed uses is 17,145 gallons per day (Qmax) (see Table 1 for summary) (See Table 2 and 3 for details), based on estimated waste / sewage flow rates from the 2019 California Plumbing Code (CPC Table H 201.1(4)).

**Table 1** Summary of Anticipated Flows.

Facility	Flow Rates
Hotel	13,725 gpd
Frontage Lot – Future Commercial Development	3,420 gpd
<b>TOTAL</b>	<b>17,145 gpd</b>

#### *Hotel Flow Rate:*

We evaluated the flow per room at 60 gpd/bed (per 2 person), and the flow for the laundry based on ½ load (cycle) per room per day, with a typical commercial washing unit use rate of 50 gallons per cycle. Flow rates are based on an average occupancy rate of 100 percent capacity. See Table 2 for itemized flow values.

We verified the anticipated flow rates with a water study provided by Chris Ott, HTL Hospitality Advisor for the project, for one of their network hotels. The reference entitled, a Water Savings Analysis for the St. Regis Resort, summarizes water conservation studies completed for the hotel sector for various hotel type (e.g. deluxe/resort, luxury, mid-market, economy). The total water usage by hotel type for a mid-market hotel is 100 gallons per day per room<sup>6</sup>, and regardless of the hotel type the domestic<sup>7</sup> water use is 53 gallons per day per room, based on an average occupancy of 1.5 guest per room and an occupancy rate of 80 percent. Extrapolating the aforementioned value from 80 to 100 percent occupancy (Qmax), changes the value from 100 to 125 gallons per day per room. The typical percentage of the daily water use for laundry vs. other uses (restrooms, food service, HVAC, landscaping, other) is 20 percent.

Thus, we compared our anticipated flow per room at 130.7 gpd to the typical total water usage for a mid-

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<sup>6</sup> Domestic, kitchen, laundry, HVAC, landscaping, etc.

<sup>7</sup> toilets, hand washing, misc. use, showers

market hotel at 100 (80 percent occupancy) and 125 (100 percent occupancy) gallons per day, which matches the studies values well. And we compared the ratio of our anticipated flow for laundry versus the flow per room (25 gpd / 130.7 gpd) at 19.1 percent, which matches the typical value from the study (20 percent). Therefore, we believe that anticipated flow rates accurately represent the proposed hotels wastewater demand.

**Table 2** Flow Rates – Hotel

<b>Hotel</b>	<b>No. Rooms/Beds</b>	<b>Unit Flow</b>	<b>Anticipated Flow</b>
Based on Beds	185 Beds <sup>1,2</sup>	60 gpd/bed	11,100 gpd
Addition for Laundry	0.5 cycles/room/day	50 gal/cycle	2,625 gpd
<b>Total Hotel Anticipated Flow</b>			<b>13,725 gpd</b>

<sup>1</sup> The number of guestrooms, by type, for the proposed hotel are listed in Table A.1 in Appendix A.

<sup>2</sup> The hotel shall have low-flow fixtures, reducing the wastewater demand on the overall facility.

#### ***Future Commercial Development Flow Rate:***

We evaluated the flow for the future development based on an estimated number of employees, gas pump island, retail space, and restaurant space, provided by the client. See Table 3 for itemized flow. Since these numbers characterize a future development, the type of uses and anticipated flows must be verified prior to implementation.

**Table 3** Flow Rates – Future Commercial Development on Frontage Lot.

<b>Service Stations and Market</b>	<b>Number</b>	<b>Unit Flow</b>	<b>Anticipated Flow</b>
Employees	6 Employees	20 gpd/employee	120 gpd
Pump Islands	3 Pump Islands <sup>1</sup>	1000 gpd for 1 <sup>st</sup> island 500 gpd for each additional pump island	2,000 gpd
4,000 sq.ft. retail space	4,000 sq.ft.	1 gpd/10 sq.ft.	400 gpd
1,000 sq.ft. fast food restaurant space (Subway)	100 Meals per day peak	2 gpd/single service 7 gpd/toilet use	900 gpd
<b>Future Commercial Development Anticipated Flow Applied</b>			<b>3,420 gpd</b>

<sup>1</sup>1 Pump Island has 2 multi-pump dispensers.

#### ***2.1.2 Wastewater Characteristics***

The water discharged to the subsurface will be made up entirely of domestic wastewater that has been treated to the tertiary level. Table 4 and Table 5 describes the influent<sup>8</sup> and effluent quality of wastewater, respectively. Since the facility falls below 20,000 gpd no nitrogen evaluation is necessary.

<sup>8</sup> Septic Tank effluent is approximately equal to half the waste strength of the raw wastewater influent.

**Table 4** Raw Wastewater Influent Quality. See Table A.7 in Appendix A for detailed calculations<sup>9</sup>.

	<b>BOD (mg/L)</b>	<b>TSS (mg/L)</b>
Hotel and Frontage Lot Dev.	510	150

For comparison purposes only, Orenco asserts the typical BOD waste strength for hotels and a Subway restaurant is 150 mg/L and 500 mg/L, respectively. These waste strengths combined with the aforementioned flow rates, have a weighted average value of 220 mg/L. Thus, the calculated value (255 mg/L) is 16 percent higher, or contains an effective 16 percent safety factor, when compared to Orenco.

**Table 5** Effluent Water Quality Limitations.

<b>Constituent</b>	<b>Unit</b>	<b>Average Monthly Limit</b>	<b>7-Day Average Limit</b>
Biochemical Oxygen Demand (BOD)	Milligrams per liter (mg/L)	30	45
Total Suspended Solids (TSS)	mg/L	30	45

According to the manufacturer of the media bed filtration system (AX-MAX), "when loaded at or below the application loading rates, AdvanTex systems typically achieve treatment levels of <10 mg/L BOD<sub>5</sub> and TSS (30-day average or 30-day arithmetic mean), and they typically provide reduction of Total Nitrogen (TN) >60%, with nitrification exceeding 95%." And pursuant to the manufacturer, Grease and Oil contribution to the AX-Max unit must not exceed 25 mg/L.

Influent flows and waste strength, and effluent waste strength needs to be measured once the expansion is completed and the system is installed to confirm design values. Confirmation testing shall also include oil and grease values to confirm values are < 25 mg/L. If O&G values exceed 25 mg/L, pre-aeration is required. Adjustments may need to be made if actual waste strengths or flows differ from design values. Any changes in usage that may affect flows or waste strength require a review by the designer.

## **2.2 WASTEWATER TREATMENT SYSTEM**

The proposed wastewater treatment system consists of two meander septic tanks, a media bed filtration system (Orenco AX-MAX system), ultraviolet (UV) disinfection system integrated in the AX-MAX, and subsurface drip field.

Wastewater from the hotel is conveyed to a 42-ft (15,000 gallon) Orenco T-Max traffic rated meander septic tank, and wastewater from the service station, market, and Subway is conveyed to a 14-ft (5,000 gallons) Orenco T-Max traffic rated Meander septic tank, by way of a gravity sewer main. Meander septic tanks will provide primary treatment. Sludge, scum, and biosolids captured in the septic tanks will be pumped by a licensed pumper and transported to an authorized disposal facility.

<sup>9</sup> Table A.7 quantifies the septic tank effluent quality. Influent values shown in Table 4 are calculated by multiplying effluent values by a factor of 2.



From the septic tanks, the primary treatment effluent is then pumped, via a Biofilter duplex pump, to the media bed filtration system. A duplex pump allows for continued operations in the event one pump needs to be shut down for cleaning or repair. The media bed filtration system is comprised of two AX-MAX pods to accommodate the required amount of filtration surface area.

In the media bed filtration system, effluent is distributed on a media bed via sprinklers. Effluent trickles through the media and is then either conveyed to the subsurface irrigation system or returned to the beginning of the media bed filtration system for additional treatment (up to four times).

From the advanced treatment system and associated equipment, the wastewater is disinfected using an ultraviolet (UV) treatment system, by Sanitron, and is discharged to a subsurface drip field. The systems cumulative calculated total average monthly influent rate is 17,145 gpd. The wastewater system will be located as shown in Appendix B – Site Plan.

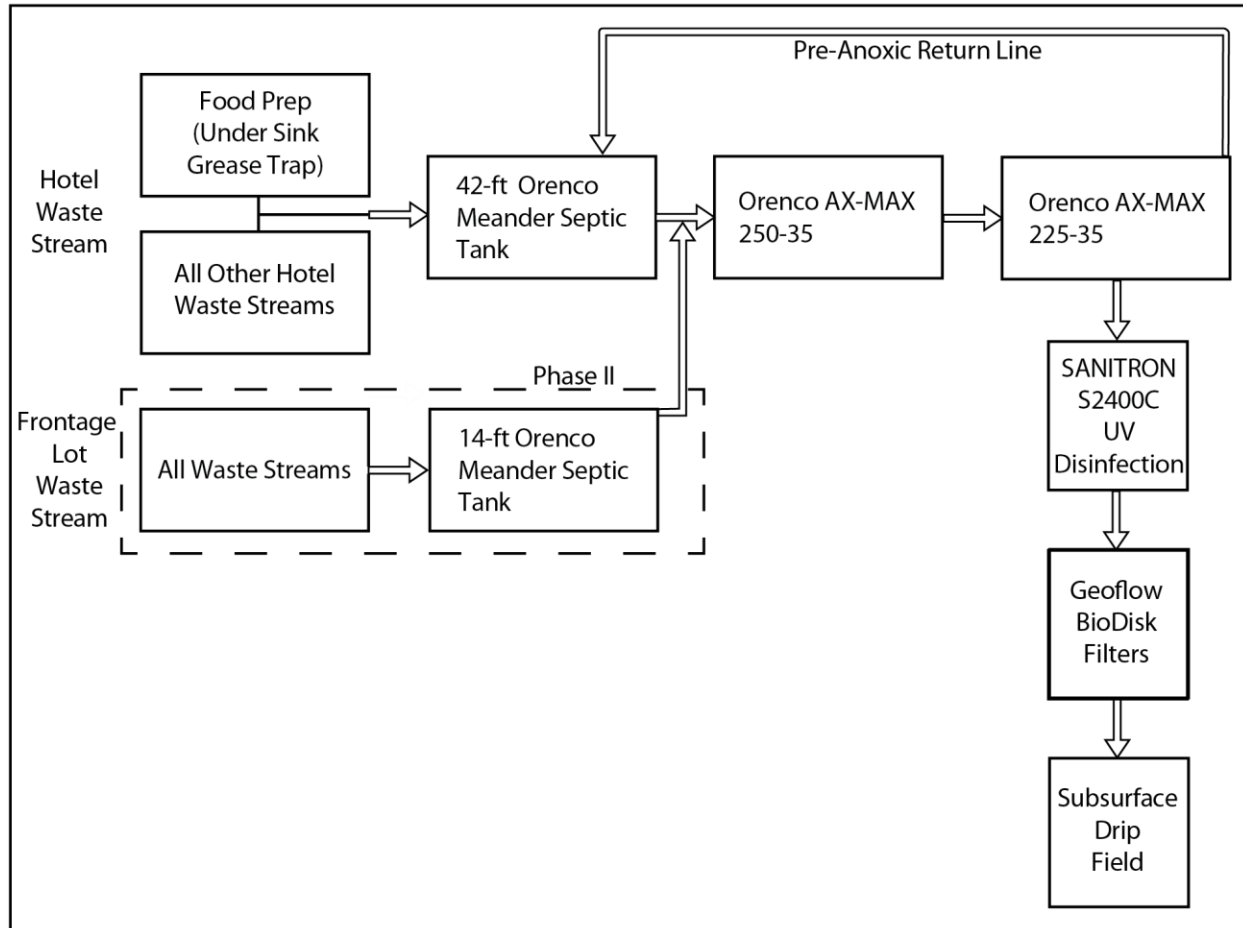
### ***2.2.1 Wastewater Treatment Schematic***

See

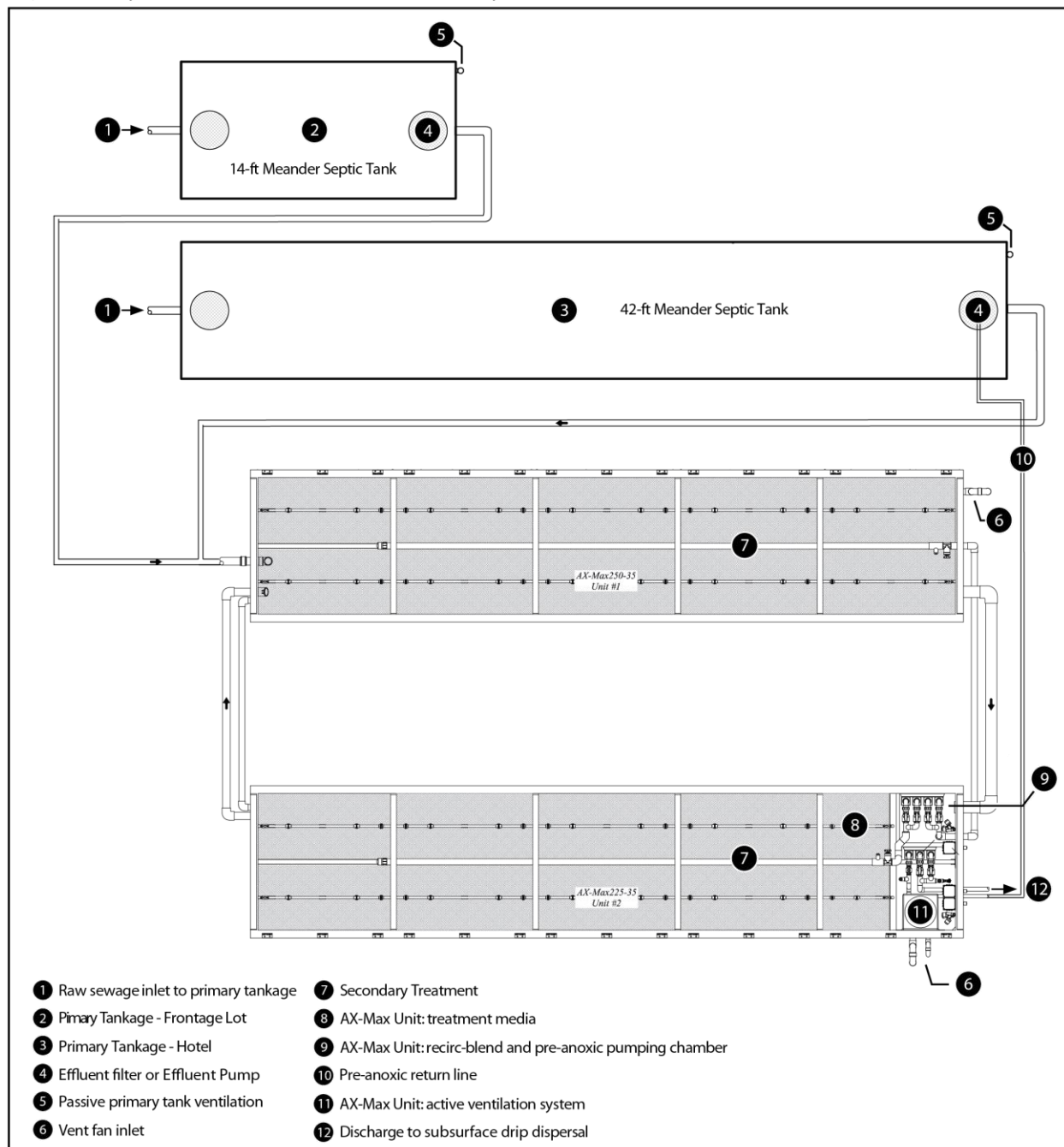
Figure 1 and Figure 2 for simplified layouts/schematics of wastewater treatment system. See Appendix B

for Site Plan.

**Figure 1** Wastewater Treatment System Flow Sheet. Pre-Anoxic Return Line will be plumbed into the 2<sup>nd</sup> compartment of the 15,000-gallon meander septic tank. AdvanTex AX-Max units are configured with integral recirculation-blend capacity and do not require an external recirculation-blend tank. Phase II components will be built in the future as part of the future frontage lot development, all other components will be built at this time.



**Figure 2** Layout of the Wastewater Treatment System (Modified from Orenco Document NDA-ATX-1).



## 2.2.2 System Components

### 2.2.2.1 Pretreatment Components (grease traps.)

Any septic system that receives high strength wastewater from a commercial food service facility must have an approved and properly sized and functioning oil/grease interceptor. The hotel food prep area requires a grease interceptor with a minimum rating capacity of 35 gpm and 70-pounds grease to be installed downstream of the food prep's 3-compartment sink and dishwasher (see Section A.1 in

Appendix A for sizing calculations). Sizing and installation must conform to the manufacturers recommendations and based on PDI<sup>10</sup> Guide Lines.

The future subway on the frontage lot will require an appropriately sized grease interceptor that must be verified by the system designer prior to implementation.

See Section 2.3 for grease interceptor maintenance requirements.

#### **2.2.2.2 Primary Treatment Equipment**

Properly sized septic tanks are imperative in order to reduce commercial strength wastewater to an acceptable level prior to advanced treatment. We propose to use an Orenco Meander Septic Tank with 30 gpm Biofilter duplex<sup>11</sup> effluent pumps. For meander tank sizing and justification see Orenco's Design Review Letter (Attachment D).

See Table 6 for Septic Tank Specifications. For comparison purposes, tankage calculations based on the anticipated flow and drainage fixture units are included in Section A.2 in Appendix A.

