COUNTY OF TULARE

RESOURCE MANAGEMENT AGENCY

5961 South Mooney Boulevard
Visalia, CA 93277

Hyder Ranch Sports Park

Tule River Indian Tribe

Draft Mitigated Negative Declaration

March 2015

Prepared by

County of Tulare Resource Management Agency
Planning Branch and
Environmental Planning Division

INITIAL STUDY CHECKLIST

1. **Project Title:** Hyder Ranch Sports Park-Tule River Indian Tribe

2. **Lead Agency:** County of Tulare – Resource Management Agency

3. **Contact Person:** Hector Guerra, Chief, Environmental Planning Division

4. **Project Location:** Southeastern corner of Reservation and Road 296, at 30110 Reservation Road in unincorporated Tulare County, California, southeast of the City of Porterville

5. **Latitude, Longitude:** 36.025562, -118.910752

6. **Section, Township and Range:** SEC. 12 & 13, T 22S R 28E MDB & M

7. **General Plan Designation:** Tulare County Plan – Tule River Development Corridor, Foothill Mixed Use and Foothill Agriculture

8. **Zoning:** PD-F-M (Planned Development, Foothill Combining, Special Mobilehome) and AF (Foothill Agricultural)

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 Hyder Ranch Sports Park will be constructed on approximately 22.3 acres of an existing 375.44-acre site (APN 305-070-12, 305-010-25 & 305-010-26). The Project will include a sports park and a small residential community garden/park to be constructed in two (2) phases. Phase 1 will include three (3) baseball/softball fields, three (3) warm up fields, and a 69-space parking lot. Phase 2 includes a picnic area, a tot lot, basketball courts, a vendor/restroom building, soccer field, 82-space parking lot, and a community garden/park. Construction of Phase 1 is expected to begin immediately upon approval of the Project, whereas construction activities for Phase 2 are anticipated to begin within five (5) years. The remaining 353.14 acres of the Project site will remain in their current state and agricultural uses (grazing) will continue.

   The proposed operational hours of the sports park are 8:00 a.m. to 10 p.m. Monday through Saturday and 8:00 a.m. to 6:00 p.m. on Sunday. The Tule River Indian Tribe (Tribe) intends to use the site as a Tribal recreation area and to host athletic tournaments. Lighting will be provided for evening and nighttime use. Water will be provided by onsite wells and wastewater will be treated through septic tanks. Access to the site is on Road 296. The proposed project will produce approximately 170 vehicle trips per day when events are held.

Five (5) single-family residential areas are shown on the site plan for the sports park; however, they are not part of the sports park project permitted under Special Use Permit PSP14-063. The existing General Plan and zoning of the Project site allows the construction of five (5) units by right and requires only ministerial approvals by the County. The residential areas shown on the site plan are not a proposed parcel map or tentative map or division of land according to the Subdivision Map Act and are shown for Tribal housing allotment only. The Tribe is currently applying for building permits for these units. These units will provide housing units for Tribal members only. Though not a part of the proposed sports park project and allowed under the existing General Plan and zoning, for the purposes of full disclosure to the public, this initial study includes these residential units.

The Project and residential units are entirely within the Foothill Development Corridor and the PD-F-M zoning.

10. Surrounding land uses and setting (Brief description): Agricultural land (grazing) surrounds the Project site to the north, east, south, and west. One single-family residence is located to the west, adjacent to the project site approximately ¼ mile south of Reservation Road on the west side of Road 296. A second single-family residence is located approximately ¼ mile south of the southern property boundary of the Project site. A 21-lot subdivision, approved in October 2013, lies directly north of the Project site across Reservation Road. The street for this subdivision has been constructed; however, no residential units have been constructed at this time.

11. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

Bureau of Indian Affairs
Bureau of Land Management
California State Parks
San Joaquin Valley Unified Air Pollution Control District
State Water Resources Control Board

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" "unless mitigated" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology/Soils
☐ Greenhouse Gases	☒ Hazards/Hazardous Materials	☒ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities / Service Systems	☐ 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 the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that a previous EIR or Negative Declaration may be utilized for this project - refer to Section E.

Signature Date

Hector Guerra ` Chief Environmental Planner

Printed Name Title

EVALUATION OF ENVIRONMENTAL IMPACTS:

The following checklist contains an extensive listing of the kind of environmental effects which result from development projects. Evaluation of the effects must take into account the whole of an 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, in addition to reasonably foreseeable phases or corollary actions. The system used to rate the magnitude of potential effects is described as follows:

A "Potentially Significant Impact" is appropriate if an effect is significant or potentially significant, or if the lead agency lacks information to make a finding of insignificance. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

A "Less Than Significant With Mitigation Incorporation" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact."

A "Less Than Significant Impact" means that the environmental effect is present, but is minor in nature and/or not adverse, or is reduced to a level less than significant due to the application and enforcement of mandatory locally adopted standards.

"No Impact" indicates that the effect does not apply to the proposed project.

Using this rating system, evaluate the likelihood that the proposed project will have an effect in each of the environmental areas of concern listed below. At the end of each category, discuss the project-specific factors, locally adopted standards, and/or general plan elements that support your evaluation. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources cited 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 proposed (e.g., Zone C of the FEMA maps). 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). The explanation of each issue should identify:

a) the significance criteria or threshold, if any, used to evaluate each question; and

b) the mitigation measure identified, if any, to reduce the impact to less than significance

Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant” 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.

“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 mitigation measures must be described along with a brief explanation on how they reduce the

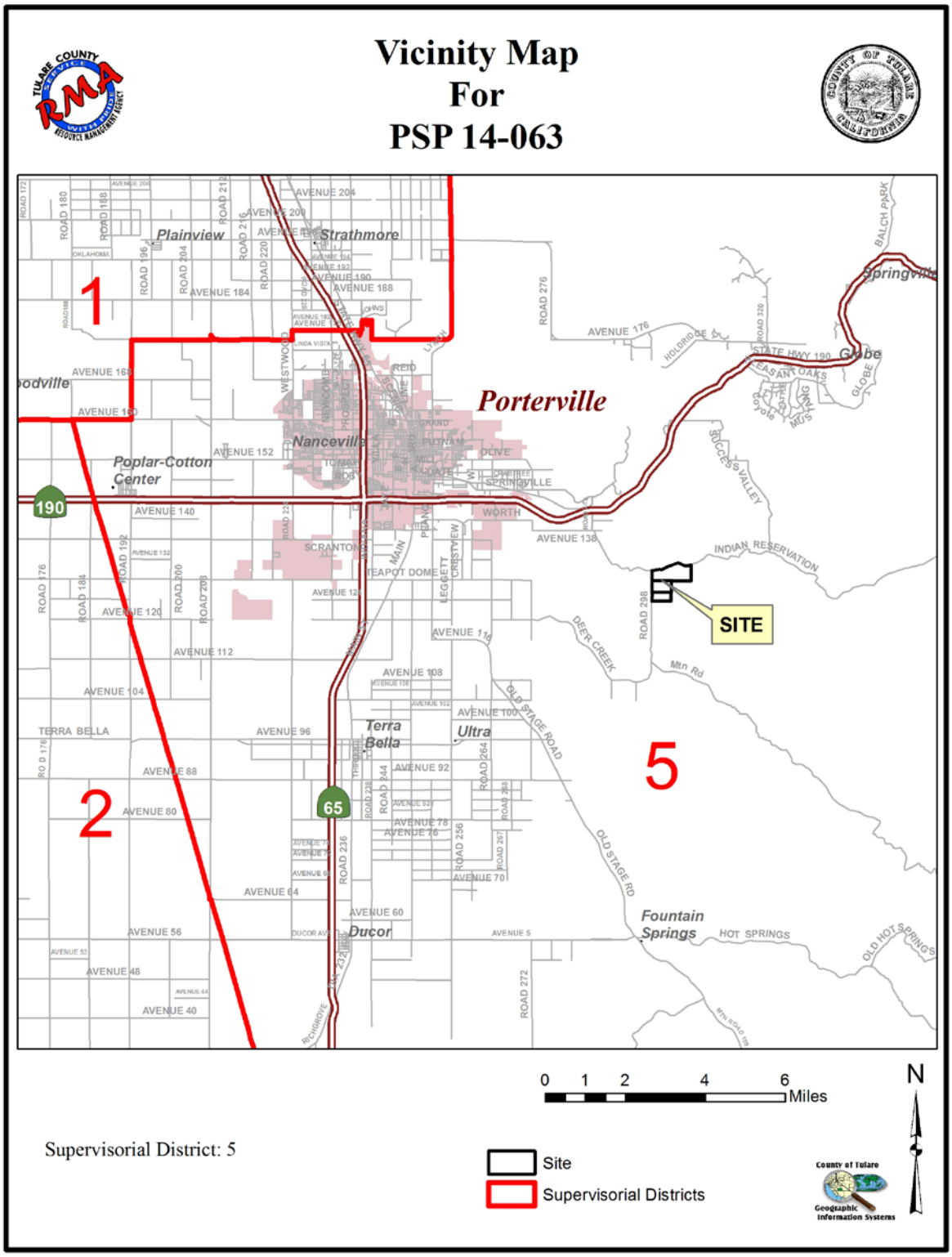
effect to a less than significant level (mitigation measures from Section E., "Earlier Analyses," may be cross-referenced).

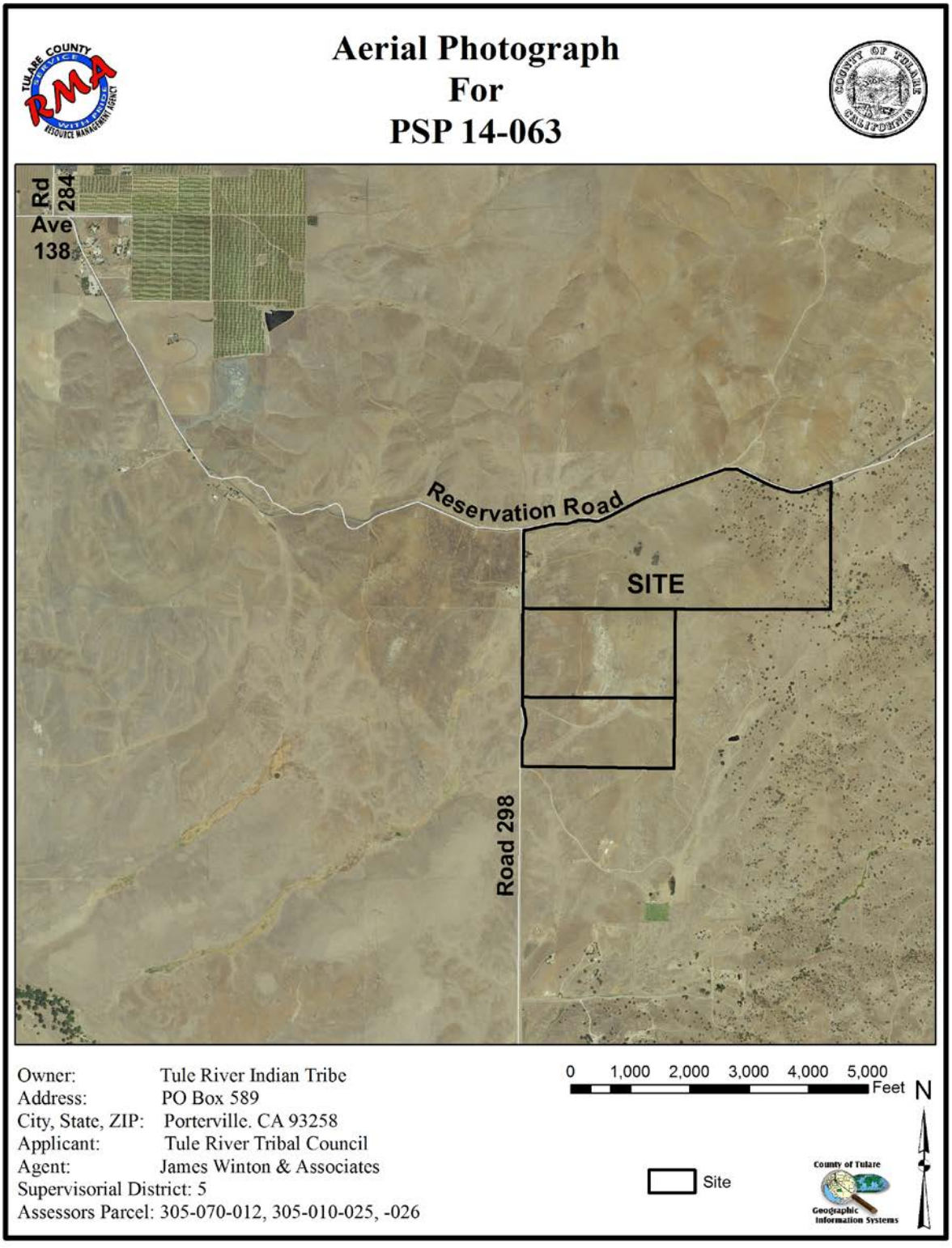
Earlier analyses may be used where, pursuant to the tiering program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration Section 15063(c)(3)(D). In this case, a brief discussion should identify the following.

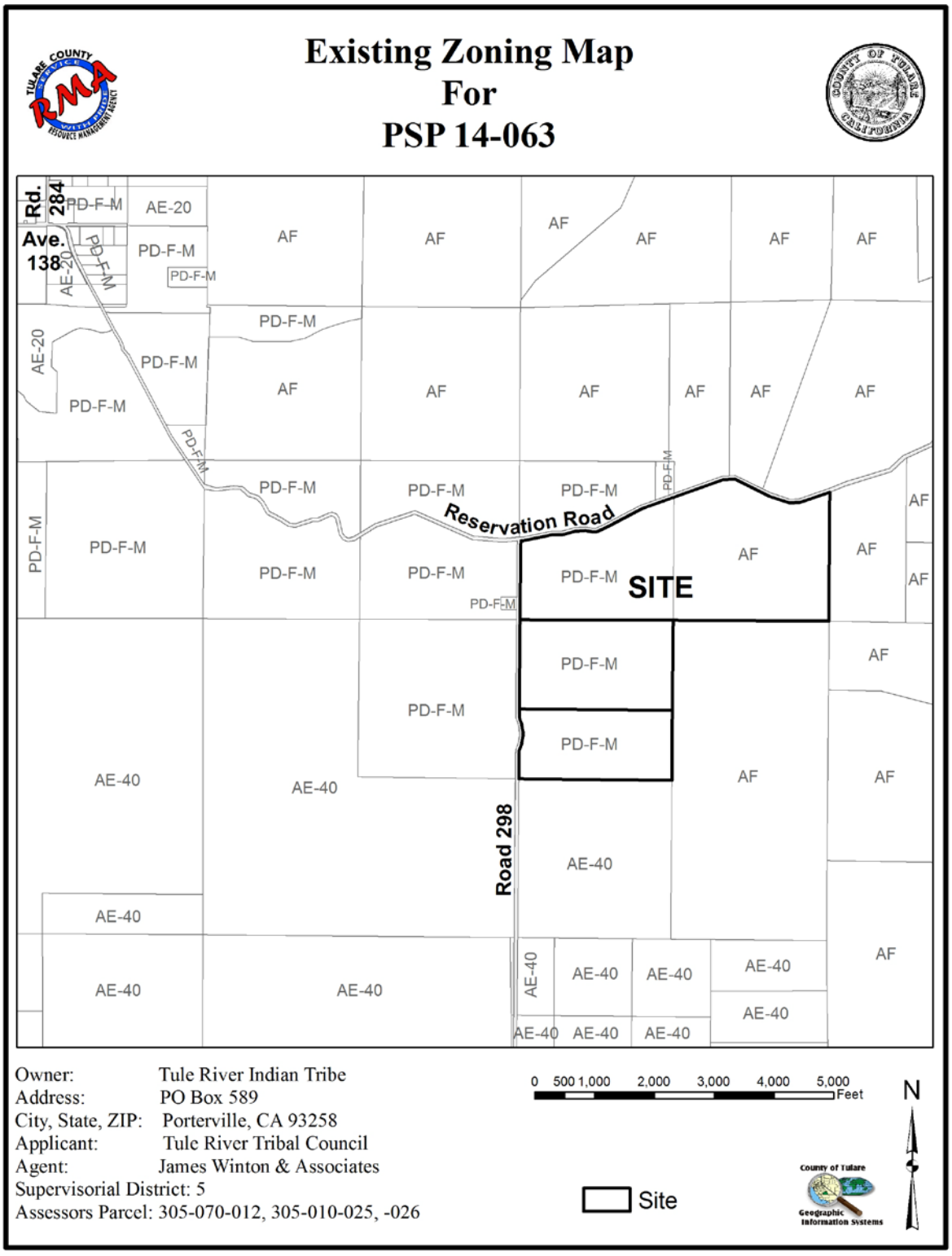
a) Earlier Analysis Used. Identify and state where they are available for review.