**Table 6** Summary of Septic Tank Sizes.

<b>Facility</b>	<b>Septic Tank</b>
Hotel	42-ft (15,000 gallon) Orenco T-Max traffic rated meander septic tank
Frontage Lot – Future Commercial Development	14-ft (5,000 gallon) Orenco T-Max traffic rated meander septic tank

The use of a pre-Anoxic tank for primary treatment of Type 5 waste is recommended by the manufacturer (1x peak daily flow), but the manufacturer approved the omission of a pre-anoxic tank requirement for Type 5 Waste (Orenco's waste classification for Hotels/Motels) because there is no nitrogen limit for flow rates less than 20,000 gpd (State Water Resources Control Board Order WQ 2014-0153-DWQ).

#### **2.2.2.3 Media Bed Filtration System Equipment**

The proposed Orenco AdvanTex treatment system is the AX-MAX unit. The filter treatment area is sized based on organic loading rate (OLR for BOD<sub>5</sub>) and hydraulic loading rate (HLR). The area required for the OLR is most restrictive; therefore, the system requirements is designed based on the OLR. The minimum treatment surface area based on OLR is 457 square feet. The proposed treatment surface area is 475 square feet, and is achieved by using the following AX Pods: (1) AX-MAX250-35 and (2) AX-MAX225-35.

See Section A.3 in Appendix A for sizing calculations.

---

<sup>10</sup> Plumbing and Drainage Institute (PDI)

<sup>11</sup> Duplex pumps work by alternating from one dose to the next.

#### **2.2.2.4 Disinfection System Equipment**

Disinfection of the treated wastewater is incorporated into the wastewater treatment system to mitigate the fast percolation rates (1 minute per inch or faster). Disinfection shall be performed by UV treatment, using two (2) Sanitron's S2400C treatment units installed in series to allow for system redundancy and resilience. The units are each rated for flows of 40 gpm.

#### **2.2.2.5 Treated Effluent Disposal Method**

The proposed effluent disposal method is subsurface drip dispersal using Geoflow's WasteFlow PC (pressure compensating) 1.0 gph drip line with 2-foot emitter spacing. The subsurface drip irrigation system will be installed at 8-inches below the surface with an area of approximately 0.33 acres. The size is based on an average percolation rate of 0.45 minutes per inch (mpi), a design loading rate of 1.2 gal/ft<sup>2</sup>/day, and a capacity of 17,145 gpd.

The dosing tank and 30 gpm duplex discharge pumps are integrated into the AX-MAX unit.

See Sections 2.2.3 below for supporting site conditions (soils, groundwater, surface water, water supply, setbacks). See Geoflow Subsurface Drip Design Spreadsheet for design details and calculations.

The subsurface disposal systems shall hold in reserve sufficient land area for possible future 100-percent replacement of the subsurface disposal system. The 100-percent replacement area is shown in Appendix B – Site Plan.

### **2.2.3 Site Conditions**

#### **2.2.3.1 Soils**

In general, the soils encountered within the proposed effluent dispersal area and 100 percent expansion area consists primarily of fine to medium-grained sand (SP) to a maximum explored depth of 5 feet. The parent material is alluvium derived from granitic bedrock. Percolation testing of the dispersal area and 100 percent expansion area suggest that the soils have a very high absorption potential (0.45 minutes per inch). The site evaluation from The Dirt Guys is provided for reference in Appendix C.

The design loading rate is based on the manufacturers (Geoflow) loading rate for drip line in sandy clay loam with a treated effluent strength of <30mg/L (BOD<sub>5</sub> and TSS) is 1.2 gpd/sq.ft

#### **2.2.3.2 Groundwater**

Seasonally high Groundwater is located at approximately 10 to 12 feet below ground surface, as determined during The Dirt Guys site evaluation.

Pursuant to WDR Attachment 1, Table 5, Minimum Depth to Groundwater and Minimum Soil Depth from the Bottom of Dispersal System, for Perc Rates less than or equal to 1 MPI, require additional treatment. This requirement coupled with the groundwater depth in sandy soils, the proposed system must use disinfection.

#### **2.2.3.3 Surface Water**

The westside of the frontage lot is located about 210 feet from the nearest point to the active channel of the Kaweah River. No treated wastewater will be discharged directly to any water body.

A man-made pond is located about 50-feet west of the hotel parcel (See Site Plan in Appendix B). The pond is located more than 200-feet (setback requirement) from the proposed dispersal area and as such the pond is not discussed further in this report.

#### **2.2.3.4 Water Supply**

Potable water will be served to the hotel and frontage lot via a new commercial well that will be located more than 150 ft away from all the wastewater treatment system components (See Appendix B for Site Plan). A shared well agreement will be established for the frontage lot. See accompanying maps in Appendix B that identify the location of all groundwater wells within 150-feet of the subject parcels.

The frontage lot contains an existing well that must be properly abandoned (destroyed) (See Appendix B for Site Plan). A permit is required for the destruction of water wells anywhere in Tulare County. All well work must be done by a contractor having a valid C-57 license as issued by the Contractors State License Board. The well must be properly abandoned prior to the final inspection of the septic system by the designer.

The neighboring lot (APN #068-100-041) contains an abandoned commercial building. The lot is of insufficient size to develop a well, and as such contains a water agreement with the neighboring Comfort Inn & Suites (APN #068-360-028). The proposed dispersal field will maintain a 5-foot setback to the property line of the aforementioned neighboring lot without a well, which is reasonable because it will not impact their development potential for the aforementioned reasons.

#### **2.2.3.5 Setbacks**

The wastewater treatment system must maintain all setbacks described in Table 3 of the General order, as well as the following setback requirements, as summarized in the Table 7.

**Table 7** Summary of Setbacks.

Equipment or Activity	Domestic Well	Flowing Stream (see 1. Below)	Ephemeral Stream Drainage (see 2. Below)	Property Line
Septic Tank, Treatment System, or Collection System (see 3. Below)	150 ft. (see 4. below)	50 ft. (see 6. below)	50 ft.	5 ft. (see 6. below)
Leach Field (see 5. below)	100 ft, (see 6 and 7. below)	100 ft. (see 6. below)	5 ft	5 ft. (see 6. below)

1. A flowing stream shall be measured from the ordinary high-water mark established by fluctuations of water elevation and indicated by characteristics such as shelving, changes in soil character, vegetation type, presence of litter or debris, or other appropriate means.
2. Ephemeral Stream Drainage denotes a surface water drainage feature that flows only after rain or snowmelt and does not have sufficient groundwater seepage (baseflow) to maintain a condition of

flowing surface water. The drainage shall be measured from a line that defines the limit of the ordinary high-water mark (described in “a” above). Irrigation canals are not considered ephemeral streams drainage.

3. Septic Tank, Treatment System, or Collection System addresses equipment located below ground or that impedes leak detection by routine visual inspection
4. Setback established by Onsite Wastewater Treatment System Policy, section 7.5.6.
5. Leach Field includes all subsurface dispersal systems, including mound systems except seepage pits.
6. Setback established by California Plumbing Code, Table K-1.
7. California Well Standards, part II, section 8.

## **2.3 OPERATIONS AND MAINTENANCE**

With certain exceptions<sup>12</sup>, anyone performing construction work in California must be licensed by the California Contractors’ State License Board. Septic tank and/or leach field service (repairs, pumping, etc.) shall be performed only by a California licensed General Engineering (A), Plumbing (C-36), or Sanitation System (C-42) contractor.

A maintenance agreement with a certified Orenco Maintenance provider and pump contractor will have to be provided to the permitting authority prior to final approval. The maintenance agreement must state that they assume responsibility to maintain the system continuously for the life of the system, or until another maintenance provider is hired and a copy of such maintenance agreement is provided.

The MANUFACTURER shall provide the services of a trained representative for training the OWNER’S service provider, inspecting all AX-MAX units, wiring, and unit placement and installation.

### **2.3.1 Describe Routine Operation and Maintenance Procedures**

The Discharger shall maintain a record of all septic service activities for a minimum of five years. At a minimum, the record shall include the date, nature of service, service company name, and service company state contractor license number.

Septic tanks shall be pumped when any one of the following conditions exists:

- The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment.
- The scum layer is within 3 inches of the outlet device.
- The sludge layer is within 6 inches of the outlet device.

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<sup>12</sup> Limited repairs may be performed by homeowners or contractors as allowed by the Business and Professions Code (Bus. & Prof. Code, §§ 7044, 7048).





**Figure 3** Orenco's suggested scheduled maintenance activities and times (from Orenco Document No. AIM-OM-ATX-4). However, system discharge limits and influent loads dictate actual O&M requirements.

Scheduled Maintenance Reference Chart		Recommended Activity Period					
		Monthly	Quarterly	Semi-annually	Annually	Biennially	
Activity	Visually Inspect Tank Liquid Levels	• <sup>1</sup>	•				
	Check Biotube® Effluent Filters; Clean as Required	• <sup>1</sup>	•		•		
	Check Biotube® Pump Vault Filters; Clean as Required	• <sup>1</sup>	•		•		
	Record Elapsed Time Meters and Event Counters for All Pumps	•					
	Inspect Spin Nozzles, Clean as Required	• <sup>2</sup>		•			
	Confirm Proper Operation of Automatic Distributing Valve (if applicable)	•					
	Sample Influent and Effluent Quality Parameters <sup>3</sup>		• <sup>1</sup>	•			
	Confirm and Record Pump Voltages and Amperages		• <sup>1</sup>		•		
	Inspect Distribution of Effluent in AX-Max Units; Clean as Required			•			
	Record Scum and Sludge Accumulation in Tanks				•		
	Flush Distribution Laterals in AX-Max Units				•		
	Inspect Pumping System Components; Clean as Required				•		
	Replace Lithium Battery in TCOM Control Panel (if applicable)					•	

<sup>1</sup>This maintenance schedule is only required during the first year of system operation.

<sup>2</sup>This maintenance schedule is only required during the first quarter of system operation.

<sup>3</sup>Recommended guidelines only. Sampling should be scheduled according to regulatory requirements.

- The service provider should be present during installation, so they are familiar with the system, especially those service lines, conduits, and connections that get buried. Ideally all system components are documented using aerial photography to maintain an accurate record of all system components. A detailed as-built drawing must be maintained on-site.
- DO NOT dispose of toxics or chemicals into system, such as restaurant degreasers, cleansers, wax strippers for linoleum, carpet shampoo and its waste products, and other toxics. As a general

rule, nothing should go into any wastewater treatment system that hasn't been ingested, other than toilet tissue, mild detergents, and wash water. Every system user and qualified service provider should be familiar with the basic guidelines below:

- No septic additives
  - No flammable or toxic products
  - No excessive household cleaners
  - No chlorine bleach, chlorides, and pool or spa products
  - No pesticides, herbicides, or agricultural chemicals or fertilizers
  - No RV waste (unless the system is specifically designed and engineered to treat such waste)
  - No water softener backwash
  - No surface runoff or stormwater runoff
  - No excessive amounts of fats, oils and grease (FOG)
  - No food byproducts
  - No cigarette butts
  - No paper towels, newspapers, sanitary napkins, diapers, disposable wipes, floss, gum or candy wrappers, etc.
- According to the manufacturer: Kitchen dishwashing appliances used in conjunction with AdvanTex treatment must be high-temperature appliances. For systems with low-temperature, chemical-type appliances, pre-aeration will be necessary. Grease and Oil contribution to the AX-Max unit must not exceed 25 mg/L.

**GEOFLOW** (dispersal system manufacturer) maintenance requirements:

- Consult the Manufacturers Design, Installation, and Maintenance Guide available on their website. If additional information is needed, contact Geoflow.
- The BioDisk Filter Battery is a T filter setup for self-cleaning via automatic back washing. Two filters, with a max flow rate of 70 gpm, are placed on the manifold, allowing clean water from one filter to wash the other filter.
- The field flush valves are automatic and flush the field once a day.
- Geoflow Specific Routine and Preventative Maintenance Includes:
  - With the pump in the “manual” position, check the pressure in the drip field by using a pressure gauge on the Schrader valve located on the air vents and by reading the pressure gauge located in the Wasteflow Headworks box. The pressure should be the same as shown on the initial installation records.

- Periodically remove and clean the air vents, field flush and filter flush valves.
- Visually check and report the condition of the drip field, including any noticeable wetness.

**SANITRON** (disinfection (UV Treatment) system manufacturer) maintenance requirements:

- Consult the Manufacturers Installation, Operation, and Maintenance Manual available on their website. If additional information is needed, contact Sanitron.
- Lamp replacement is recommended every 10,000 hours of operation, approximately 12 months of continuous service. Lamps contain small amounts of mercury and as such should not be placed in the trash. Properly dispose of lamps, in a manner suitable to the local authority.
- Cleaning of the quartz sleeve, when conditions warrant. It is recommended that the inspection of quartz sleeve be performed after one month of use. If quartz sleeve is found to be coated (not clear), then frequency of cleaning must be done more often. Deposits or discoloration on the surface of quartz sleeve are caused by excessive levels of the subject contaminant within the water that is in contact with the quartz sleeve. Most deposits on the quartz sleeve are caused by an excess of calcium (hardness), iron or manganese. If quartz sleeve is clean (clear) then frequency of cleaning may be extended.
- SANITRON® Ultraviolet water purifiers are equipped with a manual wiping mechanism making the process of routine cleaning easier and therefore, recommended weekly or at the very least monthly to insure your performance.
- During inspections, confirm that approved GFCI receptacle is still operational and that water purifier is plugged into this GFCI.
- The system must be connected to the Orenco Control Panel to monitor the level of germicidal ultraviolet energy that penetrates the quartz sleeve and the water within the water purifier. This will signal a need for system cleaning or repair.

**GREASE INTERCEPTOR** best practices and interceptor maintenance requirements: even the best-designed interceptors properly installed will fail if they are not maintained. The precise requirements for maintenance will be dependent upon the amount of F.O.G. and sediment in the wastewater.

- The interceptor has a rated retention capacity equal to twice its flow rate expressed in pounds. The user must determine the cleaning schedule by measuring how much grease has been trapped over a period of time. Grease typically weighs about 8 pounds per gallon.

- The amount of solids entering the grease trap will increase the frequency of cleaning the interceptor. Eliminate solids entering the interceptor as much as possible. If excessive solids are passing into the line, the user must install a solids interceptor ahead of the grease trap.
- Dishwashing personnel must thoroughly scrape cookware to remove all food waste, especially cooking oils and creamy sauces and gravies which are high in grease, before rinsing dishes. Thorough scraping of dishes will prevent the majority of grease in your waste stream from entering the OWTS.
- Frequency of cleaning helps eliminate most of the odors associated with interceptors and increases its efficiency.
- When the interceptor is being cleaned, extra attention should be given to make certain that inlet, outlet, and air relief ports are clear of obstructions. Always take proper care to ensure a safe and healthy environment while cleaning the interceptor.
- Follow all manufacturer requirements and service provider requirements for proper maintenance and disposal.
- Grease and any other waste matter that has been removed from the interceptor should not be introduced into any drain, sewer, or natural body of water. This waste matter should be placed in proper containers for disposal. Depending on the amount of grease generated, an appropriately sized indoor storage container or outdoor storage bin. The client shall have a service agreement with a service provider that is certified to properly dispose of grease, in a manner suitable to the local authority. The frequency of grease disposal depends on the size of the trap, volume of grease produced, and storage bin capacity.

### ***2.3.1 Manufacturer (Orenco & Sanitron) Monitoring Requirements***

Regulatory monitoring requirements applicable to the treatment disposal methods will be identified in the Notice of Applicability (NOA) Letter.

Manufacturer monitoring requirements include:

#### **ORENCO:**

Take and Test Influent and Effluent Samples: Samples should be taken quarterly for the first year to establish a baseline. Subsequent testing after the first year may be reduced based on the establishment of this baseline. Regular samples will provide valuable information for ongoing maintenance and troubleshooting. All results obtained should be reported to the appropriate people, including Orenco.

#### **SANITRON:**

To ensure proper operation of the water purifier, regular biological testing of the purifier output water should be performed at minimum; (1) at installation, (2) quarterly for the first year of service and annually after first year of service, (3) at lamp replacement. Additional testing should be performed

whenever modifications, change, or additions are made to plumbing system, pumps, well source water etc. to ensure adequate disinfection under new condition.

### ***2.3.2 Treatment Operator Training and Qualifications Requirements***

The MANUFACTURER shall provide the services of a trained representative for training the OWNER'S service provider, inspecting all AX-MAX units, wiring, and unit placement and installation. All the equipment and materials required to perform testing shall be the responsibility of the CONTRACTOR. The MANUFACTURER shall submit a detailed start-up checklist for each unit, according to the manufacturer's inspection and startup procedures.

Orenco offers training courses via webinars and live workshop, both at their corporate headquarters and through local distributors. Contact Orenco at their headquarters or your local Orenco distributor for training and certification questions.

### ***2.3.3 Contingency plans for Repairs/Spills/Treatment Issues***

The wastewater treatment components that require repairs are installed in duplicate systems (e.g. septic tank effluent pumps, recirculation pumps, discharge pumps, UV treatment units) that alternate or are installed in series, and in the event one requires repairs, the other continues to operate.

## **3.0 DESIGN REFERENCES**

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This design meets the minimum requirements of Tulare County Environmental Health Department, including the County Local Agency Management Program (LAMP) pertaining to onsite wastewater treatment systems (OWTS) and State Water Resources Control Board Order WQ 2014-0153-DWQ.

Advanced Treatment Design requirements are all based on Technical Data Sheets and Design Manuals published by the Manufacturer (form: NDA-ATX-1 and NDA-EFS-1). And the design is reviewed and approved by the Manufacturer's (Orenco) Engineers Prior to submittal (see attached manufacturers Final Design Review Letter).

Additionally, all subsurface drip dispersal sizing and design criteria is based on manufactured pre-engineered data published by Geoflow, Inc., titled Subsurface Drip Dispersal and Reuse – Design, Installation, and Maintenance Guidelines.