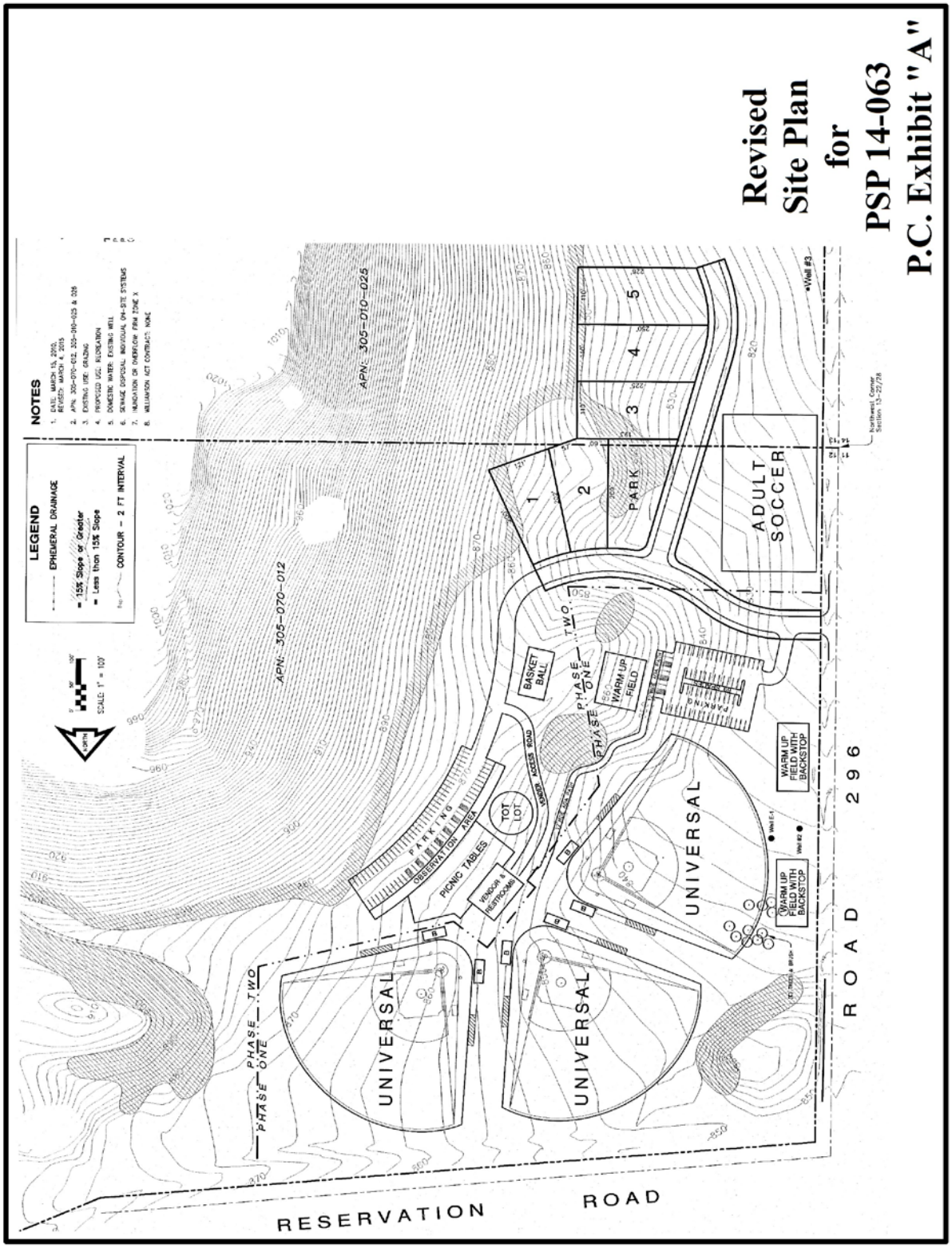
b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

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


Vicinity Map
For
PSP 14-063
Porterville
Plainview
Strathmore
Nanceville
Poplar-Cotton Center
Terra Bella
Ultra
Ducor
Fountain Springs
Springville
Globe
SITE
1
2
5
190
65
0 1 2 4 6 Miles
N
Supervisorial District: 5
Site
Supervisorial Districts
County of Tulare
Geographic Information Systems


Aerial Photograph
For
PSP 14-063
Rd 284
Ave 138
Reservation Road
SITE
Road 298
Owner: Tule River Indian Tribe
Address: PO Box 589
City, State, ZIP: Porterville. CA 93258
Applicant: Tule River Tribal Council
Agent: James Winton & Associates
Supervisorial District: 5
Assessors Parcel: 305-070-012, 305-010-025, -026
0 1,000 2,000 3,000 4,000 5,000
Feet
N
Site
County of Tulare
Geographic Information Systems


Existing Zoning Map
For
PSP 14-063
Rd. 284
Ave. 138
Reservation Road
Road 298
SITE
PD-F-M
AE-20
AF
AE-40
Owner: Tule River Indian Tribe
Address: PO Box 589
City, State, ZIP: Porterville, CA 93258
Applicant: Tule River Tribal Council
Agent: James Winton & Associates
Supervisorial District: 5
Assessors Parcel: 305-070-012, 305-010-025, -026
0 500 1,000 2,000 3,000 4,000 5,000 Feet
N
Site
County of Tulare
Geographic Information Systems


Revised
Site Plan
for
PSP 14-063
P.C. Exhibit "A"
NOTES
LEGEND
EPHEMERAL DRAINAGE
15% Slope or Greater
Less than 15% Slope
CONTOUR – 2 FT INTERVAL
SCALE: 1" = 100'
NORTH
APN: 305-010-025
APN: 305-070-012
RESERVATION ROAD
ROAD 296
PHASE ONE
PHASE TWO
UNIVERSAL
PARKING
OBSERVATION AREA
PICNIC TABLES
TOT LOT
VENDOR & RESTROOMS
BASKET BALL
WARM UP FIELD
WARM UP FIELD WITH BACKSTOP
PARK
ADULT SOCCER
1
2
3
4
5

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state or county designated scenic highway or county designated scenic road?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Analysis:

The proposed Project site is agricultural (grazing) land historically used for dry hay farming and cattle grazing. Non-native grasses are the predominant vegetation on the Project site. Twenty-foot umbrella trees and elderberry shrubs are located within the northwest corner of the Project site, approximately 400 feet south of Reservation Drive and 100 feet east of Road 296. The Project site has no naturally occurring or man-made aesthetic value. The Project site is adjacent to an existing single-family residence 400 feet to the west and ¼ mile from the southern boundary but is otherwise surrounded by agricultural (grazing) uses to the north, east, south, and west. The Project includes five (5) single-family residential units, a small community garden/park, and a sports park. The proposed sports park will not contain any structures other than a restroom/vendor building, picnic arbors, tot lot toy structure, and protective fencing around the fields. Although the sports park facility design has not been finalized, the design will consider potential visual impacts to the surrounding areas, and set-back and building height limitations contained in the Tulare County Zone Ordinance will also prevent any adverse impacts to a scenic vista. The proposed Project landscaping, including trees, various shrubs/bushes, and turf areas, will enhance the vista to surrounding land uses as it will replace the vacant lot currently located on the site.

a) The proposed Project will not adversely affect any scenic vista. Other than the structures noted in the discussion above, the Project will not include any other structure which may substantially impact a scenic vista. The residential units would be two stories or less, and would be developed in portions of the Project site with the lowest elevations. No parts of the Project would obstruct local scenic views, be visually intrusive or incompatible with the surrounding area, or be visible to large numbers of sensitive receptors. There will be ***No Impact*** to this resource.

b) The proposed Project site is adjacent to an existing single-family residence to the west and is surrounded in all directions by agricultural (grazing) uses. The Project site is vacant agricultural (grazing) land and vegetation is limited to non-native grasses and few trees and shrubs. The Project site in not located adjacent to or near a designated eligible Scenic Highway. The development area of the Project site is located on the western portion

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
of the parcels. The Project site does contain rock outcroppings and oak trees; however, the Project avoids these scenic resources completely. No trees will be removed to develop the Project. The eastern portion of the parcels contains scattered oak trees and several ridgelines with exposed bedrock outcroppings; however, these areas are outside of the development portion of the Project and will remain visible from adjacent roads and surrounding areas. No historic buildings are present on the subject parcel. As such, the Project will not damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state or county designated scenic highway or county designated scenic road. There will be ***No Impact*** to this resource. c) As noted earlier, the proposed Project site is agricultural (grazing) land predominantly vegetated with annual non-native grasses. The most frequent potential viewers of the Project would be the residents of the homes on adjacent properties directly west and north of the Project site and travelers along Reservation Road and County Road 296. The adjacent residences would experience changed views from their properties; however, the Project would be designed to not obstruct or substantially degrade the visual setting as the ridgelines and scattered trees located on the eastern portion of the Project site would remain undeveloped in their current state. There will be a ***Less Than Significant Impact*** to this resource. d) The most frequent potential viewers of the Project would be the residents of the homes on adjacent properties directly west and north of the Project site. The proposed Project will result in the creation of a new source of light or glare; however, Project lighting would not significantly affect day or nighttime views in the area. The design of the proposed athletic fields include lighting to allow the use of the fields for nighttime events. Operational hours of the sports park are 8:00 a.m. to 10:00 p.m. Monday through Saturday and 8:00 a.m. to 6:00 p.m. on Sunday. Athletic field lights will be turned on only as necessary due to accommodate weather or special events. All lighting would be downcast to minimize light pollution outside the development site. As nighttime use of the athletic fields would be occasional and lights would be turned off after hours, the Project would not create substantial light or glare affecting the views of the nearby residences. Minor increases in nighttime illumination due to individual home lighting of the five (5) residential units on the Project site would not contribute noticeably to light pollution. The impact to this resource is ***Less Than Significant.***				
2. AGRICULTURE RESOURCES: 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. 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	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Resources Agency, to non-agricultural use?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Analysis:

Agriculture is the most important sector in Tulare County's economy. As discussed in the Tulare County General Plan 2030 Update (August 2012), agricultural lands (crop and commodity production and grazing) are also 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 is essential to all County residents. In 2006, over 1.3 million acres of land in Tulare County were classified as "agricultural land. Of this land, more than 379,762 acres were classified as "Prime Farmland". Due to conversion to other/nonagricultural uses, the amount of prime farmland and the amount of land under Williamson Act Contracts in Tulare County has been declining.

The Project parcels are designated in the Tulare County General Plan 2030 Update as Foothill Mixed Use (FMU) and Foothill Agriculture (FA). The FMU designation establishes areas within the foothill development corridors for residential, commercial recreation, and light industrial uses. Uses typically allowed include: single-family and multi-family residential dwellings, eating and drinking establishments; food and beverage retail sales; limited personal, medical, professional services; repair services; retail sales; and agricultural-related industrial uses. Such facilities may range from a single use to a cluster of uses. The FA designation establishes areas for agricultural activities primarily located in the foothill and mountain regions where extensive commercial agricultural uses can exist without conflicting with other uses, or where conflicts can be mitigated. Uses typically allowed include orchards and vineyards, grazing of cattle, horses, sheep, and goats on grazing lands, resource extraction activities, facilities that directly support agricultural operations, and other necessary public utility and safety facilities. Allowable residential development includes one principal and one secondary dwelling unit per 160 acres, for relative, caretaker/employee, or farm worker housing.

The Foothill Growth Management Plan (FGMP), Chapter 3 of the Tulare County General Plan 2030 Update,

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
includes a development policies and standards that prescribe land use and circulation patterns for the foothills of Tulare County. The FGMP policies set guidelines for community identity, new development, recreation/open space, agriculture, environmental protection, scenic corridors protection, history/archaeology, infrastructure facilities, and public services. Development corridors within the FGMP are defined as areas in the foothills where development may occur provided it meets or demonstrates that it will meet the development standards of the FGMP. Lands identified as development corridors are designated as Foothill Mixed Use or are located within a Planned Community Area pursuant to Policy FGMP-1.13: Identity of Foothill Places. The Project parcels are located within the Tule River Development Corridor. a - e) The proposed Project will be constructed on approximately 22.3 acres of an existing 375.44-acre site. The Project site is located entirely on agricultural (grazing) land and is surrounded by agricultural (grazing) uses to the north, east, south, and west. The Project site is zoned PD-F-M (Planned Development, Foothill Combining, Special Mobilehome Zone) and, the proposed sports park is consistent with the Tulare County General Plan 2030 Update and is allowed by current zoning regulations with a special use permit. The remaining 353.14 acres of the Project site will remain in their current state and agricultural uses (grazing) will continue. As the Project site does not contain land designated 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, the Project will not result in the Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use. The Project site does contain some land designated as Farmland of Local Importance; however, the area of this land that would be converted is approximately 22 acres, which would account for the loss of less than 0.013 percent of Farmland of Local Importance in the County (California Department of Conservation, 2012). The Project will not convert prime agricultural land as defined in Section 51201(C) of the Govt. Code to non-agricultural use. The Project will not conflict with existing zoning for agriculture use or a Williamson Act contract, and it will not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources code 12220(g) or timberland (as defined in Public Resource Code section 4526).The Project site does not contain forest land so it will not result in the loss of forest land or conversion of forest land to non-forest use. The Project will 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 or conversion of forest land to non-forest use. There will be ***No Impacts*** to these resources.				
3. AIR QUALITY -- Where available, 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?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Analysis:

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. The SJVAB is managed by the San Joaquin Valley Air Pollution Control District (District).

Both the federal government (through the United State Environmental Protection Agency (EPA)) and the State of California (through the California Air Resources Board (ARB)) have established health-based ambient air quality standards (AAQS) for six air pollutants, commonly referred to as "criteria pollutants." The six criteria pollutants are: carbon monoxide (CO), ozone (O_3), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), particulate matter (PM_{10} and $PM_{2.5}$), 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.

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

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 designated non-attainment of state and federal health based air quality standards for ozone and respirable particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and is designated non-attainment for state and attainment for federal standards for particulate matter less than 10 microns in diameter (PM_{10}) . The federal classification for the SJVAB is extreme non-attainment for the 8-hour ozone standard. To meet Federal Clean Air Act requirements, the District adopted the 2007 Ozone Plan on April 30, 2007. The ARB approved the Plan on June 14, 2007, while the EPA approved the Plan effective April 30, 2012. The Plan projects that the Valley will achieve the 8-hour ozone standard for all areas of the SJVAB no later than 2023. The PM10 standard was been achieved and the US EPA re-classified the Air District as in attainment on September 25, 2008. Even after achieving the PM10 standard, the Air District is currently a PM10 Maintenance Area and all rules and regulations are still in effect. The SJVAB is designated non-attainment for the new state and federal PM2.5 (particulate matter less than 2.5 micrometers in diameter) annual standard. The District's federal PM2.5 attainment plan was adopted in December 2012. Measures contained in the 2007 PM10 Maintenance Plan will also help reduce PM2.5 levels and will provide progress toward attainment until new measures are implemented for the PM2.5 Plan, if needed. 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 PM10 and PM2.5 standards have no attainment planning requirements, but must demonstrate that all measures feasible for the area have been adopted.

a) Air quality plans (also known as attainment plans) and subsequent rules are used to bring the applicable air basin into attainment with federal ambient air quality standards designed to protect the health and safety of residents within that air basin. The Project will comply with all applicable District rules and regulations including, but not limited to, Regulation VIII (Fugitive PM10 Prohibitions) requirements and District Rule 9510 (Indirect Source Review). The District's 2015 Final Draft *Guidance for Assessing and Mitigating Air Quality Impacts* states, "…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 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". The District's thresholds of significance are provided in the table below.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Table 1. District Thresholds of Significance

Criteria Pollutant	Construction Related Activities Emissions (ton/year)	Operational Equipment/Activities (Permitted) Emissions (ton/year)	Operational Equipment/Activities (Non-permitted) Emissions (ton/year)
CO	100	100	100
NOx	10	10	10
ROG	10	10	10
Sox	27	27	27
PM_{10}	15	15	15
$PM_{2.5}$	15	15	15

RMA staff conducted a California Emissions Estimator Model (CalEEMOD) analysis to determine potential emissions during the construction and operational phases of the proposed Project. The Model output is included in this Initial Study as Attachment "A". As shown in Table 2, the model indicates that neither construction related nor operational emissions will exceed the District's criteria air pollutant thresholds.

Table 2. Project Criteria Pollutant Emissions

Criteria Pollutant	Construction Related Activities Emissions (ton/year)*	Operational Equipment/Activities (Permitted) Emissions (ton/year)	Operational Equipment/Activities (Non-permitted) Emissions (ton/year)
CO	8.53	N/A	2.72
NOx	5.78	N/A	0.27
ROG	5.58	N/A	5.05
SOx	0.01	N/A	0.01
PM_{10}	0.99	N/A	0.38
$PM_{2.5}$	0.46	N/A	0.31
* Emissions presented represent the highest annual emissions.			

As Project related emissions do not exceed the District's thresholds of significance, the proposed Project does not conflict with or obstruct implementation of any applicable air quality plan or rule. There will be ***No Impact*** to this resource.

b) The District's 2015 *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI), adopted on March 19, 2015, states, "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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

operational activities exceed the 100 pounds per day screening level of any criteria pollutant after implementation of all enforceable mitigation measures. Under such circumstance, the District recommends that an ambient air quality analysis be performed." The District's draft policy *Project Impact on Ambient Air Quality Under CEQA* (March 2015) provides guidance on how to estimate a project's daily emissions in pounds from an emissions analysis based on annual tons of emissions. The results of the CalEEMod analysis were used to calculate the daily emissions pursuant to the District's guidance. As shown in the table below, the model indicates that neither construction nor operational emissions exceed 100 pounds per day.

Table 3. Project Criteria Pollutant Emissions [a]

Criteria Pollutant	Construction Equipment/Activities Maximum Daily Emissions (pound/day)[b]	Operational Equipment/Activities Emissions (pound/day)
CO	37.50	14.91
NOx	25.40	1.48
ROG	24.54	27.68
SOx	0.06	0.03
PM_{10}	4.37	2.08
$PM_{2.5}$	2.03	1.71

a. Emissions calculated pursuant to SJVAPCD Draft Policy: Project Impact on Ambient Air Quality Under CEQA.
b. Emissions presented represent the highest annual emissions.