## **4.0 LIMITATIONS**

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Design Criteria is based on field data (e.g. soil profiles and percolation testing) collected under the professional responsibility of The Dirt Guys. We shall be notified if variations or undesirable conditions are encountered during installation so that a re-evaluation can be made. The client should recognize that exposure of unexpected adverse conditions would require additional costs at the rate of \$125.00 per hour,

portal-to-portal. The same rate applies to additional inspections or trips to job site that are made due to circumstances beyond our control.

This project/technical report is based upon the calculated flows and waste strengths for the purpose of serving the Hampton Inn and Suites and frontage lot project. Influent flows, and influent and effluent waste strengths will need to be measured once the facility is operational to confirm design values. Adjustments may need to be made if actual waste strengths or flows differ from design values. Any changes in business operations that may affect flows or waste strength require a review by the system designer.

The choice to not include a pre-anoxic tank to allow for additional nitrogen reduction was based on the fact that the anticipated flow is below the threshold value that mandates nitrogen mitigations.

We prepared this report for the exclusive use of the owner, installer, and project design consultants and approval by the regulatory agencies. The report has been prepared in accordance with the Water Board State Water Resources Control Board Order WQ 2014-0153-DWQ. Services performed have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our agreement and included in this report.

General Conditions required for final installation approval:

- A shared well agreement must be established for the frontage lot.
- A utility easement must be established for the wastewater treatment facilities installed on the frontage lot (e.g. dispersal field, lines, 100-percent replacement area).

SITE EVALUATION REPORT  
APN: 068-100-010

Location	Depth (ft)	Perc. Rate	(gal/sf/day)
P-1	4	0.74 Min/Inch	7.15
P-2	4	0.33 Min/Inch	10.71
P-3	4	0.57 Min/Inch	8.15
P-4	4	0.57 Min/Inch	8.15
P-5	4	0.12 Min/Inch	14.43
P-6	4	0.12 Min/Inch	14.43

SITE EVALUATION REPORT  
APN: 068-080-010

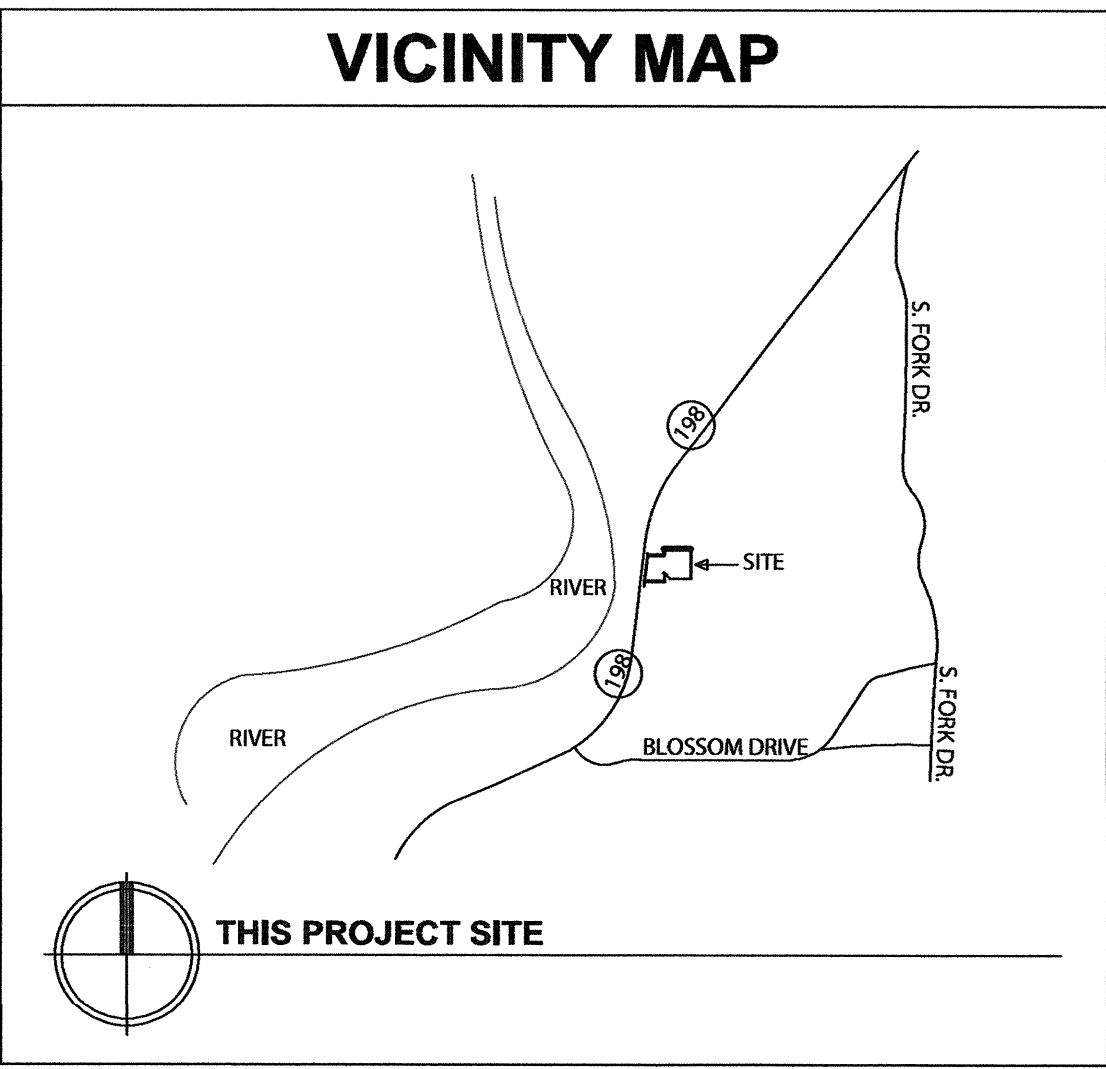
Location	Depth (ft)	Perc. Rate	(gal/sf/day)
P-7	4	0.80 Min/Inch	6.93
P-8	4	0.91 Min/Inch	6.45
P-9	4	0.47 Min/Inch	8.97
P-10	4	0.35 Min/Inch	10.40
P-11	4	0.17 Min/Inch	14.92
P-12	4	0.26 Min/Inch	12.06

PERC 7-12 CORRESPOND TO THE DIRT GUYS REPORT AS (P-1 TO P-6)

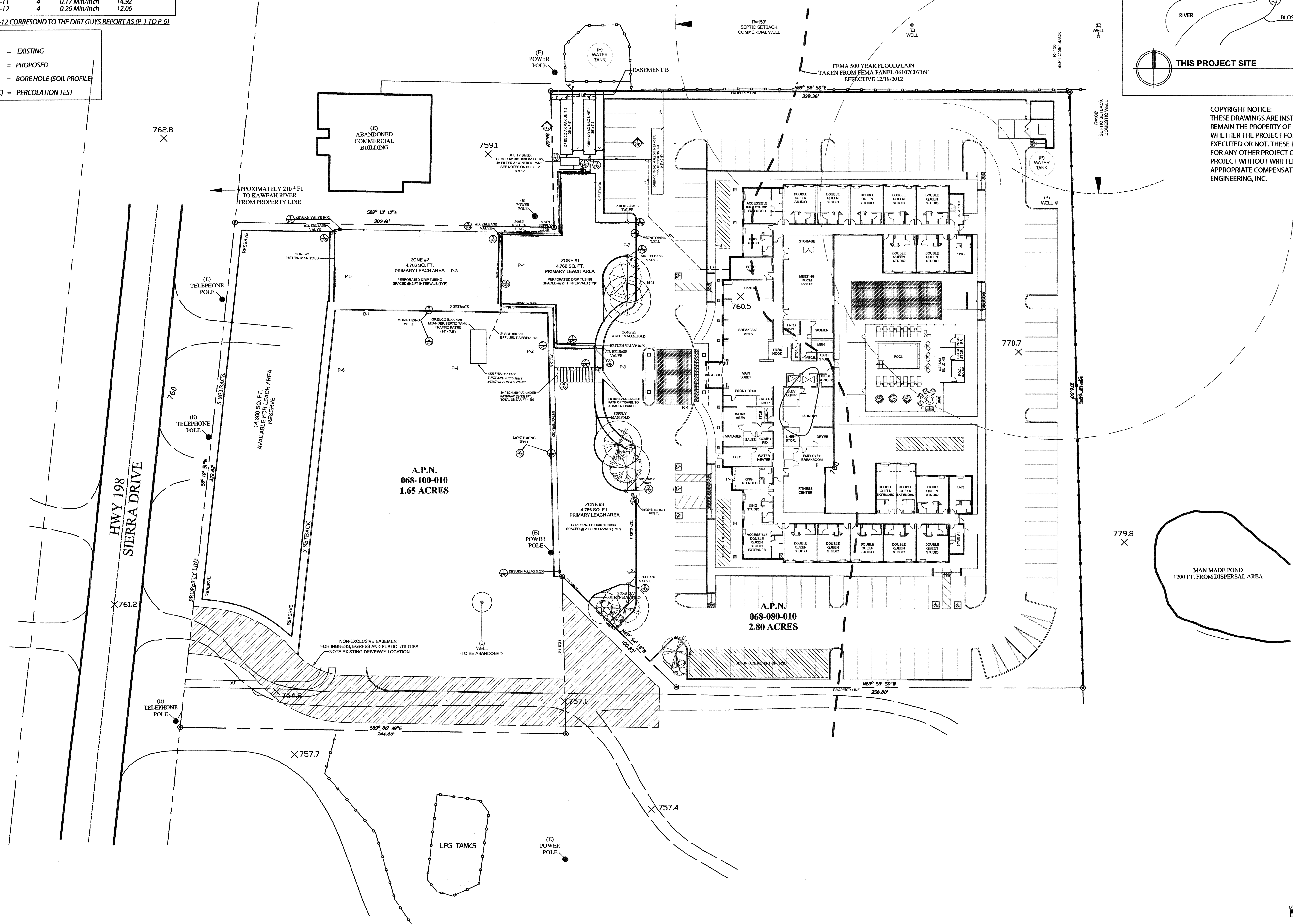
KEY:  
(E) = EXISTING  
(P) = PROPOSED  
(B) = BORE HOLE (SOIL PROFILE)  
(PERC) = PERCOLATION TEST

# HAMPTON INN & SUITES THREE RIVERS

40758 SIERRA DRIVE, THREE RIVERS, CA 93271



COPYRIGHT NOTICE:  
THESE DRAWINGS ARE INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF ALD GENERAL ENGINEERING, INC. WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT. THESE DRAWINGS SHALL NOT BE USED FOR ANY OTHER PROJECT OR AS AN EXTENSION TO THIS PROJECT WITHOUT WRITTEN AUTHORIZATION AND APPROPRIATE COMPENSATION TO ALD GENERAL ENGINEERING, INC.



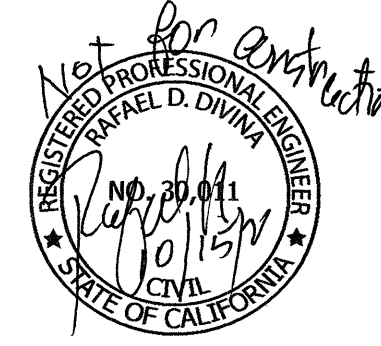
APN# 068-100-010 1.65 ACRES  
APN# 068-080-010 2.80 ACRES

WASTE WATER TREATMENT SYSTEM

SITE PLAN

A.L.D.  
GENERAL ENGINEERING INC.  
JOSHUA L.R. ANNIS  
(559) 760-1155  
LIC#1058320

THIS PLAN IS PREPARED BY ME OR UNDER MY PROFESSIONAL RESPONSIBILITY.



SCALE: 1" = 30'

DATE: 10/14/2020

SHEET NO. 1





## NATIVE AMERICAN HERITAGE COMMISSION

November 3, 2020

Tulare County  
Resource Management Agency

NOV 10 2020

Hector Guerra, Chief Environmental Planner  
Tulare County  
5961 S. Mooney Blvd.  
Visalia, CA 93277-9394

CHAIRPERSON  
**Laura Miranda**  
Luiseño

**Re: 2020110016, Three Rivers-Hampton Inn & Suites Project, Tulare County**

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

Dear Mr. Guerra:

SECRETARY  
**Merri Lopez-Keifer**  
Luiseño

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines § 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

PARLIAMENTARIAN  
**Russell Attebery**  
Karuk

COMMISSIONER  
**Marshall McKay**  
Wintun

COMMISSIONER  
**William Mungary**  
Paiute/White Mountain  
Apache

COMMISSIONER  
**Julie Tumamait-Stenslie**  
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CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

**Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**



AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:** Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

  - a. A brief description of the project.
  - b. The lead agency contact information.
  - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
  - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

  - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
- 3. Mandatory Topics of Consultation If Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

  - a. Alternatives to the project.
  - b. Recommended mitigation measures.
  - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
- 4. Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:

  - a. Type of environmental review necessary.
  - b. Significance of the tribal cultural resources.
  - c. Significance of the project's impacts on tribal cultural resources.
  - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
- 6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

  - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).



- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- Avoidance and preservation of the resources in place, including, but not limited to:
    - Planning and construction to avoid the resources and protect the cultural and natural context.
    - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - Protecting the cultural character and integrity of the resource.
    - Protecting the traditional use of the resource.
    - Protecting the confidentiality of the resource.
  - Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - Protecting the resource. (Pub. Resource Code §21084.3 (b)).
  - Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
  - Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

**11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

- The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
- The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
- The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)



## SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: [https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf).

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
  - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

### NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([http://ohp.parks.ca.gov/?page\\_id=1068](http://ohp.parks.ca.gov/?page_id=1068)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
- a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
  - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
- a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, § 15064.5(f) (CEQA Guidelines § 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
  - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code § 7050.5, Public Resources Code § 5097.98, and Cal. Code Regs., tit. 14, § 15064.5, subdivisions (d) and (e) (CEQA Guidelines § 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: [Nancy.Gonzalez-Lopez@nahc.ca.gov](mailto:Nancy.Gonzalez-Lopez@nahc.ca.gov).

Sincerely,



Nancy Gonzalez-Lopez  
Cultural Resources Analyst

cc: State Clearinghouse

Tulare County  
Resource Management Agency  
NOV 10 2020



November 23, 2020

Hector Guerra  
County of Tulare  
Resource Management Agency  
Economic Development & Planning Branch  
Environmental Planning Division  
5961 South Mooney Blvd.  
Visalia, CA 93277

**Project: Notice of Preparation – Three Rivers Hampton Inn & Suites – SCH #  
2020110016**

**District CEQA Reference No: 20200923**

Dear Mr. Guerra:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above from the County of Tulare (County). The project consists of the construction and operation of a three-story hotel (Project). The approximately 2.8-acre Project site is located east of State Route 198/Sierra Drive approximately 1,300 feet north of Old Three Rivers Road (40758 Sierra Drive), in the unincorporated community of Three Rivers, CA in Tulare County (APN 068-080-010).

### **Project Scope**

The Project consists of the construction and operation of a 3-story, 105 room hotel with 108 parking stalls. A driveway road is proposed from State Route 198/Sierra Drive through the vacant lot to the west. Utilities include a septic tank and new domestic well.

The proposed Project is anticipated to have 70 employees, 70 customers, 1 delivery, and 1 shipment per day, for an average of 825 daily vehicle trips.

The District's initial review of the Project concludes that emissions resulting from construction and/or operation of the Project may exceed the following thresholds of significance: 100 tons per year of carbon monoxide (CO), 10 tons per year of oxides of nitrogen (NOx), 10 tons per year of reactive organic gases (ROG), 27 tons per year of oxides of sulfur (SOx), 15 tons per year of particulate matter of 10 microns or less in size (PM10), or 15 tons per year of particulate matter of 2.5 microns or less in size (PM2.5).

**Samir Sheikh**  
Executive Director/Air Pollution Control Officer

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**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: (661) 392-5500 FAX: (661) 392-5585

Other potential significant air quality impacts related to Toxic Air Contaminants (see information below under Health Risk Assessment), Ambient Air Quality Standards, Hazards and Odors, may require assessments and mitigation. More information can be found in the District's Guidance for Assessing and Mitigating Air Quality Impacts at: [https://www.valleyair.org/transportation/GAMAQI\\_12-26-19.pdf](https://www.valleyair.org/transportation/GAMAQI_12-26-19.pdf)

The District recommends that a more detailed preliminary review of the Project be conducted for the Project's construction and operational emissions. The additional environmental review of the Project's potential impact on air quality should consider the following items:

## **1) Project Related Criteria Pollutant Emissions**

- 1a) Construction Emissions:** Construction emissions are short-term emissions and should be evaluated separately from operational emissions. Equipment exhaust, as well as fugitive dust emissions should be quantified. For reference, the District's annual criteria thresholds of significance for construction are listed above.

The District recommends that the County consider the use of the cleanest reasonably available off-road construction practices (i.e. eliminating unnecessary idling) and fleets, as set forth in §2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 Code of Federal Regulations as a mitigation measure to reduce Project related impacts from construction related exhaust emissions.

## **1b) Operational Related Emissions – Under-fired Charbroilers**

Projects for restaurants with under-fired charbroilers may pose the potential for immediate health risk, particularly when located in densely developed locations near sensitive receptors. Since the cooking of meat can release carcinogenic PM<sub>2.5</sub> species like polycyclic aromatic hydrocarbons, controlling emissions from new under-fired charbroilers will have a substantial positive impact on public health.

Charbroiling emissions often occur in populated areas, near schools and residential neighborhoods, resulting in high exposure levels for sensitive Valley residents. The air quality impacts on neighborhoods near restaurants with under-fired charbroilers can be significant on days when meteorological conditions are stable, when dispersion is limited and emissions are trapped near the surface within the surrounding neighborhoods. This potential for neighborhood-level concentration of emissions during evening or multi-day stagnation events raises environmental concerns.



Furthermore, reducing commercial charbroiling emissions is essential to achieving attainment of multiple federal PM<sub>2.5</sub> standards and associated health benefits in the Valley. Therefore, the District recommends that the environmental document include a measure requiring the assessment and potential installation, as technologically feasible, of particulate matter emission control systems for new large restaurants operating under-fired charbroilers. The District is available to assist the County and project proponents with this assessment. Additionally, to ease the financial burden for Valley businesses, the District is currently offering substantial incentive funding that covers the full cost of purchasing, installing, and maintaining the system for up to two years. Please contact the District at (559) 230-5800 or [technology@valleyair.org](mailto:technology@valleyair.org) for more information.

### **1c) Health Risk Screening/Assessment**

Residences are located east, south, and west of the proposed site and a worksite is located directly north of the Project site. The Health Risk Assessment should evaluate the risk associated with sensitive the residential and worksite receptors in the area and mitigate any potentially significant risk to help limit emission exposure to sensitive receptors.

A Health Risk Screening/Assessment identifies potential Toxic Air Contaminants (TAC's) impact on surrounding sensitive receptors such as hospitals, daycare centers, schools, work-sites, and residences. TAC's are air pollutants identified by the Office of Environmental Health Hazard Assessment/California Air Resources Board (OEHHA/CARB) that pose a present or potential hazard to human health. A common source of TACs can be attributed to diesel exhaust emitted from both mobile and stationary sources. List of TAC's identified by OEHHA/CARB can be found at:

<https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants>

The District recommends the development projects be evaluated for potential health impacts to surrounding receptors (on-site and off-site) resulting from operational and multi-year construction TAC emissions.

- i) The District recommends conducting a screening analysis that includes all sources of emissions. A screening analysis is used to identify projects which may have a significant health impact. A prioritization, using the latest approved California Air Pollution Control Officer's Association (CAPCOA) methodology, is the recommended screening method. A prioritization score of 10 or greater is considered to be significant and a refined Health Risk Assessment (HRA) should be performed.

For your convenience, the District's prioritization calculator can be found at:  
[http://www.valleyair.org/busind/pto/emission\\_factors/Criteria/Toxics/Utilities/PRIORITIZATION%20RMR%202016.XLS](http://www.valleyair.org/busind/pto/emission_factors/Criteria/Toxics/Utilities/PRIORITIZATION%20RMR%202016.XLS).

- ii) The District recommends a refined HRA for future development projects that result in a prioritization score of 10 or greater. Prior to performing an HRA, it is recommended that the future development project applicants contact the District to review the proposed modeling protocol. A future development project would be considered to have a significant health risk if the HRA demonstrates that the project related health impacts would exceed the District's significance threshold of 20 in a million for carcinogenic risk and 1.0 for the Acute and Chronic Hazard Indices, and would trigger all feasible mitigation measures. The District recommends that future development projects that result in a significant health risk not be approved.

For HRA submittals, please provide the following information electronically to the District for review:

- HRA AERMOD model files
- HARP2 files
- Summary of emissions source locations, emissions rates, and emission factor calculations and methodology.

More information on toxic emission factors, prioritizations and HRAs can be obtained by:

- E-Mailing inquiries to: [hramodeler@valleyair.org](mailto:hramodeler@valleyair.org); or
- Contacting the District by phone for assistance at (559) 230-6000; or
- Visiting the District's website (Modeling Guidance) at:  
[http://www.valleyair.org/busind/pto/Tox\\_Resources/AirQualityMonitoring.htm](http://www.valleyair.org/busind/pto/Tox_Resources/AirQualityMonitoring.htm).

#### **1d) Ambient Air Quality Analysis**

An ambient air quality analysis (AAQA) uses air dispersion modeling to determine if emissions increases from a project will cause or contribute to a violation of the ambient air quality standards. For development projects the District recommends that an AAQA be performed for the project if emissions exceed 100 pounds per day of any pollutant.

If an AAQA is performed, the analysis should include emissions from both project specific permitted and non-permitted equipment and activities. The District

recommends consultation with District staff to determine the appropriate model and input data to use in the analysis.

Specific information for assessing significance, including screening tools and modeling guidance is available online at the District's website [www.valleyair.org/ceqa](http://www.valleyair.org/ceqa).

#### **1e) Voluntary Emission Reduction Agreement**

If the Project is expected to have a significant impact, the District recommends the environmental document also include a discussion on the feasibility of implementing a Voluntary Emission Reduction Agreement (VERA) for this project.

A VERA is a mitigation measure by which the project applicant provides pound-for-pound mitigation of emissions increases through a process that develops, funds, and implements emission reduction projects, with the District serving a role of administrator of the emissions reduction projects and verifier of the successful mitigation effort. To implement a VERA, the project applicant and the District enter into a contractual agreement in which the project applicant agrees to mitigate Project specific emissions by providing funds for the District's incentives programs. The funds are disbursed by the District in the form of grants for projects that achieve emission reductions. Thus, project-specific regional impacts on air quality can be fully mitigated. Types of emission reduction projects that have been funded in the past include replacement of old heavy-duty trucks with new, cleaner, heavy-duty trucks, electrification of stationary internal combustion engines (such as agricultural irrigation pumps), and replacement of older school buses.

In implementing a VERA, the District verifies the actual emission reductions that have been achieved as a result of completed grant contracts, monitors the emission reduction projects, and ensures the enforceability of achieved reductions. After the project is mitigated, the District certifies to the Lead Agency that the mitigation is completed, providing the Lead Agency with an enforceable mitigation measure demonstrating that project-specific regional emissions have been mitigated to less than significant. To assist the Lead Agency and project applicant in ensuring that the environmental document is compliant with CEQA, the District recommends the environmental document includes an assessment of the feasibility of implementing a VERA.

Additional information on implementing a VERA can be obtained by contacting District CEQA staff at by email at [CEQA@valleyair.org](mailto:CEQA@valleyair.org) or by phone at (559) 230-6000.

## **2) District Rules and Regulation**

The District issues permits for many types of air pollution sources and regulates some activities not requiring permits. A project subject to District rules and regulation would reduce its impacts on air quality through compliance with regulatory requirements. In general, a regulation is a collection of rules, each of which deals with a specific topic. Here are a couple of example, Regulation II (Permits) deals with permitting emission sources and includes rules such as District permit requirements (Rule 2010), and New and Modified Stationary Source Review (Rule 2201).

### **2a) District Rules 2010 and 2201 - Air Quality Permitting for Stationary Sources**

Stationary Source emissions include any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. District Rule 2010 requires operators of emission sources to obtain an Authority to Construct (ATC) and Permit to Operate (PTO) from the District. District Rule 2201 requires that new and modified stationary sources of emissions mitigate their emissions using best available control technology (BACT).

This Project may be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and may require District permits.

Prior to commencing construction on any permit-required equipment or process, a finalized Authority to Construct (ATC) must be issued to the Project proponent by the District. For further information or assistance, the project proponent may contact the District's Small Business Assistance (SBA) Office at (559) 230-5888.

### **2b) District Rule 9510 (Indirect Source Review)**

The purpose of District Rule 9510 (Indirect Source Review) is to reduce the growth in both NO<sub>x</sub> and PM<sub>10</sub> emissions associated with development and transportation projects from mobile and area sources associated with construction and operation of development projects. The rule encourages clean air design elements to be incorporated into the development project. In case the proposed project clean air design elements are insufficient to meet the targeted emission reductions, the rule requires developers to pay a fee used to fund projects to achieve off-site emissions reductions.

The proposed Project is subject to District Rule 9510 because it will receive a project-level discretionary approval from a public agency and will equal or exceed 2,000 square feet of commercial space. When subject to the rule, an Air Impact Assessment (AIA) application is required no later than applying for project-level

approval from a public agency. In this case, if not already done, please inform the project proponent to immediately submit an AIA application to the District to comply with District Rule 9510.

An AIA application is required and the District recommends that demonstration of compliance with District Rule 9510, before issuance of the first building permit, be made a condition of Project approval.

Information about how to comply with District Rule 9510 can be found online at:  
<http://www.valleyair.org/ISR/ISRHome.htm>.

The AIA application form can be found online at:  
<http://www.valleyair.org/ISR/ISRFormsAndApplications.htm>

**2c) District Regulation VIII (Fugitive PM10 Prohibitions)**

The Project will be subject to Regulation VIII. The project proponent is required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to construction. Information on how to comply with Regulation VIII can be found online at:  
[http://www.valleyair.org/busind/comply/PM10/compliance\\_PM10.htm](http://www.valleyair.org/busind/comply/PM10/compliance_PM10.htm).

**2d) District Rule 9410 (Employer Based Trip Reduction)**

The proposed Project may be subject to District Rule 9410 (Employer Based Trip Reduction) if the Project would result in employment of 100 or more “eligible” employees. District Rule 9410 requires employers with 100 or more “eligible” employees at a worksite to establish an Employer Trip Reduction Implementation Plan (eTRIP) that encourages employees to reduce single-occupancy vehicle trips, thus reducing pollutant emissions associated with work commutes. Under an eTRIP plan, employers have the flexibility to select the options that work best for their worksites and their employees.

Information about how District Rule 9410 can be found online at:  
[www.valleyair.org/tripreduction.htm](http://www.valleyair.org/tripreduction.htm).

For additional information, you can contact the District by phone at 559-230-6000 or by e-mail at [etrip@valleyair.org](mailto:etrip@valleyair.org)

## **2e) Other District Rules and Regulations**

The Project may also be subject to the following District rules: Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants).

The list of rules above is neither exhaustive nor exclusive. Current District rules can be found online at: [www.valleyair.org/rules/1ruleslist.htm](http://www.valleyair.org/rules/1ruleslist.htm). To identify other District rules or regulations that apply to this Project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (559) 230-5888.

## **3) District Comment Letter**

The District recommends that a copy of the District's comments be provided to the Project proponent.

If you have any questions or require further information, please contact Georgia Stewart by e-mail at [Georgia.Stewart@valleyair.org](mailto:Georgia.Stewart@valleyair.org) or by phone at (559) 230-5937.

Sincerely,



Arnaud Marjollet  
Director of Permit Services

AM: gs



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Central Region  
1234 East Shaw Avenue  
Fresno, California 93710  
(559) 243-4005  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



December 02, 2020

Governor's Office of Planning & Research

**Dec 02 2020**

Hector Guerra  
Chief Environmental Planner  
Tulare County Resource Management Agency  
5961 South Mooney Blvd  
Visalia, California 93277

## **STATE CLEARINGHOUSE**

**Subject: Three Rivers-Hampton Inn & Suites Ineffable Hospitality, Inc.  
Notice of Preparation (NOP)  
SCH No.: 2020110016**

Dear Mr. Guerra:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an NOP from Tulare County Resource Management Agency for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

### **CDFW ROLE**

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

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<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Hector Guerra, Chief Environmental Planner  
Tulare County Resource Management Agency  
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CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code may be required.

## **PROJECT DESCRIPTION SUMMARY**

**Proponent:** Ineffable Hospitality, Inc.; Sukhjinder and Kulvinder Sanghera

**Objective:** The objective of the Project is to develop a three-story hotel and associated site improvements. Primary Project activities include:

- A hotel with 105 guest rooms, manager's office, storage room, breakfast area, fitness center, outdoor swimming pool, and laundry rooms.
- 108 parking stalls
- Septic tank with filter and dripline system
- New domestic well
- Storm drainage

**Location:** ±4.57-acre Project Area is located adjacent to the community of Three Rivers east of State Highway 198 (Sierra Drive), approximately 1,000 feet north of the Old Three Rivers Road intersection, and immediately south of the Comfort Inn and Suites. APN No.: 068-080-010

**Timeframe:** Unspecified

## **COMMENTS AND RECOMMENDATIONS**

CDFW offers the comments and recommendations below to assist Tulare County Resource Management Agency in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

The NOP describes the surrounding area of the Project as commercial, scattered residential, and undeveloped / vacant land. Project area is described as annual grassland, oak woodland, and ruderal/roadside; the site is approximately 400-feet from the Kaweah River. These resources may need to be evaluated and addressed prior to



Hector Guerra, Chief Environmental Planner  
 Tulare County Resource Management Agency  
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any approvals that would allow ground-disturbing activities or land use changes. The NOP indicates there are potentially significant impacts unless mitigation measures are taken but the measures listed are general and non-specific and/or may be inadequate to reduce impacts to less than significant. CDFW is concerned regarding potential impacts to special-status species including, but not limited to: the State endangered foothill yellow-legged frog (*Rana boylei*), the Federal and State endangered, and California Rare Plant Ranked (CRPR) 1B.2 Kaweah brodiaea (*Brodiaea insignis*); the Federally threatened, State endangered, and CRPR 1B.2 Springville clarkia (*Clarkia springvillensis*), and the State species of special concern burrowing owl (*Athene cunicularia*). In order to adequately assess any potential impacts to biological resources, focused biological surveys should be conducted by a qualified wildlife biologist/botanist during the appropriate survey period(s) in order to determine whether any special-status species and/or suitable habitat features may be present within the Project area. Properly conducted biological surveys, and the information assembled from them, are essential to identify any mitigation, minimization, and avoidance measures and/or the need for additional or protocol-level surveys, especially in the areas not in irrigated agriculture, and to identify any Project-related impacts under CESA and other species of concern.

#### **I. Environmental Setting and Related Impact**

**Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or United States Fish and Wildlife Service (USFWS)?**

#### **COMMENT 1: Foothill Yellow-Legged Frog (FYLF)**

**Issue:** FYLF are primarily stream dwelling and require shallow, flowing water in streams and rivers with at least some cobble-sized substrate, and have been documented to utilize upland habitat as far as 40 meters from a stream (Borque 2008, Thomson et al. 2016). Based on historical records, FYLF is known to have been present in the Kaweah River near the vicinity of the Project site (CDFW 2020). The Project development envelope is approximately 400 feet from the Kaweah River, where it is possible that FYLF could occupy the upland area of the site. Therefore, CDFW advises that avoidance and minimization measures are necessary to reduce impacts to FYLF to a level that is less than significant.

**Specific impact:** Without appropriate avoidance and minimization measures for FYLF potentially significant impacts associated with the Project's activities include burrow collapse, inadvertent entrapment, degradation of water quality, reduced reproductive success, reduction in health and vigor of eggs, larvae and/or young, and direct mortality of individuals.

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**Evidence impact would be significant:** FYLF populations throughout the State have experienced ongoing and drastic declines and many have been extirpated; historically, FYLF occurred in mountain streams from the San Gabriel River in Los Angeles County to southern Oregon west of the Sierra-Cascade crest (Thomson et al. 2016). Habitat loss from growth of cities and suburbs, invasion of nonnative plants, impoundments, water diversions, stream maintenance for flood control, degraded water quality, and introduced predators, such as bullfrogs are the primary threats to FYLF (Thomson et al. 2016). Project activities have the potential to significantly impact FYLF.

#### **Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to FYLF, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

#### **Recommended Mitigation Measure 1: FYLF Surveys**

CDFW recommends that a qualified wildlife biologist conduct protocol-level surveys for FYLF in areas where potential habitat exists. CDFW advises that visual encounter surveys follow the methodology described in the CDFW “Considerations for Conserving the Foothill Yellow-Legged Frog” (CDFW 2018b) to determine if FYLF are within or adjacent to the Project area. Please note that dip-netting would constitute take as defined by Fish and Game Code section 86, so it is recommended this survey technique be avoided. In addition, CDFW advises surveyors adhere to Appendix E “The Declining Amphibian Task Force Fieldwork Code of Practice,” of the CDFW “Considerations for Conserving the Foothill Yellow-Legged Frog” (CDFW 2018b).

#### **Recommended Mitigation Measure 2: FYLF Avoidance**

If any FYLF are found during pre-construction surveys or at any time during construction, consultation with CDFW is warranted to determine if the Project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when FYLF are most likely to be moving through upland areas (October 15 and May 1). When ground-disturbing activities must take place between October 15 and May 1, CDFW recommends a qualified biologist monitor construction activity daily for FYLF.

#### **Recommended Mitigation Measure 3: FYLF Take Authorization**

If through surveys it is determined that FYLF are occupying or have the potential to occupy the Project site and take cannot be avoided, take authorization would be warranted prior to initiating ground-disturbing activities. Take authorization would occur through issuance of an Incidental Take Permit (ITP) by CDFW, pursuant to Fish and Game Code section 2081(b).

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Tulare County Resource Management Agency  
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## **COMMENT 2: Special-Status Plants**

**Issue:** Several special-status plants are known to occur near the Project area, including Kaweah brodiaea (*Brodiaea insignis*), Springville clarkia (*Clarkia springvillensis*), and other special-status plant species (CDFW 2020). Review of aerial imagery indicates that some of the Project site is bordered and includes valley and foothill grassland habitat which is known to support these species (CNPS 2020).

**Specific impact:** Without appropriate avoidance and minimization measures potential impacts to special-status plant species include inability to reproduce and direct mortality. Unauthorized take of species listed as threatened, endangered, or rare pursuant to CESA or the Native Plant Protection Act is a violation of Fish and Game Code.

**Evidence impact would be significant:** The listed plant species above are threatened with habitat loss and habitat fragmentation resulting from development, vehicle and foot traffic, and introduction of non-native plant species (CNPS 2020), all of which may be unintended impacts of the Project. Therefore, impacts of the Project have the potential to significantly impact populations of the species mentioned above.

### **Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to special-status plants associated with the Project, CDFW recommends conducting the following evaluation of the Project area and including the following mitigation measures as conditions of Project approval in the Project's EIR.

#### **Recommended Mitigation Measure 4: Special-Status Plant Habitat Assessment**

CDFW recommends that a qualified biologist conduct a habitat assessment well in advance of project implementation, to determine if the Project area or its vicinity contains suitable habitat for special-status plant species.