As Project related emissions do not exceed the 100 pound per day screening level, an ambient air quality analysis is not required. The proposed Project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation. There will be ***No Impact*** as a result of this Project.

c) As discussed in a and b above, the Project will not conflict with or obstruct implementation of any applicable air quality plan or rule, nor will it violate any air quality standard or contribute substantially to an existing or projected air quality violation. The net increase in criteria pollutant emissions from the proposed Project is negligible as Project emissions individually are below the District's threshold of significance. Compliance with District Regulation VIII (Fugitive PM10 Prohibition) requirements and District Rule 9510 (Indirect Source Review) will further ensure that cumulative growth does not result in an overall increase in emissions in the air basin and would not jeopardize attainment plan deadlines. The proposed Project will provide a community benefit as it will provide a local recreation opportunity for community residents that would otherwise have to drive longer distances to participate in community sporting events, thereby reducing potential vehicle-based pollutant emissions. Therefore, the cumulative net increase in criteria pollutants is ***Less Than Significant***.

d) The Project site is located in a sparsely inhabited rural area. No schools, hospitals, convalescent homes, or other sensitive institutions are located within several miles of the Project site. The proposed Project has the potential to temporarily expose the residents of nearby single-family residences to the north, west, and south of the Project site to increased criteria pollutant emission concentrations from diesel powered construction

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
equipment during the short-term construction phase. Particulate emissions from diesel powered construction equipment are considered a toxic air contaminant. However, construction emissions are temporary and the short-term nature of construction-relation emissions would not exceed District short term acute toxic risk thresholds. Therefore, the impact to this resource is ***Less Than Significant***. e) Potential odor sources associated with the proposed Project would originate from diesel exhaust from construction equipment during the construction period and possibly if paint is applied to any of the proposed structures. These odors, if perceptible, would dissipate rapidly as they mix with the surrounding air and would be of very limited duration. Therefore, any potential odor impacts would be considered as ***Less Than Significant***.				
4. BIOLOGICAL RESOURCES -- 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 Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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 Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
ordinance?				
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?	☐	☐	☐	☒

Analysis:

The Project site is agricultural (grazing) land with limited vegetative growth consisting primarily of annual non-native grasses and some localized trees and shrubbery. The Project site is devoid of riparian habitat or other natural communities making it unlikely that biological resources will be impacted as a result of the proposed Project. A Biological Resources Assessment (BRA) was performed by Analytical Environmental Services in December 2009 to determine potential impacts on biological species and identify potential mitigation measures. The BRA identified four (4) habitat types within the Project site: non-native annual grassland, limestone quarry, ruderal/developed, and ephemeral drainage. The California Natural Diversity Database (CNDDB) search included in the BRA indicated that there are six (6) special status plant species and six (6) special status wildlife species with the potential to occur within the Project site. The BRA results are included in this Initial Study as Attachment "B".

a) The BRA indicates the proposed Project site is within the historic ranges of twelve (12) special status species. Special status plant species include: Kaweah brodiaea, Springville clarkia, spiny-sepaled button-celery, striped adobe-lily, San Joaquin adobe sunburst, and Keck's checkerbloom. Special status wildlife species include: Valley elderberry longhorn beetle, California condor, pallid bat, western mastiff bat, American badger, and San Joaquin kit fox.

On September 17th, 2014, the U.S. Fish and Wildlife Service (USFWS) published its determination to withdrawal the October 2, 2012 Proposed Rule to remove the Valley elderberry longhorn beetle (VELB) from the Federal List of Endangered and Threatened Wildlife. With this decision the VELB remains protected under the Federal Endangered Species Act as a threatened species. However, in the same publication, the USFWS significantly reduced the southern portion of the VELB's presumed historic range, excluding Kings, Kern and Tulare Counties. As such, Tulare County is no longer considered within the range of the species, and new projects within its boundaries no longer need to consult with the Service regarding the VELB (Pearson, 2014). As such, mitigation measures identified in the BRA for VELB are not required.

Although the BRA indicated that historical occurrences of the special status species identified earlier (except VELB) have been documented in the vicinity of the proposed Project site, these species have not been observed and are unlikely to occur on the Project site. However, there remains a possibility that individuals could be found on the Project site. Construction-related activities have the potential to cause mortality if these species were present at the time of construction. Mortality as a result of the proposed Project is a potentially significant impact. Mitigation Measures contained in the Mitigation Monitoring and Reporting Program are included as part of this Mitigated Negative Declaration which are intended to prevent or minimize disturbance or accidental take of special status species. In the unlikely event of discovery of the above noted species on the site, protocols established by the U.S. Fish and Wildlife Service (USFW) or California Department of Fish and Wildlife (DFW)

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

will be implemented before any construction activities are allowed to commence. If discovery occurs during construction activities, all activities will be immediately ceased until a qualified biologist determines which course of action to implement per USFW or DFW protocols. Implementation of the following Mitigation Measures would reduce any Project related potential impacts to a ***Less Than Significant Impact***.

Kaweah brodiaea, Springville clarkia, spiny-sepaled button-celery, striped adobe-lily, San Joaquin adobe sunburst, and Keck's checkerbloom:

BIO-1 (Preconstruction Survey). Focused botanical surveys shall be conducted by a qualified botanist during the blooming periods for Kaweah brodiaea (April through June), Springville clarkia (May through June), spiny-sepaled button-celery (April through May), striped adobe-lily (February through April), San Joaquin adobe sunburst (March through April), and Keck's checkerbloom (April through May) prior to commencement of construction activities within the nonnative annual grassland. A letter report shall be completed following the pre-construction survey to document the results. Should no species be observed, then no additional mitigation is required.

BIO-2 (Avoidance). Should Kaweah brodiaea, Springville clarkia, spiny-sepaled button-celery, striped adobe-lily, San Joaquin adobe sunburst, and/or Keck's checkerbloom be observed during the focused botanical surveys, the biologist shall contact the Tribe within one day following the pre-construction survey to report the findings. A ten-foot buffer shall be established around the species using construction flagging prior to commencement of construction activities.

BIO-3 (Habitat Replacement/Relocation). Should avoidance of the state endangered or threatened plants including Kaweah brodiaea, Springville clarkia, striped adobe-lily, San Joaquin adobe sunburst, and/or Keck's checkerbloom be infeasible, then a Section 2081 permit from the CDFG would be required. Mitigation measures including the salvaging and the replanting of individuals onsite, would be discussed in detail within the permit.

BIO-4 (Habitat Relocation). Should avoidance of spiny-sepaled button-celery, a CNPS-listed IB species protected under the Native Plant Protection Act, as well as Springville clarkia and San Joaquin adobe sunburst (federally threatened), and Keck's checkerbloom (federally endangered), be infeasible, then the CDFG would be notified at least ten days prior to commencement of ground-breaking activities to provide the CDFG the opportunity to salvage and relocate the species from the Project site.

California condor:

BIO-5 (Preconstruction Survey). A pre-construction survey shall be conducted by a qualified biologist for California condor within seven days prior to commencement of construction activities. If no California condors are observed in the Project site, then no additional mitigation measures are required.

Pallid bat and western mastiff bat:

BIO-6 (Preconstruction Survey). If the ornamental trees (excluding elderberry shrubs) and the existing structure within the Project site are proposed for removal, a qualified wildlife biologist shall conduct a focused survey for roosting bats no more than two weeks prior to the onset of construction activities. Trees that contain cavities will

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

be thoroughly investigated for evidence of bat activity.

BIO-7 (Avoidance). If special status bats are found roosting within any trees and the existing structure slated for removal, the areas shall be demarcated by exclusionary fencing and avoided until a qualified biologist can assure that the bats have vacated.

American badger:

BIO-8 (Preconstruction Survey). A pre-construction survey shall be conducted by a qualified biologist for American badger within seven days prior to commencement of construction activities. If no American badgers are observed in the Project site, then no additional mitigation measures are required.

BIO-9 (Employee Education Program). Should American badger be observed in the Project site, then the biologist shall conduct sensitivity training to all crew members. The sensitivity training shall describe the biology and habitat requirements of the species and provide information as to what to do should any members identify the species within the Project site.

San Joaquin kit fox:

BIO-10 (Preconstruction Survey). Pre-construction surveys shall be conducted on the site no less than 14 days and no more than 30 days prior to the beginning of ground disturbance, construction activities, and/or any project activity likely to impact the San Joaquin kit fox. The primary objective is to identify kit fox habitat features (e.g., potential dens and refugia) on the project site and evaluate their use by kit foxes. If an active kit fox den is detected within or immediately adjacent to the area of work, the USFWS and CDFW shall be contacted immediately to determine the best course of action**.** Survey results must be received and approved by the USFWS and the CDFG prior to the onset of construction activities. If SJKF or its habitat is not detected within the project site, no further mitigation is required unless the USFWS deems additional mitigation measures.

BIO-11 (Avoidance). Should kit fox be found within the Project site during preconstruction surveys the Project will avoid the habitat occupied by kit fox and the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW will be notified.

BIO-12 (Minimization). Permanent and temporary construction activities and other types of Project-related activities shall be carried out in a manner that minimizes disturbance to kit foxes. Minimization measures include, but are not limited to: restriction of Project-related vehicle traffic to established roads, construction areas, and other designated areas; inspection and covering of structures (e.g., pipes), as well as installation of escape structures, to prevent the inadvertent entrapment of kit foxes; and proper disposal of food items and trash. See Appendix B for more details.

BIO-13 (Mortality Reporting). In the event of accidental death or injury to a San Joaquin kit fox during Project-related activities, the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFG shall be notified in writing within three working days. Notification shall include the date, time, location of the incident or of the finding of a dead or injured animal, and any other pertinent information.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

BIO-14 (Employee Education Program). Prior to the start of construction at the proposed Project site the applicant will retain a qualified biologist to conduct a meeting to train all construction staff that will be involved with the proposed Project on all sensitive biological resources, including the San Joaquin kit fox, with the potential to occur on or near the Project site. This training will include a description of the sensitive biological resources and their habitat requirements; a report of the occurrence of any sensitive biological resources in the proposed Project area; an explanation of the status of the species and its protection under the endangered species act; and a list of the measures being taken to reduce impacts to the species during proposed Project construction and implementation.

Historical occurrences of some special status species have been documented in the vicinity of the proposed Project site. However, these species have not been recently observed and are unlikely to occur on site. Construction-related activities have the potential to cause mortality if these species were present at the time of construction. In the unlikely event of discovery of the above noted species on the site, protocols established by the USFW or DFW will be implemented before any construction activities are allowed to commence. If discovery occurs during construction activities, all activities will be immediately ceased until a qualified biologist determines which course of action to implement per USFW or DFW protocols. Implementation of the identified mitigation measures would reduce potential impacts to a ***Less Than Significant Impact With Mitigation***.

b) As noted in item a., above, the proposed Project site is agricultural (grazing) land with minimal vegetative growth. Sensitive habitats or communities are those considered to be listed under the CNDDB for a project area. The BRA indicates that no riparian habitat or other sensitive natural communities were observed on the Project site. The closest sensitive community considered by the CNDDB is Sycamore Alluvial Woodland, which occurs more than two miles south of the Project parcels, and would not be impacted. While sparse native oak trees occur in oak savanna habitat in the eastern portion of APN 305-070-012, development of the Project will not impact this habitat or any native oak trees owing to project design and location on the western extent of the Proposed Project parcels. As no riparian habitat or other natural communities exist on the site there will be ***No Impact*** as a result of the proposed Project.

c) No wetlands are located on or near the Project site. Three (3) ephemeral drainages were observed on the Project site. Since these channels convey flows from direct precipitation, the frequency and duration in which water is held does not typically support a dominant hydrophytic plant community. Ephemeral drainages are typically dry for some portions of the year and have shorter periods of inundation. As the Project has been designed to avoid the creek and the ephemeral drainages there will be ***No Impact*** as a result of the proposed Project.

d) The subject site is not identified in the BRA as being a migration corridor or wildlife nursery for any wildlife species. However, the Project site is identified as potential nesting habitat for migratory bird species and other birds of prey. Construction-related activities have the potential to cause mortality if these species and their nests were present at the time of construction. Mortality as a result of the proposed Project is a potentially significant impact. Mitigation Measures contained in the Mitigation Monitoring and Reporting Program are included as part of this Mitigated Negative Declaration which are intended to prevent or minimize disturbance or accidental take of migratory bird species. In the unlikely event of discovery of the above noted species on the site, protocols established by the U.S. Fish and Wildlife Service (USFW) or California Department of Fish and Wildlife (DFW)

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

will be implemented before any construction activities are allowed to commence. If discovery occurs during construction activities, all activities will be immediately ceased until a qualified biologist determines which course of action to implement per USFW or DFW protocols. Implementation of the following mitigation measures would reduce any Project related potential impacts to a ***Less Than Significant Impact With Mitigation***.

BIO-15 (Preconstruction Survey). If construction begins during the nesting season for raptors and other migratory birds (between February and October), a qualified biologist shall conduct a pre-construction survey for active nests within 250 feet of the proposed project site no more than two weeks prior to construction. If no active nests are found, then no further mitigation is necessary.

BIO-16 (Avoidance). If any active nests are located in the project parcels, a 100-foot diameter buffer zone shall be established around the nest to maximum extent practicable. A biologist should monitor nests weekly during construction to evaluate potential nesting disturbance caused by construction activities. The boundary of the buffer shall be marked with yellow caution tape, surveyor's flagging, pin flags, stakes, etc. The buffer zone shall be maintained until the end of the breeding season or until the young have fledged. No construction activities should occur within 100 feet of a nest tree while young are in the nest. The biological monitor will have the authority to stop construction if construction results in evidence of potential nest abandonment. The caution tape, surveyor's flagging, pin flags, stakes, etc., may be removed when a biologist, whose qualifications are acceptable to approval agency staff, confirms that the nest(s) is no longer occupied and all young have fledged.

BIO-17 (Minimization). If an active nest occurs in a tree scheduled for removal or during demolition of an existing structure, the species of nesting bird shall be determined to identify whether the species is protected under the MBTA. The nest tree shall be preserved until the CDFG and/or USFWS is contacted to obtain guidance on alternative buffers based on the species requirements.

e) The Project site is agricultural (grazing) land with limited vegetative growth consisting primarily of annual non-native grasses and some localized trees and shrubs. While the overall Project parcels contain several native oak trees the eastern portion of APN 305-070-012, there are no oak or other native trees within the 22-acre development area of the Project site. The existing trees and shrubs will be removed in the development of the property; however, pursuant to mitigation measures BIO-7 the removal will occur only if the preconstruction survey by a qualified biologist indicates that the trees and shrubs are not inhabited by special status bat species. Furthermore, the trees are not native and removal will not conflict with any local tree preservation policies. The Environmental Resources Management Element (Chapter 8) of the Tulare County General Plan 2030 Update contains policies that new development be designed in a manner which minimizes disturbance of natural vegetation. There will be ***No Impact*** as a result of the proposed Project.

f) The Project is not within the boundaries of a habitat conservation plan, natural community conservation plan, or other approved habitat conservation plan. The Project does not conflict with any such plan in Tulare County and there will be ***No Impact*** as a result of the proposed Project.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
5. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
e) Disturb unique architectural features or the character of surrounding buildings?	☐	☐	☐	☒

Analysis:

a, b, and d) A Cultural Resources Study was conducted in December 2009 by Analytical Environmental Services to analyze potential impacts on historical, archaeological, and paleontological resources in the Project area (see Attachment "C"). Prior to the field survey, a records search was conducted by the California Historical Resources Information Center (CHRIS), Southern San Joaquin Valley Information Center (SSJVIC) located at California State University, Bakersfield (RS#s 09-464). The records search found that no cultural resources have been recorded inside or within ¼ mile of the Project area. The records search included an examination of the *California Inventory of Historic Resources*, *Five Views: An Ethnic Historic Site Survey for California*, *California Historic Landmarks*, *California Points of Historic Interest*, and the *Historic Properties Directory Listing for Tulare County*. The *Historic Properties Directory* includes the *NRHP*, the *California Register of Historical Resources*, and the most recent listings (through October 2009) of the *California Historical Landmarks and California Points of Historical Interest.* Although the records search revealed that no cultural resources studies have been conducted within the limits of the current Project area, three (3) surveys have been conducted adjacent to or within ¼ mile of the proposed Project site. The records search found there are no known/recorded cultural resources inside or within ¼ mile of the proposed Project site. The Native American Heritage Commission (NAHC) was consulted and responded stating that no cultural properties were identified in the search of the Sacred Lands File. Two Native American contacts were identified by NAHC and were letters were solicited requesting information regarding potential cultural resources; no responses to these requests were received.

The field survey found three (3) previously unrecorded resources and one (1) isolated historic-period artifact which included two (2) rock alignments (TR-1 and TR-2), a historic-period stone quarry (TR-3), and hole-in-top paint can (IF-1). Three (3) noted finds and one isolated find were also encountered during the visual inspection of the property. These finds are considered *a priori* insignificant features and objects. Of the resources documented, only TR-2 lies within the Project area. No artifacts were observed in association with TR-2.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Resource TR-2 is will be impacted by the proposed Project; however, TR-2 was evaluated and found to be *not significant* under the criteria of the National Register of Historic Places (NRHP) and the California Register of Historic Resources (CRHR).

The proposed Project would not result in a substantial adverse change in the significance of an historical or archaeological resource as defined in Section 15064.5 of the CEQA Guidelines. Although no cultural resources were identified in the records search, there will, nonetheless, be a potentially significant impact if historical resources were uncovered during proposed Project construction; however, implementation of the following Mitigation Measures contained in the Mitigation Monitoring and Reporting Program are included as part of this Mitigated Negative Declaration to reduce potential impacts to historical or archaeological resources to a ***Less Than Significant*** level.