#### **Recommended Mitigation Measure 5: Special-Status Plant Focused Surveys**

CDFW recommends that the Project area be surveyed for special-status plants by a qualified botanist following the "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (CDFW 2018). This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary.

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### **Recommended Mitigation Measure 6: Special-Status Plant Avoidance**

CDFW recommends special-status plant species be avoided whenever possible by delineation and observing a no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

### **Recommended Mitigation Measure 7: Special-Status Plant Take Authorization**

If a State-listed plant species is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. However, if take cannot be avoided, take authorization would need to occur through issuance of an ITP pursuant to Fish and Game Code section 2081(b), and to comply with Fish and Game Code section 1900 and California Code of Regulations, title 14, section 786.9, subdivision (b).

### **COMMENT 3: Burrowing Owl (BUOW)**

**Issue:** The Project location is within known BUOW range and the species occurs throughout the County of Tulare; BUOW may occur near and/or on the Project site (CDFW 2020). BUOW inhabit open grassland or adjacent canal banks, rights-of-ways (ROWs), vacant lots, etc., containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. The NOP indicates that there are California ground squirrel burrows present on the Project site, those have the potential to be used by BUOW.

**Specific impact:** Potentially significant direct impacts associated with subsequent activities include burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

**Evidence impact is potentially significant:** BUOW rely on burrow habitat year-round for their survival and reproduction. Habitat loss and degradation are considered the greatest threats to BUOW in California's Central Valley (Gervais et al. 2008). The Project site is bordered by some of the only remaining undeveloped land in the vicinity, which is otherwise intensively managed for agriculture. Therefore, subsequent ground-disturbing activities associated with the Project have the potential to significantly impact local BUOW populations. In addition, and as described in CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), excluding and/or evicting BUOW from their burrows is considered a potentially significant impact under CEQA.

Hector Guerra, Chief Environmental Planner  
 Tulare County Resource Management Agency  
 December 02, 2020  
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### **Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to BUOW, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

### **Recommended Mitigation Measure 8: BUOW Surveys**

CDFW recommends that a qualified biologist assess if suitable BUOW habitat features are present within or adjacent to the Project site (e.g., burrows). If suitable habitat features are present, CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortium's "Burrowing Owl Survey Protocol and Mitigation Guidelines" (CBOC 1993) and CDFW's Staff Report on Burrowing Owl Mitigation" (CDFG 2012). Specifically, CBOC and CDFW's Staff Report suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (April 15 to July 15), when BUOW are most detectable.

### **Recommended Mitigation Measure 9: BUOW Avoidance**

CDFW recommends no-disturbance buffers, as outlined in the "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), be implemented prior to and during any ground-disturbing activities. Specifically, CDFW's Staff Report recommends that impacts to occupied burrows be avoided in accordance with the following table unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

\* meters (m)

### **Recommended Mitigation Measure 10: BUOW Passive Relocation and Mitigation**

If BUOW are found within these recommended buffers and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), exclusion is not a take avoidance, minimization, or mitigation method and is considered a potentially significant impact under CEQA. However, if necessary, CDFW recommends that burrow exclusion be conducted by qualified biologists and

Hector Guerra, Chief Environmental Planner  
Tulare County Resource Management Agency  
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only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of 1 burrow collapsed to 1 artificial burrow constructed (1:1) as mitigation for the potentially significant impact of evicting BUOW. BUOW may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance, at a rate that is sufficient to detect BUOW if they return.

## **II. Editorial Comments and/or Suggestions**

**Federally Listed Species:** CDFW recommends consulting with the USFWS on potential impacts to federally listed species including, but not limited to, the Springville clarkia (*Clarkia springvillensis*). Take under the Federal Endangered Species Act (FESA) is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of any ground-disturbing activities.

## **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a data base which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov). The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

## **FILING FEES**

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

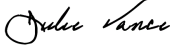
Hector Guerra, Chief Environmental Planner  
Tulare County Resource Management Agency  
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## CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist Tulare County Resource Management Agency in identifying and mitigating Project impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). Please see the enclosed Mitigation Monitoring and Reporting Program (MMRP) table which corresponds with recommended mitigation measures in this comment letter. Questions regarding this letter or further coordination should be directed to Aimee Braddock, Environmental Scientist, at (559) 243-4014, extension 243, or [aimee.braddock@wildlife.ca.gov](mailto:aimee.braddock@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
FA83F09FE08945A...

Julie A. Vance  
Regional Manager

Attachment

ec: Office of Planning and Research, State Clearinghouse, Sacramento

Hector Guerra, Chief Environmental Planner  
Tulare County Resource Management Agency  
December 02, 2020  
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## REFERENCES

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**Attachment 1**

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM  
(MMRP)**

**PROJECT: Three Rivers-Hampton Inn & Suites Ineffable Hospitality, Inc.**

**SCH No.: 2020110016**

<b>RECOMMENDED MITIGATION MEASURE</b>	<b>STATUS/DATE/INITIALS</b>
<i>Before Disturbing Soil or Vegetation</i>	
Mitigation Measure 1: FYLF Surveys	
Mitigation Measure 3: FYLF Take Authorization	
Mitigation Measure 4: Special-Status Plant Habitat Assessment	
Mitigation Measure 5: Special-Status Plant Focused Surveys	
Mitigation Measure 7: Special-Status Plant Take Authorization	
Mitigation Measure 8: BUOW Surveys	
Mitigation Measure 10: BUOW Passive Relocation and Mitigation	
<i>During Construction</i>	
Mitigation Measure 2: FYLF Avoidance	
Mitigation Measure 6: Special-Status Plant Avoidance	
Mitigation Measure 9: BUOW Avoidance	

**DEPARTMENT OF TRANSPORTATION****DISTRICT 6 OFFICE**

1352 WEST OLIVE AVENUE  
P.O. BOX 12616  
FRESNO, CA 93778-2616  
PHONE (559) 488-7396  
FAX (559) 488-4088  
TTY 711  
www.dot.ca.gov



Making Conservation  
a California Way of Life

January 8, 2020

06-TUL-198-37.41  
CEQ 20-004  
IS, TIS, DEIR  
HAMPTON INN & SUITES  
THREE RIVERS, CA  
SCH # NOT ASSIGNED

**SENT VIA EMAIL**

Mr. Hector Guerra, Chief Environmental Planner  
Tulare County Resource Management Agency  
Economic Development and Planning Branch  
5961 South Mooney Boulevard  
Visalia, CA 93277-9394

Dear Mr. Guerra:

Thank you for the opportunity to review the Initial Study (IS) and Traffic Impact Study (TIS) for the Draft Environmental Impact Report (DEIR) proposing the Hampton Inn and Suites (Project). The Project site is located on the southeast side of State Route (SR) 198 (Sierra Drive) approximately 1,100 feet north of the Old Three Rivers Road/SR 198 intersection and directly south of the Comfort Inn and Suites within community of Three Rivers, California.

The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development -Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

Caltrans provides the *following comments* consistent with the State's smart mobility goals that support a vibrant economy and sustainable communities:

1. Access to the Project site will be via a driveway and a 30-foot wide access road easement. The Project site is setback approximately 250 feet from SR 198. There are 2 vacant parcels between SR 198 and the Project site.

2. Only one (1) driveway access to SR 198 will be allowed for this project. Caltrans in its effort to minimize traffic conflicts attempts to limit the number of access points to the main line of State Routes.
3. Caltrans requires the driveway, considered to be in a rural setting, to meet Highway Design Manual (HDM) Topic 205.4 and 405.1(2)(c) for corner sight distance requirements.
4. Caltrans has not located the encroachment permit that authorized the existing driveway access to the State right of way that the Project will use. The owner needs to provide a copy of the encroachment permit or submit an application requesting approval for driveway access. Any new access will need to be approved by this agency. Furthermore, a new encroachment permit is needed if ownership has changed. Encroachment permits are not a property right and do not transfer with the property to the new owner. Only the legal property owner or his/her authorized agent can pursue obtaining an encroachment permit. Please call the Caltrans Encroachment Permit Office District 6: 1352 W. Olive, Fresno, CA 93778, at (559) 488-4058 to locate the existing encroachment permit or file a new encroachment permit authorizing access for the new and existing parcels to the State Highway System.
5. Prior to an encroachment permit application submittal, the project proponent is required to schedule a "Pre-Submittal" meeting with District 6 Encroachment Permit Office. **Please contact District 6 Encroachment Permit Office at (559) 488-4058 to schedule this meeting. Please review the permit application checklist at:**  
<https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmId=TR0402&distPath=MAOTO&brapath=PERM>
6. Typically, existing peak hour counts are conducted for the preparation of a TIS, although due to the COVID-19 pandemic, previous 2018 traffic counts with a growth rate were utilized to analyze existing traffic conditions adjacent to the study area.
7. For the Project analysis, a seasonal adjustment factor was also applied due to the significantly larger traffic volumes expected during the summer months due to travelers visiting the Sequoia National Park.
8. The vehicle trips generated by the Project were derived from the Hotel (310) Land Use code in the Institute of Transportation Engineers (ITE) Trip Generation Manual.

9. A total of 76 trips were identified for the Saturday midday peak hour and 59 trips for the Sunday PM peak hour.
10. The results of the "Cumulative Year 2042 Plus Project" indicated no significant traffic impacts at the unsignalized intersections of SR 198 & the Project driveway and SR 198 & Old 3 Rivers Road from the Project.
11. Caltrans concurs with the conclusion and no further analysis is required.
12. Alternative transportation policies should be applied to the development. An assessment of multi-modal facilities should be conducted to develop an integrated multi-modal transportation system to serve and help alleviate traffic congestion caused by the project and related development in this area of the City. The assessment should include the following:
  - a. Pedestrian walkways should link this proposal to an internal project area walkway, transit facilities, as well as other walkways in the surrounding area.
  - b. The Project might also consider coordinating connections to local and regional bicycle pathways to further encourage the use of bicycles for commuter and recreational purposes.
  - c. If transit is not available within ¼-mile of the site, transit should be extended to provide services to what will be a high activity center.
13. Caltrans recommends the Project implement "smart growth" principles regarding parking solutions, providing alternative transportation choices to residents and employees. Alternative transportation choices may include but are not limited to parking for carpools/vanpools, car-share and/or ride-share programs.
14. Active Transportation Plans and Smart Growth efforts support the state's 2050 Climate goals. Caltrans supports reducing Vehicle Miles Traveled (VMT) and Green House Gas (GHG) emissions in ways that increase the likelihood people will use and benefit from a multimodal transportation network.
15. Based on Caltrans VMT-Focused Transportation Impact Study Guide, dated May 20, 2020 and effective as of July 1, 2020, Caltrans seeks to reduce single occupancy vehicle trips, provide a safe transportation system, reduce per capita Vehicle Miles Traveled (VMT), increase accessibility to destinations via cycling, walking, carpooling, transit and reduce greenhouse gas (GHG) emissions. Caltrans recommends that the project proponent continue to

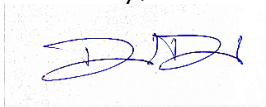
Mr. Hector Guerra – Hampton Inn, Three Rivers  
January 8, 2021  
Page 4

work with the County of Tulare to further implement improvements to reduce vehicles miles traveled and offer a variety of transportation modes for its employees.

16. Caltrans recommends the project provide charging stations for electric vehicles as part of the statewide efforts to reduce greenhouse gas emissions.

If you have any other questions, please call me at (559) 488-7396.

Sincerely,



DAVID DEEL  
Associate Transportation Planner  
Transportation Planning – South

**From:** [Soapy Mulholland](#)  
**To:** [Jessica R Willis](#)  
**Subject:** New Email Re: Proposed Hampton Inn - Notice of Preparation & Initial Study  
**Date:** Monday, November 2, 2020 3:23:12 PM

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Please reach me at [sopacmcc@gmail.com](mailto:sopacmcc@gmail.com) from January 1st, 2020, or contact my cell at 559-906-6518. After January 1st, I will no longer be an employee of Sequoia Riverlands Trust, The new executive director, Cam Tredennick, can be reached at [cam@sequoiariverlands.org](mailto:cam@sequoiariverlands.org).

Thank you,  
Soapy Mulholland

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--

**Soapy Mulholland**

Sopac & Associates LLC  
33493 Globe Dr  
Springville, CA 93265  
(559) 906-6518

November 30, 2020

To: Aaron Bock  
Assistant Director Economic Planning  
5961 South Mooney Boulevard  
Visalia, CA 93277

**Re: Proposed Hampton Hotel Development on Parcel 068-080-010 in Three Rivers**

I am writing to express my concerns about the proposed Hampton Hotel development, gas station, grocery store, and restaurant.

One of my concerns is the **amount of water** being used for this hotel when California is in a drought. I am also worried about protecting the Kaweah River from wastewater as the proposed leach field is located above the river.

In the DEIR, it was stated:

From the advanced treatment system and associated equipment, the wastewater is disinfected using an ultraviolet (UV) treatment system, by Sanitron, and is discharged to a subsurface drip field. **The systems cumulative calculated total average monthly influent rate is 17,145 gpd.**

What guarantee is there that nitrogen from the wastewater will not seep into our water table?

**Traffic impact** is another concern. I read that the traffic analysis was done on Saturday, June 5, 2020. This must be a mistake, as June 5<sup>th</sup> was a Friday. Sequoia National Park had been closed due to the Covid-19 pandemic and had just opened on Thursday, June 4, 2020. This traffic analysis does not reflect the large volume that is usually present on a Saturday in June, when there is not a pandemic.

**Fire** is another concern. This past summer, many Three Rivers residents were under a mandatory evacuation, due to the SQF Fire Complex. Having a hotel with hundred of guests in it would add to the highway congestion in the event of another fire.

Shivon Lavelly  
41050 Blossom Dr.  
Three Rivers, CA 93271  
[mike.shivon@sbcglobal.net](mailto:mike.shivon@sbcglobal.net)

**From:** [Aaron R Bock](#)  
**To:** [Hector Guerra](#); [LAVELY SHIVON](#)  
**Cc:** [Jessica R Willis](#)  
**Subject:** Re: Proposed Hampton Inn Hotel Development  
**Date:** Tuesday, December 1, 2020 7:22:39 AM

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Thank you Shivon for commenting early to the Initial Study, your comments will be put in the record and responded to in the Draft EIR, we will let you know when the Draft EIR is released so you will have another opportunity to comment on this project.

Aaron R Bock, MCRP, JD, LEED AP  
Assistant RMA Director - Economic Development & Planning  
5961 South Mooney Blvd.  
Visalia, CA 93277  
559-624-7050 - Direct  
559-730-2653 - Fax

>>> SHIVON LAVELY <mike.shivon@sbcglobal.net> 11/30/2020 11:20 PM >>>

To: Aaron Bock  
Assistant Director Economic  
Planning  
5961 South Mooney  
Boulevard  
Visalia, CA 93277

Re: Proposed Hampton Inn Hotel Development on Parcel 068-080-010 in Three Rivers

I am writing to express my concerns about the proposed Hampton Hotel development, gas station, grocery store, and restaurant. One of my concerns is the amount of water being used for this hotel when California is in a drought. I am also worried about protecting the Kaweah River from wastewater as the proposed leach field is located above the river.

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What guarantee is there that nitrogen from the wastewater will not seep into our water table?

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Fire is another concern. This past summer, many Three Rivers residents were under a mandatory evacuation, due to the SQF Fire Complex. Having a hotel with hundred of guests in it would add to the highway congestion in the event of another fire.

Thank you,  
Shivon Lavelly  
41050 Blossom Dr.  
Three Rivers, CA 93271  
mike.shivon@sbcglobal.net



## Jessica R Willis

---

**From:** Aaron R Bock  
**Sent:** Wednesday, December 2, 2020 7:08 AM  
**To:** Hector Guerra; Jessica R Willis; oaknhill@wildblue.net  
**Subject:** Fwd: Public comment on Hampton Inn plan in Three River, CA

Jenny,

Thank you for your comments, they will be responded to in the DEIR, and you will be able to see the response in that document. Although I don't see that you are asking to be put on the list for DEIR review, we will put you on the list none-the-less, if you are not already. Thanks again for your comments.

Thanks,

Aaron R Bock, MCRP, JD, LEED AP  
Assistant RMA Director - Economic Development & Planning  
5961 South Mooney Blvd.  
Visalia, CA 93277  
559-624-7050 - Direct  
559-730-2653 - Fax

>>> Jenny Mats <oaknhill@wildblue.net> 12/1/2020 8:16 PM >>>

This is a comment regarding the 105 room, three-story Hampton Inn being proposed for Three Rivers, CA on parcel 068-080-010. A real concern is the amount of fresh water that will be required to run such a facility in an area where fresh drinking water is already compromised and the continuing drought situation that this community faces is not going away but is a part of life in these foothill communities.

Not only is there a finite amount of fresh water but also the amount of waste water that such a facility would produce especially with its close proximity to the river is of great concern to maintain water quality both in the river and ground water table. Maintaining high level of water quality is not only important to the environment but to all community members of Three Rivers.

This community has been fortunate to not have huge fires in the past but as demonstrated by the long burning and community threatened SQF Complex in the 2020 fire season it is now likely to be a common occurrence. How can such a large facility provide any additional fire protection to a community that is already strapped by limited fire protection facilities? Is there any mitigation to require the new owner operators to increase revenue to the Three Rivers, CA Tulare co fire station or to the Cal Fire station located in the community to make them more able to deal with the additional fire protection of such a large facility which will also add to the complexity if evacuations such as those that were required of Three River community members in 2020?

This is a small community not equipped to deal with the water impacts or of the additional strain on both emergency services. Such a facility would benefit being in an incorporated town where waste water and available fresh water infrastructure is already in place, as well as emergency services. Not in a small unincorporated community with no resources to mitigate such impacts to the community.