CUL-1. If, in the course of Project construction, any archaeological or historical resources are uncovered, discovered, or otherwise detected or observed, activities within one hundred (100) feet of the find shall be ceased. A qualified archaeologist shall be contacted and advise the County of the site's significance. If the findings are deemed significant by the Tulare County Resources Management Agency, appropriate mitigation measures shall be required prior to any resumption of work in the affected area of the proposed Project. Where feasible, mitigation achieving preservation in place will be implemented. Preservation in place may be accomplished by, but is not limited to: planning construction to avoid archaeological sites or covering archaeological sites with a layer of chemically stable soil prior to building on the site. If significant resources are encountered, the feasibility of various methods of achieving preservation in place shall be considered, and an appropriate method of achieving preservation in place shall be selected and implemented, if feasible. If preservation in place is not feasible, other mitigation shall be implemented to minimize impacts to the site, such as data recovery efforts that will adequately recover scientifically consequential information from and about the site. Mitigation shall be consistent with CEQA Guidelines section 15126.4(b)(3).

CUL-2. If cultural resources are encountered during construction or land modification activities work shall stop and the County shall be notified at once to assess the nature, extent, and potential significance of any cultural resources. If such resources are determined to be significant, appropriate actions shall be determined. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions to be determined by a qualified archaeologist. For example, activities within 50 feet of the find shall be ceased.

No formal cemeteries or other places of human internment are known to exist on the proposed Project site. Although no remains are expected to occur on the Project site, there will be a potentially significant impact if remains were uncovered during proposed Project construction. Implementation of the following Mitigation Measures contained in the Mitigation Monitoring and Reporting Program is included as part of this Mitigated Negative Declaration to reduce potential impacts to historical or archaeological resources to ***Less Than Significant***.

CUL-3. In accordance with State Health and Safety Code Section 7050.5 and Public Resource Code Section 5097.98, if human remains are unearthed during project construction, no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and disposition of such remains. If the remains are determined to be Native American, the Coroner must notify the Native American Heritage Commission

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
(NAHC) within 48 hours of the Coroner's determination. The NAHC will then identify the person(s) thought to be the most likely descendent of the deceased Native American, who will then assist in determining what course of action shall be taken in handling the remains. c) No paleontological resources are known to exist within the proposed Project area, nor are there any known geologic features in the proposed Project area. Project construction is not expected to disturb any paleontological resources not previously disturbed; however, the mitigation measures discussed in item a., above, will ensure proper investigation and handling of any discovery. If, in the course of Project construction or operation, any archaeological, paleontological, or historical resources are uncovered, discovered, or otherwise detected or observed, activities within one hundred (100) feet of the find shall immediately cease. A qualified archaeologist/paleontologist shall be contacted and advise the County of Tulare of the site's significance. If the findings are deemed significant by the Tulare County Resources Management Agency, appropriate measures shall be required prior to any resumption of work in the affected area of the proposed Project area. The impact to this resource is ***Less Than Significant***. e) The proposed park will not disturb unique architectural features or the character of surrounding buildings. The site is located adjacent to single-family residences to the west and south, and agriculture (grazing) to the north, east, south, and west. As such, these uses do not do not have unique architectural features or characteristics that will be adversely impacted by the proposed Project. There will be ***No Impact*** to this resource				
6. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to 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 42	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
v) Subsidence?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Analysis:

Ground shaking is the primary seismic hazard in Tulare County. The Official Maps of Earthquake Fault Zones delineated by the California Geological Survey, State of California Department of Conservation, under the Alquist-Priolo Earthquake Fault Zoning Act, indicate that there are no substantial faults known to occur in Tulare County. The nearest known faults likely to affect the proposed Project site are the San Andreas Fault (approximately 40 miles west of Tulare County) and the Owens Valley Fault Group (more than 50 miles east of the Project site). According to the Health and Safety Element (Chapter 10) of the Tulare County General Plan2030 Update, the Project site is located within an area of minor potential shaking intensity of MMI level VI to VII. The USGS describes a level VII earthquake as: "Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken" (USGS, 1989). The General Plan contains policies to ensure developments are constructed in compliance with the latest edition of the California Building Code.

a.i.) There are no substantial faults known to occur in Tulare County. All structures will be constructed in compliance with the California Building Code. As such, the risk of injury to persons caused by seismic activity is very minimal. There will be a ***Less Than Significant Impact***.

a.ii.**)** Any potential impacts regarding strong seismic ground shaking have been discussed in Impact VI. a.i. There will be ***No Impact***.

a.iii.) According to the Health and Safety Element (Chapter 10) of the Tulare County General Plan 2030 Update, the Project site is located within an area of minor potential shaking intensity of MMI level VI to VII. As such, the Project site has a low risk of liquefaction. No subsidence-prone soils or oil or gas production is involved with the Project. There will be ***No Impact***.

a.iv.) According to the Health and Safety Element (Chapter 10) of the Tulare County General Plan 2030 Update, the Project site is located within an area of minor potential shaking intensity of MMI level VI to VII. As such, the Project site would have a minimal risk of landslides. No geologic landforms exist on or near the site that

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

would result in a landslide event. There will be ***No Impact***.

a.v.) The proposed Project does not contain any activity that will result in result subsidence. However, according to the Health and Safety Element (Chapter 10) of the Tulare County General Plan 2030 Update, the proposed Project site has a low to moderate risk of subsidence. The impact would be ***Less Than Significant***.

b) Site construction activities would involve earthmoving activities These activities could expose soils to erosion processes. The extent of erosion would vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. To prevent water and wind erosion during the construction period, a Storm Water Pollution Prevention Plan (SWPPP) will be developed for the Project as required for all projects which disturb more than one (1) acre in size. As part of the SWPPP, the applicant 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. Incorporation of the requirements of the SWPPP during construction activities in addition to the following Mitigation Measures would reduce potential impacts from loss of topsoil and substantial soil erosion to a ***Less Than Significant Impact With Mitigation***.

GEO-1. If ground disturbing activities, including but not limited to vegetation removal, clearing and grubbing, grading, excavation, stockpiling, and backfilling, occur during the rainy season (October 15th to May 1st), storm runoff from the construction area shall be regulated through a stormwater management/erosion control plan that shall include temporary onsite silt traps and/or basins with multiple discharge points to natural drainages and energy dissipaters. Stockpiles of loose material shall be covered and runoff diverted away from exposed soil material. If work stops due to rain, a positive grading away from slopes shall be provided to carry the surface runoff to areas where flow would be controlled, such as the temporary silt basins. Sediment basins/traps shall be located and operated to minimize the amount of sediment transport off-site. Any trapped sediment shall be removed from the basin or trap and placed at a suitable location on site, away from concentrated flows, or removed to an approved disposal site.

GEO-2. Temporary erosion control measures (such as fiber rolls, staked straw bales, detention basins, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) shall be provided until perennial or landscaping vegetation is established.

GEO-3. No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months (October 15th to May 1st).

GEO-4. Erosion protection shall be provided on all cut-and-fill slopes. Revegetation shall be facilitated by mulching, hydroseeding, or other methods and shall be initiated as soon as possible after completion of grading and prior to the onset of the rainy season.

c) None of the soil units within the proposed development area of the Project site are noted in the NRCS Soil Survey as having qualities unsuitable for construction. According to the Health and Safety Element (Chapter 10) of the Tulare County General Plan 2030 Update, the proposed Project site has a low to moderate risk of subsidence. Construction in compliance with California Building Code standards would reduce potential hazards from lateral spreading and liquefaction. Substantial grade change would not occur in the topography to the point

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
where the proposed Project would expose people or structures to potential substantial adverse effects on, or offsite, such as landslides, lateral spreading, liquefaction or collapse. The impact would be ***Less Than Significant Impact***. d) None of the soil units within the proposed development area of the Project site are noted in the NRCS Soil Survey as having qualities unsuitable for construction. Descriptions of onsite soils do not indicate a potential for expansive tendencies. Project engineering and design features in compliance with California Building Code will ensure that proper preventative measure will be taken to eliminate any adverse impacts on the proposed Project. This impact would be ***Less Than Significant***. e) The proposed Project includes the use of private domestic wells and individual septic systems. Each septic system would consist of a septic tank with inspections ports, effluent filter, service line cleanout, distribution box, and leach field lateral piping with inspection ports. The exact length, location, and configuration of each leach field will be determined during site specific percolation tests. The Project engineering and design features in compliance with California Building Code will ensure the proper preventative measures will be taken to eliminate any adverse impacts from the use of individual septic systems. There will be ***No Impact***.				
7. GREENHOUSE GAS EMISSIONS -- Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐
Analysis: This Initial Study/Negative Declaration is relying on the guidance and expertise of the San Joaquin Valley Air Pollution Control District (District) in addressing greenhouse gas (GHG) emissions. The following are excerpts contained in the San Joaquin Valley Air Pollution Control District's 2015 Final Draft Guidance for Assessing and Mitigating Air Quality Impacts: (at Section 8.9) "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*."				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

These documents and the supporting staff report are available on-line at the District's website at *www.valleyair.org/Programs/CCAP/CCAP_idx.htm*.

(Section 8.9.1) "By enacting SB 97 in 2007, California's lawmakers expressly recognized the need to analyze greenhouse gas emissions as a part of the CEQA process. SB 97 required OPR to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of greenhouse gas emissions. Those CEQA Guidelines amendments clarified several points, including the following:

- Lead Agencies must analyze the greenhouse gas emissions of proposed projects, and must reach a conclusion regarding the significance of those emissions. [See CCR §15064.4];
- When a project's greenhouse gas emissions may be significant, Lead Agencies must consider a range of potential mitigation measures to reduce those emissions. [See CCR §15126.4(c)];
- Lead Agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change. [See CCR §15126.2(a)];
- Lead Agencies may significantly streamline the analysis of greenhouse gases on a project level by using a programmatic greenhouse gas emissions reduction plan meeting certain criteria. [See CCR §15183.5(b)];
- CEQA mandates analysis of a proposed project's potential energy use (including transportation-related energy), sources of energy supply, and ways to reduce energy demand, including through the use of efficient transportation alternatives. (See CEQA Guidelines, Appendix F.)

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 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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
thresholds, the reader is referred to the above referenced staff report, District Policy, and District Guidance documents." a and b) The Tulare County Climate Action Plan (CAP) serves as a guiding document for County actions to reduce GHG emissions and adapt to the potential effects of climate change. The CAP is an implementation measure of the 2030 General Plan Update which provides the supporting framework for development in the County. The CAP builds on the General Plan's framework with more specific actions that will be applied to achieve emission reduction targets required by State of California legislation. The Tulare County General Plan 2030 Update fulfills many sustainability and GHG reduction objectives at the program level. Individual projects that will implement the General Plan will comply with these policies resulting in long-term benefits to GHG reductions that will help the County achieve the CAP reduction targets. The CAP identifies the policies from the various General Plan elements that promote more efficient development, and reduce travel and energy consumption. The proposed Project will result in very nominal and short term GHG emissions from earthmoving and other construction equipment and worker vehicle trips during the construction stage. Operation of the Project would directly emit GHG emissions from landscaping equipment, natural gas used for cooking and heating, residential vehicle trips, and maintenance worker trips, and indirectly from electricity usage. However, the proposed Project will provide many GHG emission reduction benefits as residents of the Tule River Reservation will have access to a community park within a reasonable walking distance or shorter driving distance, residents will not have to travel outside of their community to enjoy a recreational option thus avoiding GHG emissions caused by vehicle travel, and the park will be planted with trees that will sequester GHG emissions throughout the life of the trees. Thus, the proposed Project will not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance, nor will the proposed Project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. The impacts will be ***Less Than Significant***.				
8. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
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 or risk explosion?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	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?	☐	☐	☐	☒
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 the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐
i) Expose people to existing or potential hazards and health hazards other than those set forth above?	☐	☐	☒	☐

Analysis:

a-d) The Project site is not located within ¼ mile of a school and is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The use of hazardous materials, such as gasoline, diesel fuel and hydraulic fluid would be transported and used on the Project site during construction activities. The contractor would be responsible for compliance with California Health and Safety Code regulations. If construction of the Project would require use of hazardous materials in reportable amounts, the contractor would be required to submit a Hazardous Materials Business Plan (HMBP) that includes emergency response information. In addition to the HMBP, projects disturbing more than one (1) acre of land are required to prepare a Storm Water Pollution Prevention Plan (SWPPP) to obtain coverage under the State's National Pollution Discharge Elimination System General Permit for Discharges of Storm Water Associated with Construction Activity. Incorporation of the requirements of the HMBP and SWPPP during construction activities in addition to the following Mitigation Measure would reduce potential impacts from transport, use, and accidental release to ***Less Than Significant Impact With Mitigation***.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

HAZ-1. The following best management practices (BMPs) shall be added to the Project site SWPPP to reduce the impacts from routine use, transport, and disposal of hazardous materials from construction:

- Hazardous materials such as fuels and solvents used on the construction sites shall be stored in covered containers and protected from rainfall, runoff, vandalism, and accidental release to the environment.
- All stored fuels and solvents shall be contained in an area of impervious surface with containment capacity equal to the volume of materials stored.
- A stockpile of spill cleanup materials shall be readily available at all construction sites. Employees shall be trained in spill prevention and cleanup, and individuals shall be designated as responsible for prevention and cleanup activities.
- Equipment shall be properly maintained in designated areas with runoff and erosion control measures to minimize accidental release of pollutants.

e-f) The nearest airport, Porterville Municipal Airport (located in Porterville, CA), is approximately eight (8) miles west of the proposed Project site. As such, the airport would pose no safety hazard to residents or persons utilizing the sports park. There will be ***No Impact.***

g) The proposed Project will not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. However, construction of the proposed Project has the potential to impact fire and emergency vehicles entering and exiting the Project site during construction activities. Implementation of the following Mitigation Measure would reduce impacts to a ***Less Than Significant Impact With Mitigation.***

HAZ-2. Access into and out of the Project shall be maintained at all times during construction. The Fire Department and other emergency vehicles must be able to enter and exit the Proposed Project for the duration of construction.

h) The Project is located in the eastern foothills of Tulare County. Figure 10-2 of the Tulare County 2030 General Plan Update indicates the Project is located in an area with high to very high threat of fire. Cal Fire's Fire Hazard Severity Zones in State Responsibility Areas map (2007) also indicates that the Project is located in an area designated as moderate to high threat of wildland fire. The wells that will serve the Project were rated at a potential safe yield of 74 gallons per minute (gpm). This is not sufficient to provide 1,000 gpm emergency fire flow to the residences directly from the wells. However, a 74 gpm well can fill a water tank to sufficient capacity in 24 hours to provide adequate fire flow. Therefore, a potable water storage tank will be constructed on the site in order to provide both potable water and adequate fire flow capacity in compliance with the requirements of the California Fire Code. The following Mitigation Measures contained in the Mitigation Monitoring and Reporting Program are included as part of this Mitigated Negative Declaration to reduce potential impacts from exposure to wildland fires to a ***Less Than Significant Impact With Mitigation***.

HAZ-3. During construction, staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a fire break.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<u>HAZ-4.</u> Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws. **<u>HAZ-5.</u>** The onsite water storage tank will be sized and sited to provide adequate fire flow at the appropriate pressure to serve the entire project at full build-out plus the five homes that are not part of the project. Calculation of the exact size and location shall be performed by a licensed civil engineer to meet the requirements of the California Building Code. The size and location shall be included in the site plan for approval during the Building Permit process. i) Tulare County Environmental Health Services Agency conducted a records search for any hazardous spills or materials, or any other environmental concern to the Agency for the proposed Project site (Martens, 2015). The search indicated that there are no files for the proposed site. There is one (1) abandoned adit on the Project site. The adit is secured by a heavy door, access will be limited to authorized personnel only, and the nearest proposed residential unit is over 1,000 feet away. As such, the Project will not result in any hazard; nor will the proposed Project result in any potential hazards or health hazards other than those set forth in this resource. There will be a ***Less Than Significant Impact***.				
9. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge or the direction or rate of flow of ground-water 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)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course or stream or river, or substantially increase the rate or amount of surface runoff in a manner which	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
would result in flooding on- or off-site?				
e) 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?	☐	☐	☐	☒
f) Otherwise substantially degrade surface or groundwater quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) 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, or inundation by seiche, tsunami or mudflow?	☐	☐	☐	☒

Analysis:

The proposed Project is located within the Tulare Lake Hydrologic Region, San Joaquin Valley Groundwater Basin, Tule Sub basin. The Tulare Lake Hydrologic Region covers approximately 10.9 million acres (17,000 square miles) and includes all of Kings and Tulare counties and most of Fresno and Kern counties. In general, groundwater quality throughout the region is suitable for most urban and agricultural uses with only local impairments. The primary constituents of concern are high TDS, nitrate, arsenic, and organic compounds; and areas with high TDS content are primarily along the west side and in the trough of the San Joaquin Valley (DWR, 2003). The Project is situated within the rolling foothills that drain towards the South Fork of the Tule River south of Lake Success. The South Fork of the Tule River is not listed as a Wild and Scenic River. Surface drainage on the Project site generally flows in a westerly to southwesterly direction along ephemeral drainages. Ephemeral drainages are seasonal features that typically convey rainwater and surface runoff flows seasonally and for short time periods, and they are classified as "other waters" under the Clean Water Act (CWA). The three (3) onsite ephemeral drainages have no direct or indirect hydrologic connectivity to a traditional navigable waterway (or "waters of the US") and are not considered jurisdictional waters under the CWA. The drainage pattern of the site has been previously altered by the construction of access roads. The ephemeral drainages do not flow offsite and dissipate into sheet flow prior to reaching the Project development area.

a) Equipment and materials used during construction of the Project have the potential to leak fluids (such as gasoline and diesel fuels, oils, greases, concrete, paints, and adhesives), thereby discharging pollutants into stormwater, resulting in a violation of water quality standards. However, the Tribe's contractor would be responsible for compliance with all California Health and Safety Code regulations. If construction of the Project

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

would require use of hazardous materials in reportable amounts, the contractor would be required to submit a Hazardous Materials Business Plan (HMBP) that includes emergency response information. In addition to the HMBP, projects disturbing more than one (1) acre of land are required to prepare a Storm Water Pollution Prevention Plan (SWPPP) to obtain coverage under the State's National Pollution Discharge Elimination System General Permit for Discharges of Storm Water Associated with Construction Activity. Wastewater treatment also has the potential to violate water quality standards or waste discharge requirements. Treatment of wastewater will be achieved via individual septic systems. Each septic system would consist of a 1,500 gallon septic tank with inspections ports, effluent filter, service line cleanout, distribution box, and approximately 450 feet of leach field lateral piping with inspection ports. The exact length, location, and configuration of each leach field will be determined during site specific percolation tests. The Project engineering and design features in compliance with California Building Code and Waste Discharge Requirements will ensure the proper preventative measures will be taken to eliminate any adverse impacts from the use of individual septic systems. Incorporation of the requirements of the HMBP and SWPPP during construction activities and use of properly designed septic systems along with implementation of the following Mitigation Measures would reduce potential impacts to water quality and waste discharge to ***Less Than Significant With Mitigation***.

HYD-1. Implement erosion control mitigation measures described in the Geology and Soils section of this IS/MND (Mitigation Measures GEO 1-4).

HYD-2. Implementation of the hazardous materials BMPs identified in the Hazardous Materials section of this IS/MND (Mitigation Measure HAZ 1).

b) Water conservation techniques will be implemented to minimize the usage of water at the proposed Project site. The Project will be designed such that residential indoor water use will be minimized through design elements meeting the 2010 CALGreen Code. Outdoor water use would be minimized using weather or soil-moisture based controllers that automatically adjust irrigation based on weather conditions (§4.304.1), and surface drainage would be controlled with bio-swales or vegetated drainages, water retention gardens, and permeable surfaces. Also, very low and low water use, drought resistant plants will be specified except in areas where drainage patterns will yield wetter conditions and medium water use plants are more appropriate due to the micro-climate of the specific planter area. The proposed Project will not deplete groundwater supplies or interfere substantially with groundwater recharge or the direction or rate of flow of ground-water such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Impacts to groundwater supplies will be ***Less Than Significant***.

c - f) The majority of construction activity for the proposed Project will be in the form of earthmoving, grading, and excavation activities of the proposed sports park. The project will not result in direct on- or off-site erosion. There are three (3) ephemeral drainages on the Project site; however, these drainages are not located in the Project development area. As noted in the discussions of items 6.b. (Geology and Soils), 8.b (Hazards and Hazardous Materials), and 9.a above, to prevent water and wind erosion during the construction period, a Storm Water Pollution Prevention Plan (SWPPP) will be developed for the Project as required for all projects which disturb more than one (1) acre in size. As part of the SWPPP, erosion control measures will be required to protect the topsoil. As a result of these efforts, loss of topsoil and substantial soil erosion during the construction period are not anticipated.. Thus, the proposed Project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
of polluted runoff. There will be ***No Impact*** as a result of the proposed Project. g - h) According to information provided in the 2009 National Flood Insurance Rate Map prepared for the Federal Emergency Management Agency, the entire proposed Project sites lies within Flood Zone X (areas of 0.2% annual chance of flood; areas of 2% annual chance flood with average depths of less than one foot or with drainage areas less than 1 square mile and areas protected by levees from 1% annual chance flood). The only structures that will be constructed within the proposed sports park are the picnic arbors, restroom/vendor building, and tot lot toy structure; none of the residential units will be located within a 100-year flood hazard area. There will be ***No Impact***. i) The Project is not located in a FEMA-designated flood zone, nor is it in an area protected from flooding by a dam or levee. The Project is not located in an area that would be inundated by seiche, tsunami or mudflow. Therefore, the Project will not 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, or inundation by seiche, tsunami or mudflow. There will be ***No Impact***.				
10. LAND USE PLANNING -- Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
Analysis: a) The proposed Project site is agricultural (grazing) land historically used for dry hay farming and cattle grazing. The site is adjacent to existing single-family residences 400 feet to the west and ¼ mile from the southern boundary but is otherwise surrounded by agricultural (grazing) uses to the north, east, south, and west. The Project includes five (5) single-family residential units, a small community garden/park, and a sports park. Developing the proposed Project would not provide significant barriers to connectivity between the two (2) existing residences and the City of Porterville and the Tule River Reservation; therefore the Project will not result in physically dividing an established community. The Project would allow additional housing and community facilities to be built for Tribal members and guests and will have a beneficial impact on the Tribal community. There will be ***No Impact*** to this resource. b) The proposed Project is located in the Tule River Development Corridor within the Foothill Growth				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Management Plan area and is designated as PD-F-M (Planned Development, Foothill Combining, Special Mobilehome). The Project is consistent with the Tulare County General Plan 2030 Update and is allowed by current zoning regulations with a special use permit, while the five (5) residential units that are not part of the Project are allowable uses under the current land use designations and zoning. The Tulare County General Plan 2030 Update contains numerous policies supporting the development of community parks. Key policies include the following: • Policy LU-6.1 encourages the development of centrally located public activity centers, including parks; • Housing Policy 3.12 supports locally initiated programs to provide neighborhood parks and recreational facilities for residential areas within unincorporated communities; • Policy ERM-5.2 states that the County shall provide a broad range of active and passive recreational opportunities within community parks; • Policy ERM-5.4 Park-Related Organizations which states: "The County shall consider the use of existing entities or the creation of assessment districts, landscape and lighting districts, County service areas, community facilities districts, homeowners associations, or other types of districts to generate funds for the acquisition and development of parkland and/or historical properties as development occurs in the County." • Policy HS-9, states that "the County shall require where feasible the development of parks, open space, sidewalks and walking and biking paths that promote physical activity…" Based on the above policies, the proposed sports park is compatible with policies in the Tulare County General Plan. As the project is consistent with current zoning and does not conflict with the policies contained in the General Plan, the Project does not conflict with any applicable land use plan, policy, or regulation. Therefore, there will be ***No Impact*** to this resource. c) As discussed in the Biological Resources section, the Project would not conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, there will be ***No Impact*** to this resource.				
11. MINERALS AND OTHER NATURAL RESOURCES -- Would the project:				
a) Result in a loss of availability of a known mineral or other natural resource (timber, oil, gas, water, etc.) that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒
Analysis: a) Small open pit quarry areas and an abandoned adit are contained within the Project site. However, according to the Department of Conservation, Office of Mine Reclamation, these are closed with no intent to resume				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
operations. According to the CA Department of Conservation, Division of Oil, Gas, and Geothermal Resources, the only three areas within Tulare County that produce gas and oil are the Deer Creek, North; Deer Creek; and Terra Bella fields located a few miles east of the Project site. No oil or gas wells are located within or near the proposed Project development area. Timber and water resources are also absent within and near the proposed Project area. The proposed Project will result in ***No Impact*** to this resource. b) The Environmental Resources Management Element (ERME) (Chapter 8) of the Tulare County General Plan 2030 Update states, "…the most important minerals that are extracted in Tulare County are sand, gravel, crushed rock, and natural gas." The ERME also notes that, "There are three streams that have provided the main source of high quality sand and gravel in Tulare County to make PCC and AC. They include the Kaweah River, Lewis Creek, and the Tule River." These streams are neither within nor near the proposed Project area. The proposed Project will result in ***No Impact*** to this resource.				
12. NOISE -- Would the project:				
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?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
Analysis: The Health and Safety Element (Chapter 10) of the Tulare County General Plan 2030 Update identifies noise				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

producers in the County including highways and roads, railroads, manufacturing plants, airports, and agricultural operations. Table 10.1 of the Health and Safety Element establishes noise level criteria for typical land uses throughout Tulare County. Exterior noise levels in the range of 60 dB Ldn or Community Noise Equivalent Level (CNEL), or below, are generally considered acceptable for residential land uses and 70 dB Ldn (or CNEL) or below are considered acceptable for playground and neighborhood park land uses.

The distinction between short-term construction noise impacts and long-term operational noise impacts is a typical one in CEQA documents and local noise ordinances, which generally acknowledge that short-term noise from construction-related activities is inevitable and cannot be mitigated beyond a certain level. The Health and Safety Element does not identify short-term, construction-noise-level thresholds. It does, however, limit noise generating activities such as construction to hours of normal business operation unless specific County approval is given. Thus, the County consents to short-term noise at levels that it would not accept from permanent noise sources.

a) Proposed Project construction-related activity would involve short-term, temporary noise sources from earthmoving equipment operations. It is anticipated that the Project plus the five (5) homes that are not part of the Project will be built-out within 22 months. Final engineering and construction plans will determine the specific timeframes of construction-related activities. Typical construction equipment would include a grader, trencher, and other miscellaneous equipment. During the construction phase, noise from construction activities would contribute to the noise environment in the immediate proposed Project vicinity. Activities involved in construction would generate maximum noise levels, as indicated in the table below, ranging from 79 to 91 dBA at a distance of 50 feet, without feasible noise control (e.g., mufflers, well maintained equipment, shielding noisier equipment parts, and/or time and activity constraints) and ranging from 75 to 80 dBA at a distance of 50 feet, with feasible noise control. The nearest residences are located approximately 400 feet west and ¼ mile south of the proposed Project site. However, during the land shaping phase of the proposed park, earthmoving equipment will circulate throughout the site thus dispersing both volume and frequency of noise exposure at variable distances resulting in dissipated dBA. The majority of earthmoving operations will occur beyond 50 feet in distance to the nearest residences. Although the noise generated from earthmoving equipment may exceed the 65 dB Ldn during earthmoving operations, the impact is ***Less Than Significant***.

Typical Construction Noise Levels

Type of Equipment	**dBA at 50 ft**	
	Without Feasible Noise Control	**With Feasible Noise Control[1]**
Dozer or Tractor	80	75
Excavator	88	80
Scraper	88	80
Front End Loader	79	75
Backhoe	85	75
Grader	85	75
Truck	91	75

Source: U.S. Department of Transportation, Federal Transit Administration. 2006.

[1] Feasible noise control includes the use of intake mufflers, exhaust mufflers, and engine shrouds operating in

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

accordance with manufacturers specifications.

b) Vibration is the periodic oscillation of a medium or object. Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. Similar to airborne sound, ground borne vibrations may be described by amplitude and frequency. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS), as in RMS vibration velocity. The PPV and RMS (VbA) vibration velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal and is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (FTA 2006).

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. As it takes some time for the human body to respond to vibration signals, it is more prudent to use vibration velocity when measuring human response. The vibration velocity level is reported in decibels relative to a level of 1x10-6 inches per second and is denoted as VdB. The typical background vibration-velocity level in residential areas is approximately 50 VdB. Ground borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels (FTA 2006).

Typical outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. The approximate threshold of vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day (FTA 2006). The table below describes the typical construction equipment vibration levels.

Typical Construction Vibration Levels

Equipment	**VdB at 25 ft^2**
Small Bulldozer	58
Jackhammer	79

Source: U.S. Department of Transportation. Federal Transit Administration, Transit Noise and Vibration Impact Assessment. 2006.

Vibration from construction activities would be temporary and not exceed the FTA threshold for the nearest residences, approximately 400 feet west and ¼ mile south of the proposed Project. The impact would be ***Less Than Significant***.

c) Proposed Project construction-related activity would involve short-term, temporary noise sources from earthmoving equipment operations which is anticipated to be completed within approximately 22 months (including construction of the five (5) homes not a part of the Project). Intermittent construction-related activities would result in avoidance of a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the Project. The impact is ***Less Than Significant***.

d) Proposed Project construction-related activity would involve short-term, temporary noise sources from

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
earthmoving equipment operations which is anticipated to be completed within approximately 22 months (including construction of the five (5) homes not a part of the Project) resulting in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. The impact is ***Less Than Significant***. e and f) The proposed Project is not located within an airport land use plan or, where such a plan has not been or public use airport, would the adopted, within two miles of a public airport project nor is it within the vicinity of a private airstrip. There is no possibility of exposing people residing or working in the project area to excessive noise levels in or near an existing airport public or private airstrip. There will be ***No Impact***.				
13. POPULATION AND HOUSING -- Would the project:				
a) Cumulatively exceed official regional or local population projections?	☐	☐	☐	☒
b) Substantially change the demographics in the area?	☐	☐	☐	☒
c) Induce substantial 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)?	☐	☐	☐	☒
d) Substantially alter the location, distribution, or density of the area's population?	☐	☐	☐	☒
e) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
f) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
g) Conflict with adopted housing elements?	☐	☐	☐	☒
Analysis: a - g) The proposed Project includes a sports park, five (5) single-family residential units, and a small residential community garden/park. It will not result in demographic or population changes; it will not induce growth; it will not alter the location, distribution, or density of the area's population; it will not displace any housing or people; nor will it conflict with the adopted housing element. There will be ***No Impact*** to these resources.				
14. PUBLIC OR UTILITY SERVICES -- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government and public services facilities, need for new or				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
physically altered government 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:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Electrical power or natural gas?	☐	☐	☒	☐
f) Communication?	☐	☐	☐	☒
g) Other public or utility services?	☐	☐	☐	☒

Analysis:

a) Fire protection services to the Project site are provided by the Tulare County Fire Department (TCFD) Doyle-Colony substation in East Porterville. Additional fire protection resources are available, if needed, from Fire Department substations in the communities of Porterville, Terra Bella, Strathmore, Pixley, Tipton, and Earlimart. The Tule River Fire Department also provides fire protection off-Reservation as far west as CR 296. The California Department of Forestry and Fire Protection (CAL FIRE) aids local fire departments in wildland fire situations and would provide wildland fire services to the Project site as it is located in a State Responsibility Area that has a high wildfire threat. The TCFD contracts with CAL FIRE to provide fire protection services in unincorporated areas of the County. CAL FIRE operates a field station in Springville, approximately 10 miles from the Project site. The U.S. Forest Service (USFS) operates the Tule River Ranger Station in Springville. The USFS would provide wildland fire protection assistance to the TCFD and CAL FIRE at the Project site, if necessary. As the proposed Project includes only five (5) single-family residential units and a community sports park, and various local, state, federal and tribal fire services are available to the Project site, the Project would not contribute to a need for expanded fire protection or other emergency services. Impacts to fire protection will be ***Less Than Significant***.

b) Police services to the project site, which is located in unincorporated Tulare County, are provided by the County of Tulare Sheriff's Office. The nearest Sheriff's Substation is located in Porterville (approximately 8 miles northwest). The substation provides patrol services 24-hours per day, 365 days per year. Additional Sheriff resources are available as needed via dispatch from the main Sheriff's Office in Visalia, CA. The Tule River Department of Public Safety provides law enforcement services to the Tule River Tribe and its membership, including the protection of life, property, and Tribal assets on and off the Reservation. The Tule River Tribal Police Department (TRTPD) is a federally deputized police agency within the Tule River Department of Public Safety. The TRTPD is cross-deputized with the Bureau of Indian Affairs, and therefore TRTPD law enforcement are federal officers with the authority to enforce state law in California pursuant to California Penal Code

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
§830.8. The proposed Project includes only five (5) new single-family residential uses and a community sports park that could lead to an increase in demand for law enforcement services. Activities occurring within the proposed Project site are not anticipated to result in an increase in demand for law enforcement services resulting in the need for the expansion of law enforcement facilities. The proposed park location falls within an established beat patrol area. Impacts to police services will be ***Less Than Significant***. c) The proposed Project will not result in the need for expanded school facilities as it will not result in a substantial population growth of school-aged children. There will be ***No Impact***. d) As no local or regional public parks are located in the Project vicinity, the proposed Project will provide a benefit to the community. See discussion at 10 b. Land Use. There will be ***No Impact*** to this resource. e) The proposed Project will result in minimal electricity needs for the five (5) residential units and for sports park lighting during occasional evening events. Southern California Edison provides electrical services within the Project area and electrical transmission lines currently exist along Reservation Road, and a branch line runs adjacent to CR 296 adjacent to the Proposed Project site. No natural gas pipelines are located in or near the Project site. Natural gas in the form of bulk propane is provided by a nearby service company. The impact will be ***Less Than Significant***. f) AT&T, Sprint, Verizon and others provide telecommunication services in Tulare County. As the project includes only five (5) residential units that would require communication services, the proposed Project will not result in the need for additional communication services. There will be ***No Impact.*** g) The proposed Project will not result in need for increased demand for other public services causing a need for the expansion of public facilities that will cause adverse physical environmental effects. There will be ***No Impact.***				
15. RECREATION -- Would the project:				
a) 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
a) See discussion item 10 b. Land Use and Planning. As there are currently no existing neighborhood or regional parks and other recreational facilities within the Project vicinity, the proposed Project will not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
substantial physical deterioration of the facility will occur or be accelerated. Construction of the Project would result in a recreational benefit to the Tribe. There will be ***No adverse Impact*** to this resource. b) See discussion item 10 b. Land Use and Planning. The proposed Project will include recreational facilities and the construction of a new sports park; however, the construction of the new park and any ancillary recreational facilities will not result in the expansion of recreational facilities which might have an adverse physical effect on the environment. Construction of the Project would result in a recreational benefit to the Tribe. There will be ***No adverse Impact*** to this resource.				
16. TRANSPORTATION/TRANSIT -- Would the project:				
a) 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
decrease the performance or safety of such facilities?				

Analysis:

a and b) The proposed Project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system nor will it conflict with an applicable congestion management program. The development of the Project will not result in an increase in population nor corresponding to an increase in vehicle travel; therefore new intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit will not be required. There will be ***No Impact***.

c) The proposed Project is not near an airport and will not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. There will be ***No Impact***.

d) The proposed Project will be developed adjacent to existing streets; as such it will not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). There will be ***No Impact***.

e) As there will be no changes to any streets directly adjacent to or in proximity of the proposed Project site that could be used for emergency access, there will be ***No Impact***.

f) The proposed Project will not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. There will be ***No Impact*** to this resource.

17. UTLITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies, including	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
fire flow available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
e) 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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Analysis:

a, b, and e) Wastewater treatment also has the potential to violate water quality standards or waste discharge requirements. Treatment of wastewater will be achieved via individual septic systems. Each septic system would consist of a 1,500 gallon septic tank with inspections ports, effluent filter, service line cleanout, distribution box, and approximately 450 feet of leach field lateral piping with inspection ports. The exact length, location, and configuration of each leach field will be determined during site specific percolation tests. The Project engineering and design features in compliance with California Building Code and Waste Discharge Requirements will ensure the proper preventative measures will be taken to eliminate any adverse impacts from the use of individual septic systems. As such the proposed Project will not require or result in the construction of new water or wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. There will be ***No Impact***.

c) There are three (3) ephemeral drainages on the Project site; however, these drainages are not located in the Project development area. To prevent water erosion during the construction period, a Storm Water Pollution Prevention Plan (SWPPP) will be developed for the Project as required for all projects which disturb more than one (1) acre in size. Operations of the proposed Project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Thus, the proposed Project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction which could cause significant environmental effects. There will be a ***Less Than Significant Impact***.

d) The Project includes five (5) single-family residential units, a small community garden/park, and a sports park and will rely on private domestic wells for drinking water. A potable water storage tank will be constructed on the site in order to provide both potable water and adequate fire flow capacity in compliance with the requirements of the California Fire Code. Also, by incorporating the water conservation measures noted in Item 9 Hydrology and Water Quality, b, above, the use of water for irrigating will be maximized to the extent feasible and practicable. There will be a ***Less Than Significant Impact***.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Solid waste disposal services for the Project Will be provided by Waste Management, which serves the Tribal and non-tribal transfer stations in the vicinity of the proposed Project and operates three landfills with sufficient capacity to accommodate the proposed Project. The proposed Project will not generate solid waste in quantities that will potentially impact a landfill in an adverse manner, as such, it will be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. There will be a ***Less Than Significant Impact.*** g) All applicable federal, state, and local statutes and regulations related to solid waste will be strictly adhered to. There will be ***No Impact***.				
18. MANDATORY FINDINGS OF SIGNIFICANCE				
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, reduce the number or restrict the range of an endangered, rare or threatened plant or animal species, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have environmental impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means 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)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐
Analysis: a) As discussed in Item 4 Biological Resources, the proposed Project site is agricultural (grazing) land with limited vegetative growth consisting primarily of annual non-native grasses and some localized trees and shrubbery. No riparian habitat or other sensitive natural communities were observed during the BRA. The BRA indicated that there are six (6) special status plant species and six (6) special status wildlife species with the				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
potential to occur within the Project site. Mitigation Measures contained in the Mitigation Monitoring and Reporting Program are included as part of this Mitigated Negative Declaration which are intended to prevent or minimize disturbance or accidental take these twelve (12) special status species. In the unlikely event of discovery of a special species on the site, protocols established by the U.S. Fish and Wildlife Service (USFW) or California Department of Fish and Game (DFG) will be implemented before any construction activities are allowed to commence. If discovery occurs during construction activities, all activities will be immediately ceased until a qualified biologist determines which course of action to implement per USFW or DFG protocols. The site does not contain any riparian habitat or other natural communities nor are there any wetlands on or in proximity of the site. As noted in item 5. Cultural Resources, a cultural resources study was conducted in December 2009 by Analytical Environmental Services. Prior to the field survey, a records search was conducted by the Southern San Joaquin Valley (SSJVIC) Historical Resources Information Center (HRIC), California State University, Bakersfield. (The field survey found three (3) previously unrecorded resources and one (1) isolated historic-period artifact which included two (2) rock alignments, a historic-period stone quarry, and hole-in-top paint can. Three noted finds and one isolated find were also encountered during the visual inspection of the property. Of the resources documented, only one (1) lies within the Project area and was evaluated and found to be *not significant* under the criteria of the National Register of Historic Places (NRHP) and the California Register of Historic Resources (CRHR). No formal cemeteries or other places of human internment are known to exist on the Project site. Implementation of the Mitigation Monitoring and Reporting Program as part of this Mitigated Negative Declaration will reduce potential impacts to historical or archaeological resources Therefore, the proposed Project does not 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, reduce the number or restrict the range of an endangered, rare or threatened plant or animal species, or eliminate important examples of the major periods of California history or prehistory. There will be a ***Less Than Significant Impact***.				
b) The proposed Project will provide the residents of the Tule River Reservation with a park and recreational facilities. The Project provides the added benefit of reducing vehicle miles travelled as residents will not have to drive to nearby communities for sports related recreational activities. The Project is not growth inducing, therefore, it will not significantly impact resources such as air quality, noise, Greenhouse Gas Emissions, hazard or hazardous materials, hydrology and water quality, population and housing, pubic services, transportation/traffic, or utilities and service systems. The proposed Project will not result in environmental impacts that are individually limited nor cumulatively considerable. There will be a ***Less Than Significant Impact***.				
c) The proposed Project will provide the residents of the Tule River Reservation with a recreational sports park. The Project is consistent with the policies contained in the County of Tulare General Plan 2030 Update and will provide recreational benefits to the Tule River Tribe and the general public. The proposed project for environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. However, a level of insignificance. The proposed Project has the potential to result in environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly; however Mitigation Measures have been incorporated to reduce all impacts to a ***Less than Significant Impact***.				

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Hyder Ranch Sports Park

Tule River Indian Tribe

Draft

Mitigated Negative Declaration

Attachments

Attachment A

Air Quality Emissions Model and Ambient Air Quality Screening

Tule River Tribe - Hyder Ranch

Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	151.00	Space	2.00	87,120.00	0
City Park	18.00	Acre	18.00	784,080.00	0
Single Family Housing	5.00	Dwelling Unit	4.00	9,000.00	14

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	7			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - parking lot acres accounts for 151 spaces (1.36 acre) plus 0.64 acres of roadway; park and SFR areas approximated

Construction Phase -

Woodstoves - District Rule 4901 allows wood stoves and wood fireplaces in all homes if the density is less than 2 homes/acres

Water And Wastewater - all wastewater will be handled via private septic systems

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	12/30/2016	12/31/2016
tblConstructionPhase	PhaseEndDate	7/31/2015	8/1/2015
tblConstructionPhase	PhaseEndDate	1/27/2017	1/28/2017
tblFireplaces	NumberGas	2.75	0.00
tblFireplaces	NumberNoFireplace	0.50	0.00
tblFireplaces	NumberWood	1.75	5.00
tblLandUse	LandUseSquareFeet	60,400.00	87,120.00
tblLandUse	LotAcreage	1.36	2.00
tblLandUse	LotAcreage	1.62	4.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblWater	AerobicPercent	87.46	0.00
tblWater	AerobicPercent	87.46	0.00
tblWater	AerobicPercent	87.46	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	100.00
tblWater	SepticTankPercent	10.33	100.00
tblWater	SepticTankPercent	10.33	100.00
tblWoodstoves	NumberCatalytic	0.00	5.00
tblWoodstoves	NumberNoncatalytic	0.00	5.00

2.0 Emissions Summary

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					
2015	0.5777	4.2962	5.0320	7.3600e-003	0.5416	0.2142	0.7558	0.1931	0.1994	0.3925	0.0000	636.4826	636.4826	0.0846	0.0000	638.2581
2016	0.9264	5.7774	8.5320	0.0144	0.7041	0.2910	0.9950	0.1894	0.2726	0.4620	0.0000	1,194.0137	1,194.0137	0.1096	0.0000	1,196.3149
2017	5.5828	0.2307	0.2221	3.8000e-004	0.0110	0.0132	0.0242	2.9300e-003	0.0123	0.0152	0.0000	32.3460	32.3460	7.0700e-003	0.0000	32.4945
Total	**7.0868**	**10.3042**	**13.7862**	**0.0221**	**1.2567**	**0.5184**	**1.7751**	**0.3855**	**0.4843**	**0.8697**	**0.0000**	**1,862.8423**	**1,862.8423**	**0.2012**	**0.0000**	**1,867.0675**

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					
2015	0.5777	4.2962	5.0320	7.3600e-003	0.5416	0.2142	0.7558	0.1931	0.1994	0.3925	0.0000	636.4823	636.4823	0.0846	0.0000	638.2578
2016	0.9264	5.7774	8.5320	0.0144	0.7041	0.2910	0.9950	0.1894	0.2726	0.4620	0.0000	1,194.0133	1,194.0133	0.1096	0.0000	1,196.3145
2017	5.5828	0.2307	0.2221	3.8000e-004	0.0110	0.0132	0.0242	2.9300e-003	0.0123	0.0152	0.0000	32.3460	32.3460	7.0700e-003	0.0000	32.4945
Total	**7.0868**	**10.3042**	**13.7861**	**0.0221**	**1.2567**	**0.5184**	**1.7751**	**0.3855**	**0.4843**	**0.8697**	**0.0000**	**1,862.8416**	**1,862.8416**	**0.2012**	**0.0000**	**1,867.0668**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	4.9775	0.0256	1.9366	3.0200e-003		0.2843	0.2843		0.2843	0.2843	32.0825	0.0637	32.1462	0.0946	1.0500e-003	34.4567
Energy	8.0000e-004	6.8400e-003	2.9100e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	40.5527	40.5527	1.6500e-003	4.6000e-004	40.7286
Mobile	0.0738	0.2383	0.7823	1.4700e-003	0.0912	3.2900e-003	0.0945	0.0245	3.0200e-003	0.0275	0.0000	119.5096	119.5096	4.4600e-003	0.0000	119.6032
Waste						0.0000	0.0000		0.0000	0.0000	1.3377	0.0000	1.3377	0.0791	0.0000	2.9979
Water						0.0000	0.0000		0.0000	0.0000	0.0000	22.1908	22.1908	0.0750	4.6000e-004	23.9091
Total	**5.0521**	**0.2707**	**2.7218**	**4.5300e-003**	**0.0912**	**0.2882**	**0.3794**	**0.0245**	**0.2879**	**0.3124**	**33.4202**	**182.3168**	**215.7370**	**0.2547**	**1.9700e-003**	**221.6955**

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	4.9775	0.0256	1.9366	3.0200e-003		0.2843	0.2843		0.2843	0.2843	32.0825	0.0637	32.1462	0.0946	1.0500e-003	34.4567
Energy	8.0000e-004	6.8400e-003	2.9100e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	40.5527	40.5527	1.6500e-003	4.6000e-004	40.7286
Mobile	0.0738	0.2383	0.7823	1.4700e-003	0.0912	3.2900e-003	0.0945	0.0245	3.0200e-003	0.0275	0.0000	119.5096	119.5096	4.4600e-003	0.0000	119.6032
Waste						0.0000	0.0000		0.0000	0.0000	1.3377	0.0000	1.3377	0.0791	0.0000	2.9979
Water						0.0000	0.0000		0.0000	0.0000	0.0000	22.1908	22.1908	0.0750	4.6000e-004	23.9091
Total	**5.0521**	**0.2707**	**2.7218**	**4.5300e-003**	**0.0912**	**0.2882**	**0.3794**	**0.0245**	**0.2879**	**0.3124**	**33.4202**	**182.3168**	**215.7370**	**0.2547**	**1.9700e-003**	**221.6955**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	6/1/2015	6/12/2015	5	10	
2	Grading	Grading	6/13/2015	8/1/2015	5	35	
3	Building Construction	Building Construction	8/2/2015	12/31/2016	5	370	
4	Paving	Paving	1/1/2017	1/28/2017	5	20	
5	Architectural Coating	Architectural Coating	1/29/2017	2/24/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 0

Residential Indoor: 18,225; Residential Outdoor: 6,075; Non-Residential Indoor: 1,180,040; Non-Residential Outdoor: 393,347 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
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	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	368.00	143.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	74.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	**0.0263**	**0.2845**	**0.2132**	**2.0000e-004**	**0.0903**	**0.0154**	**0.1058**	**0.0497**	**0.0142**	**0.0639**	**0.0000**	**18.6506**	**18.6506**	**5.5700e-003**	**0.0000**	**18.7675**

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	5.2000e-004	7.8000e-004	7.5800e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.9966	0.9966	6.0000e-005	0.0000	0.9979
Total	**5.2000e-004**	**7.8000e-004**	**7.5800e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1200e-003**	**3.0000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9966**	**0.9966**	**6.0000e-005**	**0.0000**	**0.9979**

3.2 Site Preparation - 2015

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
Total	**0.0263**	**0.2845**	**0.2132**	**2.0000e-004**	**0.0903**	**0.0154**	**0.1058**	**0.0497**	**0.0142**	**0.0639**	**0.0000**	**18.6505**	**18.6505**	**5.5700e-003**	**0.0000**	**18.7675**

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	5.2000e-004	7.8000e-004	7.5800e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1200e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	0.9966	0.9966	6.0000e-005	0.0000	0.9979
Total	**5.2000e-004**	**7.8000e-004**	**7.5800e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1200e-003**	**3.0000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9966**	**0.9966**	**6.0000e-005**	**0.0000**	**0.9979**

3.3 Grading - 2015

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					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1186	1.3833	0.8897	1.0800e-003		0.0665	0.0665		0.0612	0.0612	0.0000	102.9739	102.9739	0.0307	0.0000	103.6195
Total	**0.1186**	**1.3833**	**0.8897**	**1.0800e-003**	**0.1518**	**0.0665**	**0.2183**	**0.0629**	**0.0612**	**0.1242**	**0.0000**	**102.9739**	**102.9739**	**0.0307**	**0.0000**	**103.6195**

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	2.0100e-003	3.0300e-003	0.0295	5.0000e-005	4.3300e-003	4.0000e-005	4.3700e-003	1.1500e-003	3.0000e-005	1.1900e-003	0.0000	3.8758	3.8758	2.3000e-004	0.0000	3.8806
Total	**2.0100e-003**	**3.0300e-003**	**0.0295**	**5.0000e-005**	**4.3300e-003**	**4.0000e-005**	**4.3700e-003**	**1.1500e-003**	**3.0000e-005**	**1.1900e-003**	**0.0000**	**3.8758**	**3.8758**	**2.3000e-004**	**0.0000**	**3.8806**

3.3 Grading - 2015

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					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1186	1.3833	0.8897	1.0800e-003		0.0665	0.0665		0.0612	0.0612	0.0000	102.9737	102.9737	0.0307	0.0000	103.6193
Total	**0.1186**	**1.3833**	**0.8897**	**1.0800e-003**	**0.1518**	**0.0665**	**0.2183**	**0.0629**	**0.0612**	**0.1242**	**0.0000**	**102.9737**	**102.9737**	**0.0307**	**0.0000**	**103.6193**

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	2.0100e-003	3.0300e-003	0.0295	5.0000e-005	4.3300e-003	4.0000e-005	4.3700e-003	1.1500e-003	3.0000e-005	1.1900e-003	0.0000	3.8758	3.8758	2.3000e-004	0.0000	3.8806
Total	**2.0100e-003**	**3.0300e-003**	**0.0295**	**5.0000e-005**	**4.3300e-003**	**4.0000e-005**	**4.3700e-003**	**1.1500e-003**	**3.0000e-005**	**1.1900e-003**	**0.0000**	**3.8758**	**3.8758**	**2.3000e-004**	**0.0000**	**3.8806**

3.4 Building Construction - 2015

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	0.1994	1.6366	1.0216	1.4600e-003		0.1154	0.1154		0.1085	0.1085	0.0000	132.9769	132.9769	0.0334	0.0000	133.6776
Total	**0.1994**	**1.6366**	**1.0216**	**1.4600e-003**		**0.1154**	**0.1154**		**0.1085**	**0.1085**	**0.0000**	**132.9769**	**132.9769**	**0.0334**	**0.0000**	**133.6776**

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	0.1159	0.8143	1.1806	1.6900e-003	0.0457	0.0147	0.0603	0.0131	0.0135	0.0266	0.0000	154.9129	154.9129	1.4900e-003	0.0000	154.9442
Worker	0.1150	0.1736	1.6899	2.8600e-003	0.2484	2.1300e-003	0.2505	0.0660	1.9300e-003	0.0680	0.0000	222.0959	222.0959	0.0131	0.0000	222.3709
Total	**0.2309**	**0.9880**	**2.8705**	**4.5500e-003**	**0.2941**	**0.0168**	**0.3109**	**0.0791**	**0.0154**	**0.0945**	**0.0000**	**377.0088**	**377.0088**	**0.0146**	**0.0000**	**377.3151**

3.4 Building Construction - 2015

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	0.1994	1.6366	1.0216	1.4600e-003		0.1154	0.1154		0.1085	0.1085	0.0000	132.9768	132.9768	0.0334	0.0000	133.6774
Total	**0.1994**	**1.6366**	**1.0216**	**1.4600e-003**		**0.1154**	**0.1154**		**0.1085**	**0.1085**	**0.0000**	**132.9768**	**132.9768**	**0.0334**	**0.0000**	**133.6774**

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	0.1159	0.8143	1.1806	1.6900e-003	0.0457	0.0147	0.0603	0.0131	0.0135	0.0266	0.0000	154.9129	154.9129	1.4900e-003	0.0000	154.9442
Worker	0.1150	0.1736	1.6899	2.8600e-003	0.2484	2.1300e-003	0.2505	0.0660	1.9300e-003	0.0680	0.0000	222.0959	222.0959	0.0131	0.0000	222.3709
Total	**0.2309**	**0.9880**	**2.8705**	**4.5500e-003**	**0.2941**	**0.0168**	**0.3109**	**0.0791**	**0.0154**	**0.0945**	**0.0000**	**377.0088**	**377.0088**	**0.0146**	**0.0000**	**377.3151**