Thank you,  
Jenny Matsumoto  
Three Rivers, CA



December 1, 2020

TO: Hector Guerra, Chief Environmental Planner  
Tulare County Resource Management Agency  
via hguerra@co.tulare.ca.us

FR: Greg and Laurie Schwaller  
43857 South Fork Drive, Three Rivers, CA 93271  
via lschwaller1@wildblue.net

RE: Initial Study for DEIR Hampton Inn and Suites Three Rivers Project (CEQ 20-004),  
Comments from Greg and Laurie Schwaller, Three Rivers

Dear Hector:

Here are our comments re the above IS/DEIR. Thank you for ensuring that the DEIR will address them. Please let us know by return email that you have received these comments timely.

\* \* \* \* \*

p. 2 -- Initial Study Checklist: What is the hotel ownership/development/management experience of Ineffable Hospitality, Inc./Haren-Deep Singh Sanghera and owners Sukhjinder and Kulvinder Sanghera? Construction of the proposed hotel/gas station/market/restaurant project would have a very large and lasting impact on Three Rivers, probably for many decades. **The IS/DEIR should fully describe the history of the Applicant, Ineffable Hospitality, Inc., and the owners in the planning, construction, and management of such projects and their impact on their surrounding communities.**

p.2 Description of Project (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation): The description mentions only the hotel, its driveway and parking lot, its laundry and outdoor swimming pool, and its septic system, new domestic well, and on-site storm drainage (with biofiltration option). It anticipates 12 employees, 70 customers, 1 delivery, and 1 shipment per day, for an average total of 825 daily vehicle trips.

**The description does not mention the adjoining vacant lot west of the proposed hotel parcel and the service station, market, and restaurant that the owner of the lots plans to develop on that parcel, requiring the installation of a single wastewater system for the two parcels..** On page 544, details are provided "for the proposed Hampton Inn Hotel and future service station,

market, and subway [sic], or equivalent, onsite wastewater treatment system. **The project is comprised of two undeveloped parcels (APN# -68-080-010 [2.81 acres] and 068-100-010 [1.58 acres]) that cumulatively comprise 4.39 acres and are located at 40758 Sierra Drive in three Rivers, California.** "These properties are owned by Satwant Sanghera . The proposed development of the aforementioned parcels has site limitations (e.g. setbacks to wells, available space) that require the installation of a single wastewater system for the two parcels." The proposed hotel is to be developed on APN #068-080-010, while the "future Commercial Development on frontage lot (APN #068-100-010) includes a service station with 3 pump islands and a market, and Subway restaurant, or equivalent." "The proposed facilities will be located at the site shown in Appendix B." The 3R News online also reported that **"The two parcels . . . are where the 105 room three story Hampton Inn and secondary commercial development (3 pump island gas station, market, Subway restaurant or equivalent) are slated to be built."**

**The current IS/DEIR must be completely revised in order to describe the whole action involved, as defined above.** Once the revision is complete, covering the proposed plans and actions for both parcels, the revised IS/DEIR must be reissued for public comment.

p. 7 -- NOTE: Figure 4 - Overall Site Plan appears to indicate some fixtures or features on the gas station/market/restaurant parcel in the first phase related to the development of the hotel parcel, but it **does not show any of the rest of the development (apparently in phase 2) for the gas station parcel.** Most of the labels on the Site Plan cannot be read on the e-version of the IS/DEIR, a hindrance to the viewer's understanding of the plan, which should be corrected. **The Overall Site Plan must be revised in order to depict all of the planned facilities.**

p. 11 -- Environmental Factors Potentially Affected: **The checklist must be revised by adding an X to Aesthetics, to Noise, and to Land Use/Planning,** as these factors will certainly be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact." Evaluation answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

p. 13 --- Aesthetics: **The ratings of "Less than Significant"** for "substantial adverse effect on a scenic vista," "substantially degrade the existing visual character or quality of public views," "conflict with regulations governing scenic quality," and "create a new source of substantial light or glare which would adversely affect day or nighttime views in the area" **should be changed to "Significant Impact" or, at best, "Less than Significant Impact with Mitigation."**

p. 14 -- California Scenic Highway Program: The proposed project is immediately adjacent to SR 198, which is an **Eligible State Scenic Highway.** The natural scenic beauty of this highway

should be protected and enhanced through special conservation treatment. In 2006, the Three Rivers Village Foundation, with the support of CalTrans, made a major effort to get 16 miles of SR 198 designated as State Scenic Highway, to enhance and protect regional identity, promote local tourism, and secure eligibility for grant funding for maintenance. At the April 25 Supervisors' meeting, as a result of a presentation by the Village Foundation, the Supervisors voted unanimously in favor of pursuing the Scenic Highway designation, but it was not obtained. The Scenic Highways Element of the Tulare County General Plan was adopted by the Board of Supervisors in 1975. In 1981, the Foothill Growth Management Plan also recognized that scenic highways (and byways) should be designated and protected from obtrusive and inappropriate development. The Tulare County **General Plan 2030 Update SL-2.1 Designated Scenic Routes and Highways** "is intended to protect views of natural and working landscapes along the County's highways" and "encourages citizen and private sector initiatives to promote and protect such areas." **The proposed hotel/gas station/market/restaurant project would significantly impact the natural scenic beauty of SR 198 in Three Rivers. This impact and how it could be mitigated must be addressed in the IS/DEIR.**

p. 14 -- The County's General Plan 2030 Update: Chapter 7 - Scenic Landscapes, LU-7.14 Contextual and Compatible Design: **The General Plan states** that "the County shall ensure that new development respects Tulare County's heritage by requiring that development respond to its context, be compatible with the traditions and character of each community, and develop in an orderly fashion which is compatible with the scale of surrounding structures." Nowhere in the IS/DEIR is there any depiction of what the proposed hotel/gas station/market/restaurant project will look like in terms of its scale, architecture, details, colors, landscaping, signage, lighting, etc. and its relationship to the highway, the surrounding landscape, and the scenic viewshed.

**The IS/DEIR must be revised to fully describe and illustrate how the proposed project will respond to its rural foothill village context** with scenic mountain views and a river across the road; **be compatible with the rural small-town community of Three Rivers, with its traditions and character** of ranching, specialty agriculture, historic community events, artists and artisans, close ties to the nearby National Parks and other nearby public lands, including Lake Kaweah, that enhance its quality of life and bring it many visitors, and hospitality to the hundreds of thousands of tourists from all over the world who experience the community as the gateway to Sequoia National Park, in addition to the many visitors from the local area who come to Three Rivers to enjoy its scenic beauty, its rivers, its dark skies, its unique events and businesses and its small-town charm; and **its compatibility with the scale of surrounding structures.**

Unfortunately, the Comfort Inn, the structure immediately adjacent to the proposed project is one of the largest structures in all of Three Rivers. None of the other structures visible from the project area is on anywhere near that scale. Putting an even larger project right next to the

Comfort Inn, parking lot to parking lot, greatly magnifies the impact of the inappropriate scale of the proposed project and blots out a lot more of the scenic view. It increases the incompatibility of the development with the rural, small-scale, natural context and character of Three Rivers.

pp. 14-15 -- Three Rivers Community Plan: **Goal 1: Compatible Development: "to maintain the Rural Gateway Character of Three Rivers through land uses and new development that are compatible and consistent with the existing development in Three Rivers, preserve the unique visual and community character and natural environment and create a distinct sense of place.** Clearly, a big-box, 3-storey chain hotel is incompatible with the great majority of the existing development in Three Rivers and does nothing to preserve the unique visual and community character and natural environment and create a distinct sense of place. Looking online at photos of dozens of Hampton Inns across the country, one sees an almost complete lack of effort to preserve unique visual and community character and natural environment and create a distinct sense of place. However, there are a few examples of Hampton Inns which have made at least some effort to remedy these failures, viz.: Flagstaff, Manchester, Lexington, Miami, Richmond, Jekyll Island, Moab, Gettysburg, and Hudson. **The IS/DEIR must be revised to specifically describe and illustrate the measures that the proposed hotel/gas station/market/restaurant project will take in order to be compatible and consistent with the majority of existing development in Three Rivers, preserve the town's unique visual and community character and natural environment , and help to create its distinct sense of place.**

p. 15 -- 1.2.19 FGMP-6.4 Development Within Scenic Corridors: "The County shall require that projects located within a scenic corridor be designed in a manner which does not detract from the visual amenities of that thoroughfare."

p. 15 -- 1.3.4 Setbacks: "Require adequate setbacks for residential, commercial, and industrial uses, including side and rear yards, landscaping and screening, as determined by the County Project Review Committee." The IS/DEIR shows no setbacks, landscaping, or screening for the proposed hotel/gas station/market/restaurant project. **The IS/DEIR must be revised to specifically describe and illustrate the setbacks, landscaping, and screening that will be provided for the proposed project. Landscaping and screening should be primarily drought-tolerant plants, preferably native plants wherever possible, and landscaping should include bioswales to reduce and cleanse run-off from paved areas.**

p. 15 -- 1.3.5 Signage Standards: "Require standards including regulations for size, height, scale, color, lighting, and material. Incorporate Caltrans signage standards with community standards." "Balance reasonable business considerations with community design standards that are feasible to direct persons within appropriate sight distances that will determine, size, height, and bulk." "Prohibit the use of exterior neon or blinking signs and source lit signs."

There is nothing in the current IS/DEIR showing the proposed signage for the proposed hotel/gas station/market/restaurant project. **The IS/DEIR must be revised to specifically describe and illustrate the signage that will be provided for the proposed project, including its size, height, scale, color, lighting, and material.**

p. 15 -- 1.3.6 Lighting Standards: "To minimize light pollution, glare, and light trespass and to protect the dark skies in Three Rivers," light fixtures to be fully shielded; externally illuminated signs, displays, and building identification shall use top mounted light fixtures which shine light downward and which are fully shielded; require motion sensors for security purposes, rather than intrusive security lights; lights to be turned off when not in use or when the business is not open; commercial lights during nighttime restricted to indirect, non-glaring lighting; International Dark Sky Association Model Ordinance lighting standards and guidelines to minimize light pollution, glare, and light trespass. **The IS/DEIR must be revised to specify how the proposed lighting for the proposed hotel/gas station/market/restaurant project will minimize light pollution, glare, and light trespass, and protect the dark skies of Three Rivers.**

p. 15 -- Vegetation Standards: "To establish vegetation standards for residential and commercial development," encourage the use of native vegetation in landscaping, encourage the use of drought-resistant vegetation, minimize the disturbance of existing vegetation, and prohibit the use of invasive plant species. **The IS/DEIR must be revised to specifically describe and illustrate the vegetation that will be provided for the proposed hotel/gas station/market/restaurant project. Vegetation should be primarily drought-tolerant plants, preferably native plants wherever possible, and should not include any invasive species. Existing vegetation, especially native oaks, including their drip lines, must not be disturbed.**

pp. 15-16 -- a) Less Than Significant Impact: "For purposes of this proposed Project, a scenic vista is defined as an area that is designated, signed, and accessible to the public for the purpose of viewing and sightseeing." What is the reason and what is the justification for this completely arbitrary and unprecedented definition of a scenic vista? Three Rivers has long been recognized by the County and by the touring public for its high-quality scenic vistas of foothills, mountains, oak and sycamore woodlands, rivers, and its picturesque, historic rural community. I have never seen a sign in Three Rivers designating an area as a scenic vista. It is all scenic vistas, and that is a key factor in its attractiveness and its economy. **The IS/DEIR must be revised to remove the preposterous definition of a scenic vista "as an area that is designated, signed, and accessible to the public for the purpose of viewing and sightseeing for purposes of this proposed Project."** You cannot logically, reasonably, or justifiably declare that the project would not adversely affect a real, live scenic vista simply because there are no "designated" "signed" scenic vistas within visible distance of the proposed project site, and thus declare that the project would result in a less than significant impact to this resource. **The**

**IS/DEIR should also be revised to note the 35-foot height limit specified in the Three Rivers Community Plan (not just the 75-foot maximum in the Zoning Ordinance).**

p. 16 -- b) No Impact and Less Than Significant Impact: True, the Three Rivers Community segment of SR 198 is only an "eligible" Scenic Highway and is not yet a "designated" Scenic Highway, since the County has failed since adopting the Scenic Highways Element of the General Plan in 1975 to nominate any of its eligible highways for designation. It is important to the environment, the economy, and the attractiveness of Three Rivers for the community to continue to work through its Community Plan and other actions to maintain its segment's eligibility so that some day it may enjoy the benefits of official designation as a California Scenic Highway (see California Scenic Highway Program, p. 14 above).

p. 16 -- c) No Impact: It is not correct that the proposed project will be located greater than 200 feet from SR 198, because the gas station/market/restaurant portion of the project will obviously be located much closer than that to the highway. As noted above, **the current IS/DEIR must be revised in order to describe the whole action involved, the Overall Site Plan must be revised in order to depict all of the planned facilities, the IS/DEIR must be revised to specifically describe and illustrate the measures that the proposed hotel/gas station/market/restaurant project will take in order to be compatible and consistent with the majority of existing development in Three Rivers, preserve the town's unique visual and community character and natural environment , and help to create its distinct sense of place; it must specifically describe and illustrate the setbacks, landscaping, and screening that will be provided for the proposed project, specify how the proposed lighting for the proposed hotel/gas station/market/restaurant project will minimize light pollution, glare, and light trespass, and protect the dark skies of Three Rivers, and specifically describe and illustrate the vegetation that will be provided for the proposed hotel/gas station/market/restaurant project. Only then will reviewers be able to determine whether the project as a whole "would not substantially degrade the existing visual character of the site and its surroundings" and "would not conflict with applicable regulations governing scenic quality."**

p. 16 -- d) Less than Significant Impact: As with c) above, **the determination of impact cannot be made until the IS/DEIR has been revised in order describe the whole action involved, depicting, describing, and illustrating all of the planned facilities, and specifying how they will comply with the County's General Plan and the Three Rivers Community Plan. Therefore, the determination of Less Than Significant Impact cannot stand at this time.**

p. 16 -- Cumulative Impact: As with c) and d) above, **the determination of impact cannot be made until the IS/DEIR has been revised in order describe the whole action involved, depicting, describing, and illustrating all of the planned facilities, and specifying how they will**



**comply with the County's General Plan and the Three Rivers Community Plan.** Therefore, the determination of Cumulative Impact cannot stand at this time.

p. 20 -- Air Quality: As above, **the determination of impact cannot be made until the IS/DEIR has been revised in order describe the whole action involved, depicting, describing, and illustrating all of the planned facilities, and specifying how they will comply with the County's General Plan and the Three Rivers Community Plan.** It appears that the Air Quality section of the IS/DEIR does not consider the impacts of the gas station/market/restaurant portion of the proposed project. The gas station deserves particular attention; with what would be the community's two largest hotels plus a hotel and market in its immediate vicinity, it seems to be an incompatible land use. There are already two gas stations just up the road from the proposed project. Adding a third here seems both unnecessary and not healthy for the environment and the concentration of people in the two hotels. An electric vehicle charging station or two should be considered instead. The much too-often unhealthy air quality in Tulare County and Three Rivers does not need the contribution of yet another gas station.

p. 41 -- Biological Resources: In this section, as always, we encounter the ongoing death by a thousand cuts of our biological resources. As noted in a), "Consultant utilized Google Earth aerial photographs which previous [sic] showed an area of oak woodland was present in the eastern portion of the site through 2005 but had been cut down and removed by 2009." This destruction occurred when the speculative property owner at the time, who had "for sale" signs up on the property, brought in a crew of workers who, to the horror and dismay of the community, cut down every oak growing along the eastern fence line of the property, for no apparent reason. These were large, beautiful, mature trees, providing beauty, shade, habitat, and cover, cleaning and cooling the air, sequestering carbon, holding and building soil, and contributing significantly to the character and quality of life of Three Rivers. This unwarranted destruction spurred community members to campaign for County protection of the area's oaks and an Oak Woodlands Management Plan. Therefore, **the IS/DEIR must be revised to emphasize that the oaks adjoining the proposed project site must be protected by ensuring that they and their driplines and root systems are not adversely affected by the construction of the proposed project or its subsequent operation and maintenance.** This will help to ensure compliance with many of the goals and policies of the Community Plan, several of which are cited above. It will also help to maintain habitat for special status species including Nuttall's woodpecker, Oak titmouse, Lawrence's goldfinch, and Townsend's big-eared bat. Native oaks should be included in the proposed project's landscaping.

Three Rivers' wildlife is a vital component of its biological resources, essential to the health and vitality of its environment and the community's quality of life and also its economy, as wildlife are a major tourist attraction. If the proposed project is built, it will pave over several acres of

grassland and will also, in conjunction with the adjoining Comfort Inn, block wildlife movement for quite a long stretch where they would formerly move east/west to cross the highway to access the river and the riparian environment there. Too many animals are killed by vehicles on that stretch of the highway already. The proposed project will significantly increase vehicle trips in the area. Therefore, **the IS/DEIR should require mitigation for these adverse impacts: the proposed project should be required to install approved warning signs (both directions) indicating wildlife crossing areas and advising caution.**

p. 52 -- ERM-4.1 Energy Conservation and Efficiency Measures - encourages use of solar energy, solar hot water panels, and other features. ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation - encourage planting of shade trees along streets and within parking areas to reduce radiation heating etc.

p. 53 -- No Impact: "As visitors will have the opportunity to lodge within the community of Three Rivers, there will be fewer vehicle miles traveled to the nearest communities for lodging. As such, vehicle fuel consumption will be reduced. Therefore, the proposed project will have a less than significant impact resulting from energy consumption." This evaluation implies that the proposed project is beneficial because it will reduce the number of visitors who, without access to the proposed hotel, would be forced to travel to other communities in order to find overnight lodging. This evaluation does not consider the reportedly over 200 (and growing) short-term rental houses (e.g., VRBOs, AirBnBs) in Three Rivers that are responding to visitors' increasing desire to stay in that type of "local home" accommodation as opposed to a "big box" chain hotel. **The IS/DEIR should consider the short-term rental market in Three Rivers when evaluating the appropriateness of the proposed Hampton Inn to meet the lodging needs of visitors to the Three Rivers and our National Parks.** It may be that a new hotel hasn't been built in Three Rivers in over two decades because there is no demand or need for one.

p. 53 -- Cumulative Impact: Apply No Impact comment above. Also, **the IS/DEIR must be revised so that the proposed project's energy-efficiency and water conservation features are specified in detail for the whole hotel/gas station/market/restaurant project.**

p. 62 -- Environmental Setting: The IS/DEIR's discussion of global warming seems designed to cast doubt and uncertainty on the science of climate change and its findings, and on their applicability to Tulare County. **The IS/DEIR should be revised to state that "the potential resulting effects in California of global warming [which] may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years" are not just "potential" in Tulare County. All of these (except for sea level rise) are already severely and increasingly impacting our environment, our health, and our economy. Therefore, it is increasingly essential and urgent that we act to decrease our contributions to the causes of climate change/global warming.**

p. 73 -- Table GHG-6. CAP Consistency Checklist, Renewable Energy: The proposed project does not appear to include solar on its buildings, nor does it provide EV Charging facilities. Given the very large footprint of the whole project, and the very sunny climate of Three Rivers, the project should certainly include extensive solar panels and EV Charging facilities. **Instead of a counter-productive gas station, the proposed project should consider installing EV charging and a well-designed public transit stop near the highway.**

p. 74 -- GHG-1 and GHG-2: The proposed project's plans for renewable energy system(s) and EV Charging accommodation should not be delayed until its building plans are done. **The IS/DEIR should be revised to describe and illustrate the proposed project's plans for these facilities for the whole project (hotel/gas station/market/restaurant), so that their sufficiency and efficacy can be evaluated as part of the IS/DEIR process.**

pp. 84-85 -- Water Supply Evaluation: "[T]he placement of individual wells could have an adverse impact on other local wells if not properly spaced or otherwise constructed to protect existing well operations." **The IS/DEIR must be revised to detail the water supply plans, conditions, and impacts of the whole proposed project (hotel/gas station/market/restaurant), so that their sufficiency and effects can be fully evaluated as part of the IS/DEIR process, in addition to their cumulative impact with the usage of the adjacent Comfort Inn.** Will the cones of depression of the wells of the proposed project and the Comfort Inn overlap? Will the combined usage of the proposed whole project plus that of the adjacent Comfort Inn produce the greatest concentration and volume of groundwater withdrawal in the whole community of Three Rivers? As well as the greatest concentration and volume of wastewater? The impacts of the proposed project cannot be considered in isolation from those of the adjacent Comfort Inn.

p. 86 -- Less Than Significant Impact: Note that "Ald Engineering also provided as [sic] estimate for a parcel directly west of the proposed Project site of 3,450 gallons per day of water usage (or 1,259,250 gallons per year or 3.86 acre-feet per year)." This estimate must be for the usage of the second part of the proposed project, the gas station/market/restaurant, making it additionally clear that **the IS/DEIR must be extensively revised to describe and evaluate the whole project, not just the hotel portion.** Are these (Comfort Inn and proposed project) wells hard rock or alluvial?

p. 91 -- Tulare County General Plan, LU-7.15 Energy Conservation and LU-7.16 Water Conservation: **The IS/DEIR must describe and illustrate how the proposed whole (hotel/gas station/market/restaurant) project will use solar power and what energy conservation building techniques it will use, and also what "extra-ordinary" water conservation and demand management measures will be used, both indoors and out.**

pp. 91-92 -- Three Rivers Community Plan: The Plan calls for development that is compatible and consistent with existing development in Three Rivers, preserves its unique visual and community character and natural environment, and creates a distinct sense of place. As previously noted, **the IS/DEIR must be revised to describe how the proposed whole project will constructively respond to these goals and policies.** Unfortunately, the adjacent Comfort Inn was built long before the current Three Rivers Plan was adopted in 2018, and the Comfort Inn indeed falls short in regard to these goals and policies. But two wrongs don't make a right, so **the proposed project of the Hampton Inn and its adjoining gas station/market/restaurant must not strive for compatibility with the Comfort Inn next door, but rather with the character and scale and sense of place of the great majority of the structures in this rural community in its beautiful, scenic natural setting.**

p. 92 -- 1.1.12 LU-4.5 Commercial Building Design: "[T]he County shall encourage that new commercial development is consistent with the existing design of the surrounding community . . . by encouraging similar facades, proportionate scale, parking, landscaping, and lightning that provides for night sky conservation and protection." As previously noted, **the IS/DEIR must be revised to describe and clearly illustrate how the proposed whole project will meet these goals and policies. This project should receive County Project Review Committee review for evaluation of its compliance.**

p. 109 -- Environmental Setting: "Three Rivers does not have any public parks." It may be noted here that Three Rivers long ago had a County park, but the County closed it. During the almost 20-year period in which the community worked with the County on the County's sporadic off-and-on schedule to update its original (1980) community plan, community members repeatedly urged the County to provide a park again for Three Rivers, which would be an asset to its visitors, its tourism economy, its public health, its open space, and its quality of life. The County has never done so. The County seems to be in a hurry to get the proposed project approved and built, perhaps due to anticipating increased TOT revenues. It would be appropriate (and long overdue) for a portion of the considerable TOT revenues generated in Three Rivers to be returned to the community in the form of a County park. Possible locations and design elements were determined as part of the Community Plan process.

pp. 123-124 -- Utilities and Service Systems: **The IS/DEIR must be revised to show that it is including the proposed whole project (hotel/gas station/market/restaurant) in evaluating the nature and significance of its impacts in this category.**

p. 141 -- AQ and GHG Assessment: The Introduction to this section describes the proposed project for which the AQ/GHG Assessment was prepared as simply the hotel portion. Obviously, the ensuing construction of a gas station/market/restaurant by the owner on the adjoining lot would significantly alter the scope and content of this Assessment. **The IS/DEIR**

**must be revised to include an Air Quality and Greenhouse Gas Assessment for the whole action, including the gas station/market/restaurant.**

p. 180 -- "The County will also review the trash enclosure design to ensure solid waste pick-up is feasible and will ensure the Project meets the CalRecycle requirements." **The County must also review the trash enclosure design to ensure that it is as bear-proof as possible.** The bears are getting into Three Rivers trash containers again this fall.

p. 193 -- The proposed whole project (hotel/gas station/market/restaurant) will have over an acre of paving. **The IS/DEIR should encourage the use of permeable paving on both phases of the project.**

p. 217 -- Mitigation Measures Water: Low flow faucets, toilets, and showers are listed, but what about irrigation for landscaping and bioswales? **The IS/DEIR should require drought-tolerant landscaping plants, preferably natives, and water-efficient drip irrigation systems (or similar) for the whole of the proposed project (hotel/gas station/market/restaurant).** **Additionally, water-saving washers should be required to be used for laundry and the restaurant should serve water only upon request.** Is there a way to recycle swimming pool water for re-use, as perhaps on landscaping, or for window washing, floor cleaning, or other such purposes? If so, that could also help to provide mitigation.

p. 288 -- Introduction: It is noted that the Biological Resources Assessment describes "the approximately 4.57 Hampton Inn and Suites Three Rivers Project," indicating that it is dealing appropriately with the proposed whole project (hotel/gas station/market/restaurant) area, even though it lists only the hotel in its project description.

p. 297 -- Tulare County General Plan/Three Rivers Community Plan: "The vision for the Community Plan . . . will provide appropriate direction to help guide public and private decisions affecting the community, including provisions for the overall direction, density, type of growth and protection of the natural environment that are consistent with the needs and desires of the Three Rivers community to maintain its rural character. These vision statements intensify what is already recognized throughout the state that Three Rivers is a unique destination among Tulare County's rural foothill communities. The purpose of the Community Plan . . . is to preserve and protect the values, character and assets of the community, including preservation of its historical rural character and valuable natural resources, while ensuring that economic growth remains vibrant and sustainable, consistent with the desired character of the community. Vision Statement 7 effectuates the desire of the community to 'protect and preserve oak, sycamore and cottonwood woodlands.' Goal 4 (Protection and Conservation of the Environment) of the Community Plan includes objectives that are pertinent to biological resources, including: 4.1.1 Preserving the Natural Environment [and] 4.1.2 CEQA Compliance."

p. 302 -- Oak Woodland: "A small area of oak woodland is located in the southeastern corner of the Study Area. The oak woodland is largely situated on the adjacent property to the south but the dripline of the trees overlaps into the Study Area. Please see discussion above re p. 41 - Biological Resources re oaks. **The IS/DEIR must be revised to emphasize that the oaks adjoining the proposed project site must be protected by ensuring that they and their driplines and root systems are not adversely affected by the construction of the proposed project or its subsequent operation and maintenance.** This will help to ensure compliance with many of the goals and policies of the Community Plan, several of which are cited above. It will also help to maintain habitat for **special status species** including Nuttall's woodpecker, Oak titmouse, Lawrence's goldfinch, and Townsend's big-eared bat, all of which can potentially be found on the site. **Native oaks should also be included in the proposed project's landscaping** for the same reasons. See pp. 314, 315, 317, 322, and 323 of the current IS/DEIR for information re these special status species. Birders staying at the Hampton Inn would be delighted to see these species on and near the property and would appreciate the owners' efforts to provide suitable lodging for these avians as well.

p. 319 -- Kaweah Brodiaea: This charming special-status flower has been found just .1 mile from the proposed project's site. It offers another opportunity for the proposed project to make an effort to comply with the goals of the Three Rivers Community Plan, by providing habitat and protection for this brodiaea in its landscaping. **The IS/DEIR should encourage this effort.**

p. 399 -- Cumulative Operational Noise: This paragraph and the whole Noise Impact Assessment must be redone because they consider the proposed project (see p. 377, etc.) to be only the hotel. **The IS/DEIR must be revised to assess noise impacts for the whole action of the proposed project (hotel/gas station/market/restaurant).**

p. 417 -- Traffic Impact Study, Executive Summary: Here again **the IS/DEIR must be revised to assess traffic impacts for the whole action of the proposed project (hotel/gas station/market/restaurant).** The proposed gas station, market, and restaurant could greatly increase disruption to traffic flow on SR 198 at the project site's single driveway. What would be the hours of operation of these facilities? How many parking spaces would they have? Pedestrian facilities in Three Rivers may be "nonexistent" (p. 418) in Three Rivers, but pedestrians are nevertheless regularly seen walking alongside SR 198. Their safety must also be considered in this assessment.

p. 419 -- Feasibility Study prepared for the project: "The Feasibility Study prepared for the Project forecasts an unaccommodated demand equivalent to 7.3% of the base-year demand, resulting from the analysis of monthly and weekly peak demand and sell-out trends. Unaccommodated demand refers to individuals who are unable to secure accommodations in

the market because all the local *hotels* are filled [emphasis added]. These travelers must settle for less desirable accommodations or stay in properties located outside the market area. This evaluation does not consider the reportedly over 200 (and growing) short-term rental houses (e.g., VRBOs, AirBnBs) in Three Rivers that are responding to visitors' increasing desire to stay in that type of "local home" accommodation as opposed to a "big box" chain hotel. **The IS/DEIR should consider the short-term rental market in Three Rivers when evaluating the appropriateness of the proposed Hampton Inn to meet the lodging needs of visitors to the Three Rivers and our National Parks.** It may be that a new hotel hasn't been built in Three Rivers in over two decades because there is no demand or need for one. Many visitors obviously do not consider these "local home" accommodations "less desirable" than the hotels on offer in Three Rivers.

p. 419 -- Less Than Significant Impact: "The Project would not result in hazards due to design features, since all proposed improvements (Project Driveway) would be built to County design standards." Again, this is based on the driveway serving only the hotel, not the additional proposed actions of the project, to build a gas station/market/restaurant in front of the hotel, beside the highway. **The IS/DEIR must be revised to determine the potential hazards resulting from the proposed whole project.** In an emergency situation, how long would it take the hotel guests and staff and the customers and staff at the gas station/market/restaurant to exit the project via a single driveway?

p. 428 -- Existing Conditions: "The first step toward assessing Project traffic impacts is to assess existing traffic conditions. . . . 2018 Traffic counts in the study area were used to evaluate existing traffic conditions in this traffic analysis. Intersection turning movement counts conducted for the Saturday and Sunday peak hour periods on February 3, 2018 and February 4, 2018, were used and are provided in Appendix B." The peak tourist season in Three Rivers and Sequoia National Park, when the proposed project would presumably be busiest, is not early February. It seems that a traffic study conducted then would be misleading and would heavily undercount the traffic impacts that would occur in the much busier six months of the year. The consultant, in consultation with Caltrans staff, used "a seasonal growth factor of 1.76 . . . to account for the increase in traffic in Three Rivers during the summer months." As a resident of Three Rivers for three decades, I would say that the growth factor between the first weekend in February and a summer weekend would likely be far greater than 1.76. **The IS/DEIR should include the basis for the 1.76 increase to verify its validity and applicability.**

p. 438 -- Near-Term Plus Project Traffic Conditions: "Traffic conditions with the Project in the Year 2022 were estimated by applying a growth rate of 1.3% per year to the existing traffic volumes. Historical growth in Tulare County is approximately 1.3% based on population trends as forecasted in the Tulare County General Plan 2030 Update." While population growth trends

in Tulare County will likely be a factor in traffic volumes in Three Rivers, probably growth in visitation to Sequoia National Park is a much greater factor, as virtually all visitors reach the park via the highway, primarily SR 198 through Three Rivers, and a big percentage of these visitors come from outside of Tulare County. It appears from information online that Sequoia N.P. visitation increased from about 838,060 in 1996 to about 1,254,688 in 2016. **Perhaps the average growth rate of traffic volume could be more validly calculated from this information.**

p. 446 -- The penultimate paragraph mentions Sequoia National Forest and Kings Canyon National Park. It is likely that Sequoia National Park was intended, rather than the Forest. If so, the sentence should be corrected.

p. 449 -- **The site plan must be revised to show the whole action of the proposed project (hotel/gas station/market/restaurant).** It is also too small to enable much of it to be read. Where is the project's well? Where is its wastewater/septic system? Where is its landscaping? Where are the elevation drawings to show the project as a whole in its landscape and in relation to the highway and the Comfort Inn? **These must be provided in the IS/DEIR in order for their impacts to be evaluated.**

p. 545 -- Wastewater Treatment Facility: "Wastewater will be generated at the proposed hotel by domestic sources that include: sinks, toilets, showers, laundry, and limited food preparation and associated dish washing/dishwasher. The proposed hotel will serve breakfast, which consists of reheating prepackaged food in their food prep area and washing of cook wear used in the reheating process. All dinnerware and flatware will be disposable. Wastewater will be generated at the future development of the frontage lot (service station and market, and Subway restaurant) primarily via a public restroom (e.g. sinks, toilets) and limited food production for a Subway Restaurant, or equivalent." Does this mean that a single restroom will serve the gas station and the market and the restaurant? Page 546, Table 3 - Flow Rates - Commercial Development on Front Lot appears to indicate that the toilet use will produce only 7 gallons per day (is this per toilet?). The total Anticipated Flow for the gas station/market/restaurant portion of the project is 3,420, but it is not clear what it comprises. What is 2 gpd/single service for instance? This table needs to be clarified so that it can be understood. 17,145 gallons per day/365 days per year for the whole project seems like a lot to process. The adjacent Comfort Inn has had many problems with its wastewater disposal. **Where has the proposed wastewater treatment system for the proposed project been used? Has it been used successfully over time in similar conditions? Where is the proposed project's subsurface drip field?** p. 553 says that "the subsurface disposal systems shall hold in reserve sufficient land area for possible future 100-percent replacement of the subsurface disposal system." **What would cause the system to have to be entirely replaced? How often might that happen?**

p. 554, last paragraph, says that the proposed system must use disinfection due to minimum depth to groundwater and minimum soil depth from bottom of the dispersal system and per



rates. This sounds ominous for impacts to groundwater quality. **What is the disinfection system? Is it automatic?**

pp. 558-559 discusses what can't be disposed of in the system. Many of the items on the list would be commonly part of the wastewater stream in the proposed whole project. **How will these items be properly disposed of?**

"DO NOT dispose of toxics or chemicals into system, such as restaurant degreasers, cleansers, wax strippers for linoleum, carpet shampoo and its waste products, and other toxics. As a general rule, nothing should go into any wastewater treatment system that hasn't been ingested, other than toilet tissue, mild detergents, and wash water. Every system user and qualified service provider should be familiar with the basic guidelines below:• No septic additives• No flammable or toxic products• No excessive household cleaners• No chlorine bleach, chlorides, and pool or spa products• No pesticides, herbicides, or agricultural chemicals or fertilizers• No RV waste (unless the system is specifically designed and engineered to treat such waste)• No water softener backwash• No surface runoff or stormwater runoff• No excessive amounts of fats, oils and grease (FOG)• No food byproducts• No cigarette butts• No paper towels, newspapers, sanitary napkins, diapers, disposable wipes, floss, gum or candy wrappers, etc. •According to the manufacturer: Kitchen dishwashing appliances used in conjunction with AdvanTex treatment must be high-temperature appliances."

p. 562 -- General Conditions required for final installation approval:

"General Conditions required for final installation approval: •A shared well agreement must be established for the frontage lot. •A utility easement must be established for the wastewater treatment facilities installed on the frontage lot (e.g. dispersal field, lines, 100-percent replacement area)

**Shouldn't the IS/DEIR require that conditions be met prior to approval of the DEIR?**

# # #

Thank you for your consideration of these comments.