3.4 Building Construction - 2016

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	0.4445	3.7201	2.4151	3.5000e-003		0.2567	0.2567		0.2412	0.2412	0.0000	316.0104	316.0104	0.0784	0.0000	317.6563
Total	**0.4445**	**3.7201**	**2.4151**	**3.5000e-003**		**0.2567**	**0.2567**		**0.2412**	**0.2412**	**0.0000**	**316.0104**	**316.0104**	**0.0784**	**0.0000**	**317.6563**

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	0.2432	1.6938	2.6002	4.0400e-003	0.1093	0.0295	0.1388	0.0313	0.0271	0.0584	0.0000	366.3276	366.3276	3.2400e-003	0.0000	366.3956
Worker	0.2386	0.3635	3.5167	6.8500e-003	0.5948	4.7200e-003	0.5995	0.1581	4.3100e-003	0.1624	0.0000	511.6757	511.6757	0.0280	0.0000	512.2630
Total	**0.4819**	**2.0573**	**6.1169**	**0.0109**	**0.7041**	**0.0342**	**0.7383**	**0.1894**	**0.0314**	**0.2208**	**0.0000**	**878.0033**	**878.0033**	**0.0312**	**0.0000**	**878.6586**

3.4 Building Construction - 2016

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	0.4445	3.7201	2.4151	3.5000e-003		0.2567	0.2567		0.2412	0.2412	0.0000	316.0101	316.0101	0.0784	0.0000	317.6560
Total	**0.4445**	**3.7201**	**2.4151**	**3.5000e-003**		**0.2567**	**0.2567**		**0.2412**	**0.2412**	**0.0000**	**316.0101**	**316.0101**	**0.0784**	**0.0000**	**317.6560**

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	0.2432	1.6938	2.6002	4.0400e-003	0.1093	0.0295	0.1388	0.0313	0.0271	0.0584	0.0000	366.3276	366.3276	3.2400e-003	0.0000	366.3956
Worker	0.2386	0.3635	3.5167	6.8500e-003	0.5948	4.7200e-003	0.5995	0.1581	4.3100e-003	0.1624	0.0000	511.6757	511.6757	0.0280	0.0000	512.2630
Total	**0.4819**	**2.0573**	**6.1169**	**0.0109**	**0.7041**	**0.0342**	**0.7383**	**0.1894**	**0.0314**	**0.2208**	**0.0000**	**878.0033**	**878.0033**	**0.0312**	**0.0000**	**878.6586**

3.5 Paving - 2017

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	0.0191	0.2030	0.1473	2.2000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8266
Paving	2.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0217**	**0.2030**	**0.1473**	**2.2000e-004**		**0.0114**	**0.0114**		**0.0105**	**0.0105**	**0.0000**	**20.6934**	**20.6934**	**6.3400e-003**	**0.0000**	**20.8266**

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	6.4000e-004	9.9000e-004	9.4600e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8700e-003	4.9000e-004	1.0000e-005	5.1000e-004	0.0000	1.5336	1.5336	8.0000e-005	0.0000	1.5352
Total	**6.4000e-004**	**9.9000e-004**	**9.4600e-003**	**2.0000e-005**	**1.8600e-003**	**1.0000e-005**	**1.8700e-003**	**4.9000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.5336**	**1.5336**	**8.0000e-005**	**0.0000**	**1.5352**

3.5 Paving - 2017

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	0.0191	0.2030	0.1473	2.2000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8265
Paving	2.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0217**	**0.2030**	**0.1473**	**2.2000e-004**		**0.0114**	**0.0114**		**0.0105**	**0.0105**	**0.0000**	**20.6934**	**20.6934**	**6.3400e-003**	**0.0000**	**20.8265**

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	6.4000e-004	9.9000e-004	9.4600e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8700e-003	4.9000e-004	1.0000e-005	5.1000e-004	0.0000	1.5336	1.5336	8.0000e-005	0.0000	1.5352
Total	**6.4000e-004**	**9.9000e-004**	**9.4600e-003**	**2.0000e-005**	**1.8600e-003**	**1.0000e-005**	**1.8700e-003**	**4.9000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.5336**	**1.5336**	**8.0000e-005**	**0.0000**	**1.5352**

3.6 Architectural Coating - 2017

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	5.5540					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
Total	**5.5573**	**0.0219**	**0.0187**	**3.0000e-005**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**	**0.0000**	**2.5533**	**2.5533**	**2.7000e-004**	**0.0000**	**2.5589**

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	3.1400e-003	4.8800e-003	0.0467	1.1000e-004	9.1600e-003	7.0000e-005	9.2300e-003	2.4400e-003	6.0000e-005	2.5000e-003	0.0000	7.5657	7.5657	3.9000e-004	0.0000	7.5738
Total	**3.1400e-003**	**4.8800e-003**	**0.0467**	**1.1000e-004**	**9.1600e-003**	**7.0000e-005**	**9.2300e-003**	**2.4400e-003**	**6.0000e-005**	**2.5000e-003**	**0.0000**	**7.5657**	**7.5657**	**3.9000e-004**	**0.0000**	**7.5738**

3.6 Architectural Coating - 2017

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	5.5540					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
Total	**5.5573**	**0.0219**	**0.0187**	**3.0000e-005**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**	**0.0000**	**2.5533**	**2.5533**	**2.7000e-004**	**0.0000**	**2.5589**

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	3.1400e-003	4.8800e-003	0.0467	1.1000e-004	9.1600e-003	7.0000e-005	9.2300e-003	2.4400e-003	6.0000e-005	2.5000e-003	0.0000	7.5657	7.5657	3.9000e-004	0.0000	7.5738
Total	**3.1400e-003**	**4.8800e-003**	**0.0467**	**1.1000e-004**	**9.1600e-003**	**7.0000e-005**	**9.2300e-003**	**2.4400e-003**	**6.0000e-005**	**2.5000e-003**	**0.0000**	**7.5657**	**7.5657**	**3.9000e-004**	**0.0000**	**7.5738**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	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	0.0738	0.2383	0.7823	1.4700e-003	0.0912	3.2900e-003	0.0945	0.0245	3.0200e-003	0.0275	0.0000	119.5096	119.5096	4.4600e-003	0.0000	119.6032
Unmitigated	0.0738	0.2383	0.7823	1.4700e-003	0.0912	3.2900e-003	0.0945	0.0245	3.0200e-003	0.0275	0.0000	119.5096	119.5096	4.4600e-003	0.0000	119.6032

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	28.62	28.62	28.62	70,583	70,583
Parking Lot	0.00	0.00	0.00		
Single Family Housing	47.85	50.40	43.85	171,459	171,459
Total	76.47	79.02	72.47	242,042	242,042

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	16.80	7.10	7.90	38.40	22.60	39.00	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.408191	0.071408	0.163262	0.194536	0.057230	0.008238	0.019334	0.064751	0.001899	0.001501	0.006208	0.001196	0.002246

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	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	32.6303	32.6303	1.5000e-003	3.1000e-004	32.7580
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	32.6303	32.6303	1.5000e-003	3.1000e-004	32.7580
NaturalGas Mitigated	8.0000e-004	6.8400e-003	2.9100e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	7.9224	7.9224	1.5000e-004	1.5000e-004	7.9706
NaturalGas Unmitigated	8.0000e-004	6.8400e-003	2.9100e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	7.9224	7.9224	1.5000e-004	1.5000e-004	7.9706

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					
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
Single Family Housing	148460	8.0000e-004	6.8400e-003	2.9100e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	7.9224	7.9224	1.5000e-004	1.5000e-004	7.9706
City Park	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
Total		**8.0000e-004**	**6.8400e-003**	**2.9100e-003**	**4.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**	**0.0000**	**7.9224**	**7.9224**	**1.5000e-004**	**1.5000e-004**	**7.9706**

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					
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
Single Family Housing	148460	8.0000e-004	6.8400e-003	2.9100e-003	4.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	7.9224	7.9224	1.5000e-004	1.5000e-004	7.9706
City Park	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
Total		**8.0000e-004**	**6.8400e-003**	**2.9100e-003**	**4.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**	**0.0000**	**7.9224**	**7.9224**	**1.5000e-004**	**1.5000e-004**	**7.9706**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	76665.6	21.9392	1.0100e-003	2.1000e-004	22.0250
Single Family Housing	37360	10.6912	4.9000e-004	1.0000e-004	10.7330
Total		**32.6303**	**1.5000e-003**	**3.1000e-004**	**32.7580**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	76665.6	21.9392	1.0100e-003	2.1000e-004	22.0250
Single Family Housing	37360	10.6912	4.9000e-004	1.0000e-004	10.7330
Total		**32.6303**	**1.5000e-003**	**3.1000e-004**	**32.7580**

6.0 Area Detail

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	4.9775	0.0256	1.9366	3.0200e-003		0.2843	0.2843		0.2843	0.2843	32.0825	0.0637	32.1462	0.0946	1.0500e-003	34.4567
Unmitigated	4.9775	0.0256	1.9366	3.0200e-003		0.2843	0.2843		0.2843	0.2843	32.0825	0.0637	32.1462	0.0946	1.0500e-003	34.4567

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	0.5554					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.4376					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.9831	0.0251	1.8974	3.0200e-003		0.2841	0.2841		0.2841	0.2841	32.0825	0.0000	32.0825	0.0945	1.0500e-003	34.3915
Landscaping	1.3400e-003	4.6000e-004	0.0392	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.0637	0.0637	7.0000e-005	0.0000	0.0651
Total	**4.9775**	**0.0256**	**1.9366**	**3.0200e-003**		**0.2843**	**0.2843**		**0.2843**	**0.2843**	**32.0825**	**0.0637**	**32.1462**	**0.0946**	**1.0500e-003**	**34.4567**

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	0.5554					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.4376					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.9831	0.0251	1.8974	3.0200e-003		0.2841	0.2841		0.2841	0.2841	32.0825	0.0000	32.0825	0.0945	1.0500e-003	34.3915
Landscaping	1.3400e-003	4.6000e-004	0.0392	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.0637	0.0637	7.0000e-005	0.0000	0.0651
Total	**4.9775**	**0.0256**	**1.9366**	**3.0200e-003**		**0.2843**	**0.2843**		**0.2843**	**0.2843**	**32.0825**	**0.0637**	**32.1462**	**0.0946**	**1.0500e-003**	**34.4567**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	22.1908	0.0750	4.6000e-004	23.9091
Unmitigated	22.1908	0.0750	4.6000e-004	23.9091

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 21.4467	21.4806	9.9000e-004	2.0000e-004	21.5647
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.32577 / 0.205377	0.7101	0.0740	2.6000e-004	2.3444
Total		**22.1908**	**0.0750**	**4.6000e-004**	**23.9091**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 21.4467	21.4806	9.9000e-004	2.0000e-004	21.5647
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.32577 / 0.205377	0.7101	0.0740	2.6000e-004	2.3444
Total		**22.1908**	**0.0750**	**4.6000e-004**	**23.9091**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.3377	0.0791	0.0000	2.9979
Unmitigated	1.3377	0.0791	0.0000	2.9979

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.55	0.3146	0.0186	0.0000	0.7051
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	5.04	1.0231	0.0605	0.0000	2.2928
Total		**1.3377**	**0.0791**	**0.0000**	**2.9979**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.55	0.3146	0.0186	0.0000	0.7051
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	5.04	1.0231	0.0605	0.0000	2.2928
Total		**1.3377**	**0.0791**	**0.0000**	**2.9979**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Screening Analysis for Ambient Air Quality

Total Days of Construction: 455
Total Days of Operation: 365

	Construction *			Operation		
	total tons/year	total pounds	pounds/day	total tons/year	total pounds/year	pounds/day
CO	8.53	17,064.00	37.50	2.7218	5443.60	14.91
NOx	5.78	11,554.80	25.40	0.2707	541.40	1.48
ROG	5.58	11,165.60	24.54	5.0521	10104.20	27.68
SOx	0.01	28.80	0.06	0.005	10.00	0.03
PM_{10}	1.00	1,990.00	4.37	0.3794	758.80	2.08
$PM_{2.5}$	0.46	924.00	2.03	0.3124	624.80	1.71

* represents the year with the highest emissions

Attachment B

Biological Resources Assessment

BIOLOGICAL RESOURCES ASSESSMENT

TULE RIVER TRIBE

HOUSING DEVELOPMENT PROJECT

DECEMBER 2009

BIOLOGICAL RESOURCES ASSESSMENT

TULE RIVER TRIBE

HOUSING DEVELOPMENT PROJECT

DECEMBER 2009

Prepared By:

Analytical Environmental Services
1801 7th Street, Suite 100
Sacramento, CA 95811
www.analyticalcorp.com

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TULE RIVER TRIBE HOUSING DEVELOPMENT PROJECT - BIOLOGICAL RESOURCES ASSESSMENT

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1.0 INTRODUCTION

1.1 PURPOSE

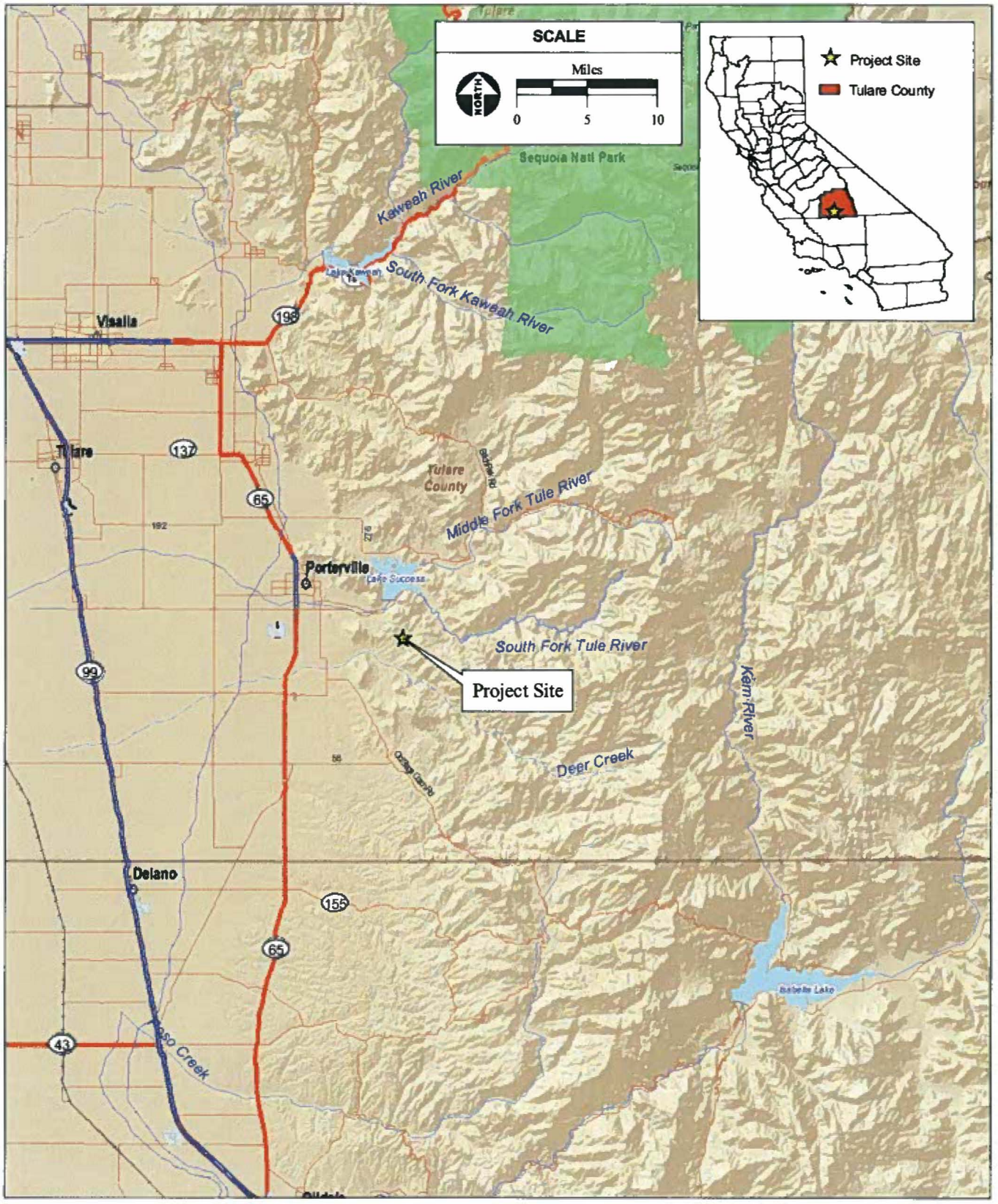
This Biological Resources Assessment (BRA) documents sensitive biological habitats and special status species that may occur or be affected by the approximately 60-acre Tule River Tribe Housing Development Project (proposed project) in Tulare County, California (**Figure 1**). The purpose of this BRA is to determine whether the proposed project would jeopardize the continued existence of any federally listed or proposed threatened and endangered species (i.e., plants or animals, fish, or invertebrates), or destroy or adversely modify designated or proposed critical habitat. This BRA was prepared in accordance with the requirements set forth under Section 7 of the FESA (16 U.S.C. 1536 (c)) concerning the effects of the proposed project. This BRA also evaluates state listed special status species and may be used in support of permit applications and environmental analyses in the California Environmental Quality Act (CEQA) review process.

1.2 PROJECT LOCATION

The proposed project site (project site) is located at the southeastern corner of Reservation Road and Road 296 at 30110 Reservation Road in unincorporated Tulare County, California southeast of the City of Porterville (**Figure 1**). The project site is located in Sections 12 and 13 of the Success Dam U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle within Township 22 South and Range 28 East, Mt. Diablo Baseline and Meridian (**Figure 2**). The 60-acre proposed project site is located within three parcels (project parcels); Assessor Parcel Numbers (APNs) 305-070-012, 305-010-025, and 305-010-026. The project parcels are comprised of approximately 375 acres.