December 2, 2020

Mr. Hector Guerra  
Mr. Aaron Bock  
5961 S Mooney Blvd,  
Visalia, Ca 93277

Mr. Hector Guerra,

On behalf of the Kaweah Coalition, this letter is intended to guide dialogue surrounding the Hampton Inn and Suites (CEQ 20-004) development project sited at APN 068-080-010. Local and sustainable economic development is vital to the quiet, bucolic town of Three Rivers, but the proposed project raises several concerns that are not adequately addressed within the Initial Study.

While the Three Rivers Community Plan Update (3RCPU) was recently adopted by the Board of Supervisors, several of its most prioritized “Implementation Programs” were not, including but not limited to: a ‘Town Center’ Specific Plan, which would establish Development Standards for this specific area of Three Rivers based on clearly defined growth objectives; the Oak Woodlands Management Plan, which was motioned against by District 1 Supervisor Crocker after decades of exhaustive community input; more established rural compatibility standards; and lastly, a Noise Standards Reflective of a Foothill and Canyon Environment.

Without these Implementation Measures amended to the Three Rivers Community Plan, commercial development in the C-2-MU-SC zone (General Commercial-Mixed Use-Scenic Corridor Combining Zone) will be inconsistent with several of the stated Community Plan Priorities, most notably the “Three Rivers Town Center”. Any considerable commercial project in the vicinity of this “Town Center” without a Specific Plan would render the 3RCPU *internally* inconsistent under Government Code section 65300.5.

Additionally, any Zoning Ordinance which would allow commercial uses inconsistent with this “Town Center Specific Plan” will be *vertically* inconsistent. The general plan is the “constitution” or “charter” for future development, and any “Zoning ordinance that is inconsistent with the general plan is invalid when passed and one that was originally consistent but has become inconsistent must be brought into conformity with the general plan” (*Leshar Communications, inc. v. City of Walnut Creek, (1990) 52 Cal. 3d 531, 540*).

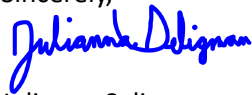
As a sub-plan of the 2030 Tulare County General Plan, the 3RCPU must remain internally consistent. In its current state, with no adoption of the Implementation Programs, the 3RCPU has few “Implementation Measures” for large portions of the planning area. Large commercial projects will continue to be met with opposition without these Implementation Programs, as any “Good Faith” arguments are undermined by developers’ profit motives and the obvious objectives of the “Economic Development and Planning Branch”.

What works within Visalia will not work within the Town Center of Three Rivers, yet the only measurable standards actually implemented through the 3RCPU are broad and discretionary General Plan policies that are *non-specific to the natural and cultural settings of rural, foothill communities*.

As a local non-profit 501(c)(3) committed to “preserving the rural legacy of the Tulare County foothills through responsible land use planning and advocacy”, we request that you revisit the “Town Center Specific Plan” Implementation Measure and use the Policing Power granted to your agency by the California Constitution to protect the health, safety and welfare of Tulare County residents and deny this project proposal.

We fear that considerable resources will be spent and wasted on behalf of Three Rivers residents and the lead agency within the DEIR period of this project if a more thorough hydrological and water quality study is not conducted, along with a more accurate analysis of occupancy, traffic patterns, light and aesthetic impacts, and noise quality concerns, all of which has been inadequately reviewed under CEQA within the Initial Study.

Sincerely,



Julianna Seligman  
Director, The Kaweah Coalition

## Jessica Willis - RE: Proposed Hampton Inn - Notice of Preparation & Initial Study

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**From:** <info@3riverscsd.com>  
**To:** "Jessica Willis" <JWillis@co.tulare.ca.us>  
**Date:** 12/2/2020 11:03 AM  
**Subject:** RE: Proposed Hampton Inn - Notice of Preparation & Initial Study  
**Cc:** "Csd Cindy" <info3riverscsd@gmail.com>

---

Hello,  
 Could you change the email you have for CSD to the gmail I ccd you on in this message? thx!  
 we don't use the old email anymore.

Cindy Howell  
 General Manager

----- Original Message -----

Subject: Proposed Hampton Inn - Notice of Preparation & Initial Study  
 From: "Jessica Willis" <[JWillis@co.tulare.ca.us](mailto:JWillis@co.tulare.ca.us)>  
 Date: Mon, November 02, 2020 4:32 pm  
 To: <[info@3riverscsd.com](mailto:info@3riverscsd.com)>, <[history@3rmuseum.org](mailto:history@3rmuseum.org)>, "Gilbert Portillo" <[GPortillo@co.tulare.ca.us](mailto:GPortillo@co.tulare.ca.us)>, "Hernan Beltran Herrera" <[HBeltran@co.tulare.ca.us](mailto:HBeltran@co.tulare.ca.us)>, "Julieta Martinez" <[JMartinez2@co.tulare.ca.us](mailto:JMartinez2@co.tulare.ca.us)>, "Johnny Wong" <[JWong@co.tulare.ca.us](mailto:JWong@co.tulare.ca.us)>, "Ross Miller" <[RMiller@co.tulare.ca.us](mailto:RMiller@co.tulare.ca.us)>, "Tom Tucker II" <[TTucker@co.tulare.ca.us](mailto:TTucker@co.tulare.ca.us)>, <[tccrg.info@gmail.com](mailto:tccrg.info@gmail.com)>, <[ann@sequoiariverlands.org](mailto:ann@sequoiariverlands.org)>, <[info@threerivers.com](mailto:info@threerivers.com)>, "Theodore Smalley" <[TSmalley@tularecog.org](mailto:TSmalley@tularecog.org)>, "Allison Shuklian" <[AShuklia@tularehhsa.org](mailto:AShuklia@tularehhsa.org)>, "Megan Fish" <[MFish@tularehhsa.org](mailto:MFish@tularehhsa.org)>, "Sabrina Bustamante" <[SLBustamante@tularehhsa.org](mailto:SLBustamante@tularehhsa.org)>, "Tricia Stever" <[psteve@tulcofb.org](mailto:psteve@tulcofb.org)>

Good afternoon.

Attached for your review is the Notice of Preparation/Initial Study (NOP/IS) for the Environmental Impact Report being prepared for the proposed Hampton Inn in Three Rivers.

The notice contains the link to the County's website where the NOP/IS is available for viewing. The NOP/IS includes the technical studies that have been prepared for the project, .

Comments may be submitted by mail at the address provided in the notice or to Mr. Hector Guerra, Chief Environmental Planner, by email at [hguerra@co.tulare.ca.us](mailto:hguerra@co.tulare.ca.us). For general questions regarding the project or the CEQA process, Mr. Guerra can be reached by phone at [\(559\) 624-7121](tel:559-624-7121).

Respectfully,

Jessica Willis, Planner IV  
Tulare County Resource Management Agency  
Economic Development and Planning Branch  
Environmental Planning Division  
Phone: [\(559\) 624-7122](tel:(559)624-7122)  
E-mail: [JWillis@co.tulare.ca.us](mailto:JWillis@co.tulare.ca.us)

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**From:** [Jessica R Willis](#)  
**To:** [Delores Lucero](#)  
**Cc:** [Aaron R Bock](#); [Hector Guerra](#)  
**Subject:** Re: Proposed Hampton Inn - Notice of Preparation & Initial Study  
**Date:** Monday, November 2, 2020 3:55:01 PM

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Delores,

Please note, this notice was for CEQA purposes only; however, I did check on the status of the PRR and the County did receive it. You will be receiving a response from the County's PRR staff once the information has been gathered.

Thank you for your interest in this project.

Jessica Willis

>>> Delores Lucero <[delores.lucero@ucr.edu](mailto:delores.lucero@ucr.edu)> 11/2/2020 3:29 PM >>>

Hi,

Thank you for sending this, though I already read it on your website.

I sent in a request for public information yesterday, can you tell me if it has been received? There are questions and requested documents in my PRR that were not answered by reading the NOP.

Thank you,

Delores Lucero

On Nov 2, 2020, at 3:23 PM, Jessica Willis <[JWillis@co.tulare.ca.us](mailto:JWillis@co.tulare.ca.us)> wrote:

Good afternoon.

Attached for your review is the Notice of Preparation/Initial Study (NOP/IS) for the Environmental Impact Report being prepared for the proposed Hampton Inn in Three Rivers.

The notice contains the link to the County's website where the NOP/IS is available for viewing. The NOP/IS includes the technical studies that have been prepared for the project, .

Comments may be submitted by mail at the address provided in the notice or to Mr. Hector Guerra, Chief Environmental Planner, by email at [hguerra@co.tulare.ca.us](mailto:hguerra@co.tulare.ca.us). For general questions regarding the project or the CEQA process, Mr. Guerra can be reached by phone at (559) 624-7121.

Respectfully,

Jessica Willis, Planner IV  
Tulare County Resource Management Agency  
Economic Development and Planning Branch  
Environmental Planning Division  
Phone: (559) 624-7122  
E-mail: [JWillis@co.tulare.ca.us](mailto:JWillis@co.tulare.ca.us)

<Hampton Inn\_Notice\_11-2-20.pdf>

**From:** [Aaron R Bock](#)  
**To:** [Celeste Perez](#); [Hector Guerra](#); [Jessica R Willis](#); [Lucero Delores](#)  
**Subject:** Re: Fwd: Initial Study Hampton Inn in 3 Rivers Public Information Request (Out of Office)  
**Date:** Monday, November 30, 2020 1:40:48 PM

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Yes, we have been discussing, and IT is looking into the emails. We are scanning the application to send to you. Again, the comment period is for the Initial Study. The DEIR will have a separate process and comment period. There is no specific plan, and in the 3 Rivers Community Plan, we have found a specific plan to be infeasible at this time. We have been available to receive the initial study / NOP comments throughout the IS comment period. There is no reason to extend the IS comment period.

Thanks,

Aaron R Bock, MCRP, JD, LEED AP  
Assistant RMA Director - Economic Development & Planning  
5961 South Mooney Blvd.  
Visalia, CA 93277  
559-624-7050 - Direct  
559-730-2653 - Fax

>>> Delores Lucero <delores.lucero@ucr.edu> 11/30/2020 1:18 PM >>>

Hi,

It has been 30 days since my initial request, has there been any attempt to gather this information to send to me? I know there has been holidays, that being said perhaps the DEIR comment period for the Hampton Inn should be extended as well.

Delores Lucero

Begin forwarded message:

From: Delores Lucero <delores.lucero@ucr.edu>  
Date: November 23, 2020 at 2:21:17 PM PST  
To: Jessica Willis <JWillis@co.tulare.ca.us>  
Cc: Aaron Bock <ABock@co.tulare.ca.us>, Celeste Perez <CVPerez@co.tulare.ca.us>  
Subject: Re: Fwd: Initial Study Hampton Inn in 3 Rivers Public Information Request (Out of Office)

Hi Jessica,

I have attached Hector's response to me regarding my records request dated November 1. If you look at both documents, you can see which questions were not answered but to make it easier on you, I would like a copy of the Term Sheet between the developer and the County. I now know the parcel number of the hotel but actually it is more than one parcel, I see that the Wastewater Treatment System has been planned out for two parcels, with the front parcel having a secondary development, a gas station, market, and "Subway" type restaurant, will there be a separate project level DEIR done for this secondary development?

I would also like to obtain a copy of the Specific Plan that was alluded to many times in the Three Rivers Community Plan 2018, the document was to guide development in the "Town Center" area, which is where this hotel, gas station, market is proposed.

I am also waiting for the correspondence between the developer and RMA staff that Celeste Perez is obtaining from your IT department, do you know when that may be ready?

Thank you for in advance for this information.

Delores Lucero

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From: Aaron Bock <abock@co.tulare.ca.us>  
Sent: Monday, November 23, 2020 1:35 PM  
To: Celeste Perez <CVPerez@co.tulare.ca.us>; Jessica Willis <JWillis@co.tulare.ca.us>; Delores Lucero <delores.lucero@ucr.edu>  
Cc: Carrie Carrillo <CDCarril@co.tulare.ca.us>; Hector Guerra <HGuerra@co.tulare.ca.us>  
Subject: Re: Fwd: Initial Study Hampton Inn in 3 Rivers Public Information Request (Out of Office)

Send all your IS comments to Jessica per the IS / NOP comment period and any questions you felt were not answered.

Thanks,

Aaron R Bock, MCRP, JD, LEED AP  
Assistant RMA Director - Economic Development & Planning  
5961 South Mooney Blvd.  
Visalia, CA 93277  
559-624-7050 - Direct  
559-730-2653 - Fax

>>> Delores Lucero <delores.lucero@ucr.edu> 11/23/2020 11:30 AM >>>

Hi,  
Hector Guerra is out of the office during a substantial time during which comments can be submitted about the DEIR. It would seem reasonable that either someone else should be in receipt of the comments or the comment period extended.  
Also, it is obvious some of my questions in my PRR were either ignored or beyond the scope of Hector's duties. I would appreciate it if these questions could be directed to another party and answered.  
Thank you,  
Delores Lucero

Begin forwarded message:

From: Hector Guerra <HGuerra@co.tulare.ca.us>  
Date: November 19, 2020 at 2:45:06 PM PST  
To: Delores Lucero <delores.lucero@ucr.edu>  
Subject: Re: Initial Study Hampton Inn in 3 Rivers Public Information Request (Out of Office)

I will be out of the office beginning Nov. 19 and returning Nov. 30. If you require immediate assistance, please call 624-7000.

The office will be closed on Nov. 26th and 27th in observance of Thanksgiving Day.

Best Regards,

Hector

Delores Lucero <delores.lucero@ucr.edu> 11/19/20 14:44 >>>

Hi Celeste and Hector,  
When can I expect an answer to my PRR request sent to you November 1st?  
Thanks

Sent from my iPhone



On Nov 19, 2020, at 9:16 AM, Aaron Bock <ABock@co.tulare.ca.us> wrote:

Initial Study comments are due within the 30 days from NOP release. Per the NOP:

"NOTICE OF PREPARATION COMMENT PERIOD: November 2, 2020 \* December 2, 2020, at 5:00 p.m."

All documents are located at: <https://tularecounty.ca.gov/rma/index.cfm/public-notices/>

Celeste please send Delores Hector's Memo addressing her questions in fulfillment of the PIR.

Thanks,

Aaron R Bock, MCRP, JD, LEED AP  
Assistant RMA Director - Economic Development & Planning  
5961 South Mooney Blvd.  
Visalia, CA 93277  
559-624-7050 - Direct  
559-730-2653 - Fax

Delores Lucero <delores.lucero@ucr.edu> 11/17/2020 1:43 PM >>>

Hi,

Who should email comments be directed to regarding the DEIR for the Hampton in 3R?

Also, who is responsible for addressing my Public Records Request submitted Nov. 1?

Thank you,

Delores Lucero



# RESOURCE MANAGEMENT AGENCY

## INTEROFFICE MEMORANDUM

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**TO:** Aaron Bock, Assistant Director, Economic Development and Planning Branch

**FROM:** Hector Guerra, Chief, Environmental Planning Division

**SUBJECT:** Public Records Request from Mrs. Delores Lucero

**DATE:** November 18, 2020

Following are my responses to Mrs. Lucero public records request. My response to the request is limited to specific tasks, assignments, responsibilities, etc. of the Environmental Planning Division; as such, I cannot respond to Mrs. Lucero's question regarding "developer application and Term Sheet between the developer and the County."

Regarding Question No. 2: As the property is within the C-2-MU-SC (General Commercial-Mixed Use-Scenic Corridor Combining Zone); the proposed Project is an allowed use (i.e., "by-right"). The proposed project is not a "resort"; rather it is a hotel/motel, and therefore, a planned unit development does not apply.

Regarding Question No. 3: I have communicated only with the applicant's agent. No one else from the Division has communicated with the applicant and/or agent. An e-mail search of written conversations with the agent will be included in an e-mail search to be conducted by the County's IT department; no other written correspondence has occurred. Verbal communications have been limited to conversations regarding the technical studies (which are included in the IS/EIR, see below) and the recently held Scoping Meeting of November 5, 2020 (i.e., County notification, date/time, physical location, remote viewing (i.e., Zoom), and if the applicant and/or agent were required to attend). One other verbal conversation between the agent and I occurred on November 6 to provide the agent a summary of the Scoping Meeting. As an aside, only two persons participated and only one question was asked ("Where are the project's septic system leach lines be located?") wherein I responded that they would be located west of the main structure.

As an aside, please note that the Initial Study/Environment Impact Report (IS/EIR), in its entirety, can be found at: <https://tularecounty.ca.gov/rma/index.cfm/planning-building/environmental-planning/environmental-impact-reports/hampton-inn-suites-three-rivers/>. Technical studies contained in the IS/EIR (in the form of Attachments) are intended to address resources issues as contained in Appendix "G" of the CEQA guidelines. As such, the IS/EIR includes studies regarding Emissions Assessment (Attachment "A" addressing Air Quality and Greenhouse Gases); Biological Assessment (Attachment "B" addressing biological resources and a Special Status Plant Survey); Cultural Resources Inventory Report (Attachment "C" addressing historical, cultural, and tribal cultural resources. Due to the nature of confidential information contained in the Report, it will not be readily available to the public; however, Tulare County will allow access to the Report within legal limitations); Noise Impact Assessment

(Attachment “D” addressing the noise resource); Traffic Impact Study (Attachment “E” addressing the traffic resource) and; Wastewater Technical Report (Attachment “F” addressing the wastewater treatment system for the proposed project).

The Notice of Preparation review period began November 2, 2020 and will end December 2, 2020. Comments should be directed to me as shown in the NOP notice provided to Mrs. Lucero. The Draft EIR is anticipated to be release for public, interested party, and agency review/comment in late January 2021 for a typical 45-day review period. A Final EIR is anticipated in mid-March to early April, 2021.