1.3 PROJECT DESCRIPTION

The Tule River Tribe (Tribe) proposes to construct a low income housing community development consisting of an initial phase of ten low income housing units, a community garden, and community athletic fields on tribally owned fee land within Tulare County, California. The project site may eventually be developed to include a maximum of 54 home sites and expansion of the community garden into a for-profit nursery business. Residents of the new homes are likely be tribal members and their tribal and non-tribal spouses and children. A small wastewater treatment facility will be developed during the initial phase of the project. Water will be provided by domestic wells located on the project parcels. An aerial photograph of the proposed project site plan is provided in **Figure 3**.

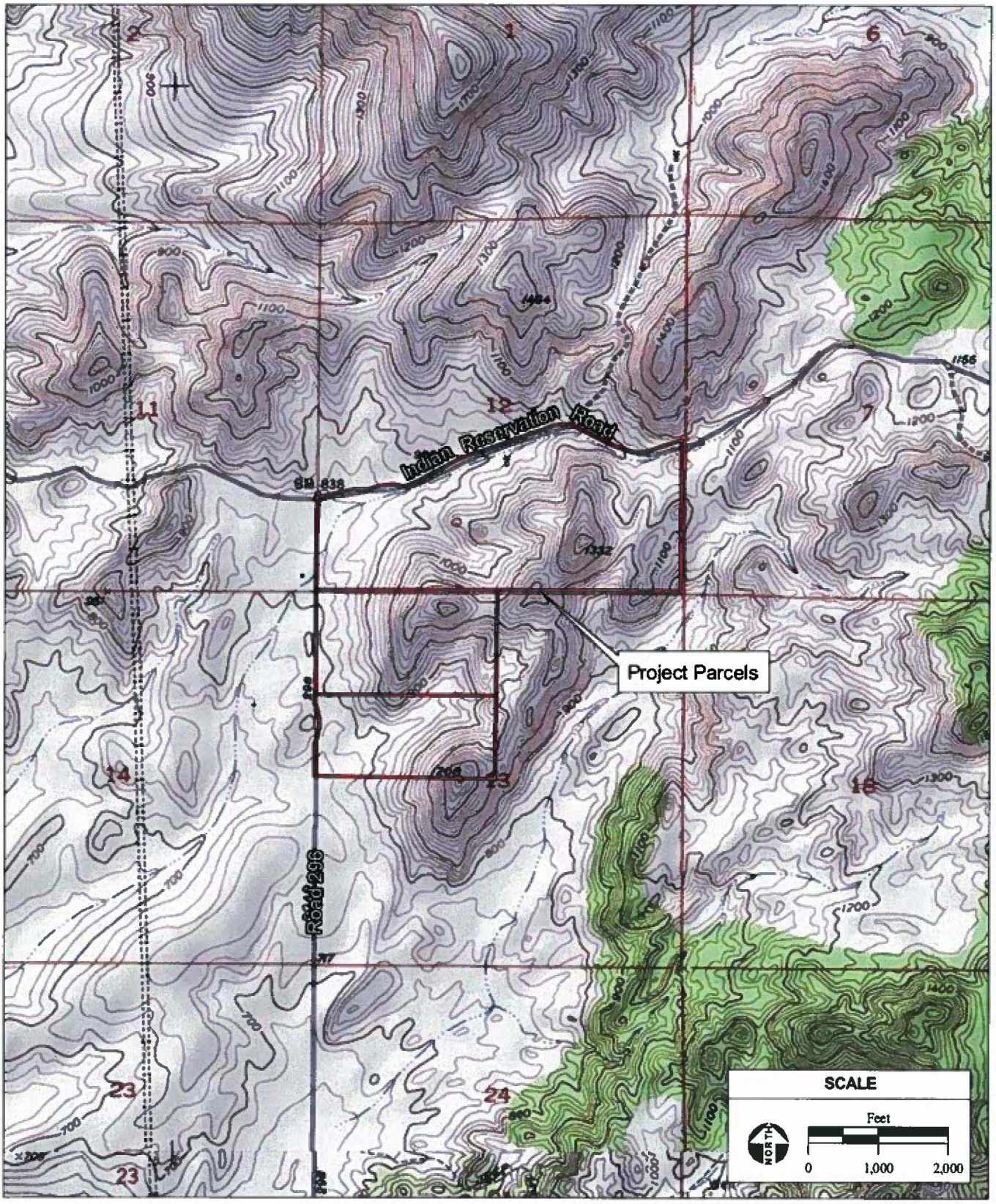


SOURCE: ESRI Data, 2009; AES 2009

Tule River Tribe Housing Development / 209563 ■

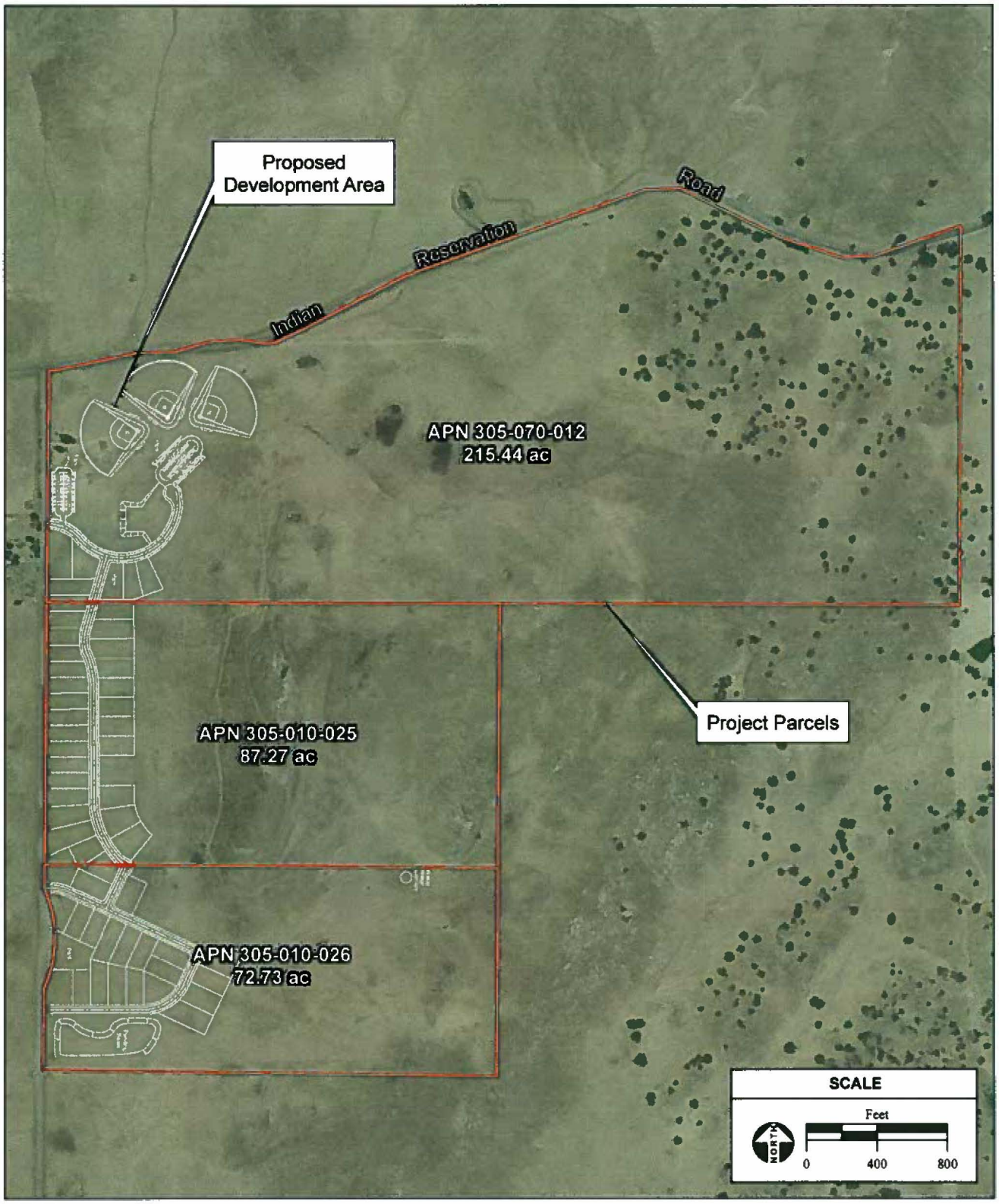
Figure 1

Regional Location Map



SOURCE: "Success Dam, CA" USGS 7.5 Minute Topographic Quadrangle, Sections 12 & 13, T22S, R28E, Mt. Diablo Baseline & Meridian; AES, 2009

Figure 2
Site and Vicinity



SOURCE: NAIP Aerial Photograph, 7/1/2005; AES, 2009

Tule River Tribe Housing Development / 209563 ■

Figure 3
Aerial Photograph

2.0 REGULATORY SETTING

The following section discusses the applicable federal, state, and local regulations related to the project site.

2.1 FEDERAL

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) enforce the federal Endangered Species Act (FESA) of 1973 (16 USC Section 1531 et seq.). The USFWS administers FESA for terrestrial species and the NMFS administers FESA for marine fish species. Threatened and endangered species on the federal list (50 CFR Section 17.11, 17.12) are protected from take (Section 9) which is defined as direct or indirect harm, unless a Section 10(a) Incidental Take Permit (16 U.S.C. 1532, 50 CFR 17.3) is granted or a Section 7 Biological Opinion with incidental take provisions is rendered.

Migratory Bird Treaty Act

Migratory birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird included in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The MBTA is relevant to construction activities and construction-related disturbance. Under federal law, a take is considered any project activity that results in the direct injury or death of a migratory bird, removal of active nests during the breeding season, disturbances that result in the abandonment of nestlings or forced fledging of a species.

The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Act) (16 U.S.C. 668-668c), enacted in 1940, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs (USFWS, 1940). The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or any manner, any bald eagle [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb."

Wetlands and Other Waters of the United States

Wetlands and other Waters of the U.S. may be subject to permitting by the United States Army Corps of Engineers (USACE), United States Environmental Protection Agency (USEPA) and/or State Water Board regulation under Section 404 and 401 of the Clean Water Act (CWA), and/or California Department of Fish and Game (CDFG) regulation under Section 1600 of the California Fish and Game Code. Project development activities such as infilling or dredging of these jurisdictional water features could trigger the need to obtain permits or other approvals from these agencies.

Waters of the U.S. are defined as:

> All waters used in interstate or foreign commerce; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent and ephemeral streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, where the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; or wetlands adjacent to these waters (Section 404 of the CWA; 33 CFR Part 328).

With non-tidal waters, in the absence of adjacent wetlands, the extent of the USACE jurisdiction is defined by the ordinary high water mark (OHWM). The ordinary high water mark is defined, in 33 CFR Part 329.11, as the line on the shore established by the fluctuations of water, and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, or the presence of litter and debris.

The USACE and the U.S. Environmental Protection Agency (USEPA) issued the *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* on May 30, 2007, to provide guidance based on the Supreme Court's decision regarding *Rapanos v. United States and Carabell v. United States* (Rapanos Guidance). The decision provides new standards that distinguish between traditional navigable waters (TNWs), relatively permanent waters (RPWs), and non-relatively permanent waters (non-RPWs). Wetlands adjacent to non-RPWs are subject to CWA jurisdiction if: the water body is relatively permanent, or if a water body abuts a RPW, or if a water body, in combination with all wetlands adjacent to that water body, has a significant nexus with TNWs. The significant nexus standard will be based on evidence applicable to ecology, hydrology, and the influence of the water on the "chemical, physical, and biological integrity of downstream traditional navigable waters" (USACE, 2007). Isolated wetlands are not subject to CWA jurisdiction based on the Supreme Court's decision regarding Solid Waste Agency of Northern Cook County (SWAANC) (Guzy, 2001).

2.2 STATE

California Endangered Species Act

The California Fish and Game Code defines take (Section 86) and prohibits taking of a species listed as threatened or endangered (California Fish and Game Code Section 2080) or fully protected (California Fish and Game Code Section Sections 3511, 4700, and 5050) under the California Endangered Species Act (CESA). Should a state listed species be determined to occur within the project parcels, the CDFG would determine whether take would occur and would identify "reasonable and prudent alternatives" for the project and conservation of the species. The CDFG can authorize an incidental take permit if impacts of the authorized take are minimized and fully mitigated, however, no permit can be issued if its issuance would "jeopardize the continued existence of the species."

Pursuant to CEQA, the local lead agency must evaluate the significance of impacts to CESA endangered or threatened species that result in the physical modification of their habitat. The CDFG reviews the evaluation of potential impacts and may comment on whether mitigation measures to reduce the significance of impacts are sufficient and recommend additional mitigation measures.

California Fish and Game Code Sections 3503 and 3503.5 prohibit the take or needless destruction of bird nests or eggs; and prohibit the take, possession, and destruction of birds of prey (birds of the orders Strigiformes and Falconiformes; owls, falcons, and hawks). California Fish and Game Code Section 3511 lists birds that are "fully protected," which may not be taken or possessed except under specific permit. Depending on the presence of special status species or nesting raptors during periods of project construction, consultation with the CDFG may be necessary. California Fish and Game Code Section 3800 prohibit the take of nongame birds. Nongame birds are defined as, "all birds occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds."

Sections 2081(b) and (c) of the CESA allow the CDFG to issue an incidental take permit for a state listed threatened and endangered species only if specific criteria identified in Title 14 CCR, Sections 783.4(a) and (b) are met. A summary of the criteria are as follows: the authorized take is incidental to an otherwise lawful activity; the impacts of the authorized take are minimized and fully mitigated; the measures required to minimize and fully mitigate the impacts of the authorized take are roughly proportional in extent to the impact of the taking on the species, maintain the applicant's objectives to the greatest extent possible, and are capable of successful implementation; adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with and the effectiveness of the measures; and issuance of the permit will not jeopardize the continued existence of a state listed species.

The Native Protection Plant Act (California Fish and Game Code Sections 1900-1913) prohibit the taking, possessing, or sale of any plants within the state that are designated by CDFG as rare, threatened, or endangered. An exception allows landowners to take listed plant species provided that the owners notify and give CDFG at least ten days to retrieve the plants prior to being destroyed by project activities. California Fish and Game Code Section 1913 exempts from take prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, road, or other right of way."

The California Native Plant Society (CNPS) publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California. Plants on Lists 1A, 1B, and 2 of the CNPS Inventory must be addressed in CEQA projects (CEQA Guidelines Section 15380).

3.0 METHODOLOGY

3.1 BACKGROUND INFORMATION

Background information on special status species and their communities in the vicinity of the project parcels was obtained from the following sources:

- USFWS list, updated December 1, 2009, of federal listed special status species with the potential to occur on or be affected by projects on the Success Dam quad (USFWS, 2009) (**Attachment 1**);
- California Natural Diversity Database (CNDDB) query, dated November 4, 2009, of special status species known to occur on the Success Dam quad and the surrounding eight quads (CDFG, 2003) (**Attachment 1**);
- CNDDB query of special status species known to occur within five miles of the project parcels (CDFG, 2003; CNDDB, 2009);
- CNPS online inventory, dated December 4, 2009, for special status species known to occur on the Success Dam quad and the surrounding eight quads (CNPS, 2009) (**Attachment 1**); and
- Aerial photographs and topographic maps of the project parcels.

3.2 STANDARD REFERENCES

Standard references used for the biology and taxonomy of plants include: Abrams (1951, 1960), CNPS (2009), CDFG (2003, 2005b, 2005c), Hickman, ed. (1993), Mason (1957), Munz (1959), and Sawyer and Keeler-Wolf (1995). Standard references used for the biology and taxonomy of wildlife include Behler and King (1979), CDFG (2004, 2005a), Ehrlich et al. (1988), Jennings and Hayes (1994), Peterson (1990), Sibley (2000), and Stebbins (2003).

3.3 FIELD SURVEYS AND ANALYSIS

Analytical Environmental Services (AES) biologist Kelly Buja, M.S. conducted a biological survey of the project parcels on December 8 and 9, 2009. The biological surveys consisted of evaluating biological communities and documenting potential habitats for special status species with the potential to occur within the vicinity of the project parcels. A list of plant and wildlife species observed within the project parcels is provided in **Attachment 2**.

4.0 ENVIRONMENTAL SETTING

The project parcels are located in the southern High Sierra Nevada district of the Sierra Nevada subregion within the greater California Floristic Province (Ca-FP). The average regional climate data in the vicinity of the project parcels was obtained from the Porterville, California (047077) climate station and was recorded between 1948 and 2005. The average maximum temperature is 78.2 degrees Fahrenheit (°F) and the average minimum temperature is 49.9°F. The average annual precipitation is 10.99 inches

(WRCC, 2009). The topography is comprised of relatively level terrain in the west and steep terrain in the east with elevations that range from approximately 760 feet to 1,332 feet.

Surrounding land use consists primarily of cattle grazing. Ongoing land use activities within the project parcels consist of cattle grazing.

4.1 SOILS

As shown in **Figure 4**, nine soil types occur within the project parcels: (108) Blasingame-Rock outcrop complex, 9 to 50 percent slopes; (114) Cibo clay, 30 to 50 percent slopes; (115) Cibo-Rock outcrop complex, 15 to 50 percent slopes; (120) Coarsegold-Rock outcrop complex, 15 to 50 percent slopes; (142) Las Posas loam, 15 to 30 percent slopes; (152) Rock outcrop; (157) Sesame sandy loam, 15 to 30 percent slopes; (168) Vista-Rock outcrop complex, 9 to 50 percent slopes; and (173) Wyman loam, 2 to 5 percent slopes (NRCS, 2007). None of these soil types are considered hydric (NRCS, 2009).

4.2 HABITAT TYPES

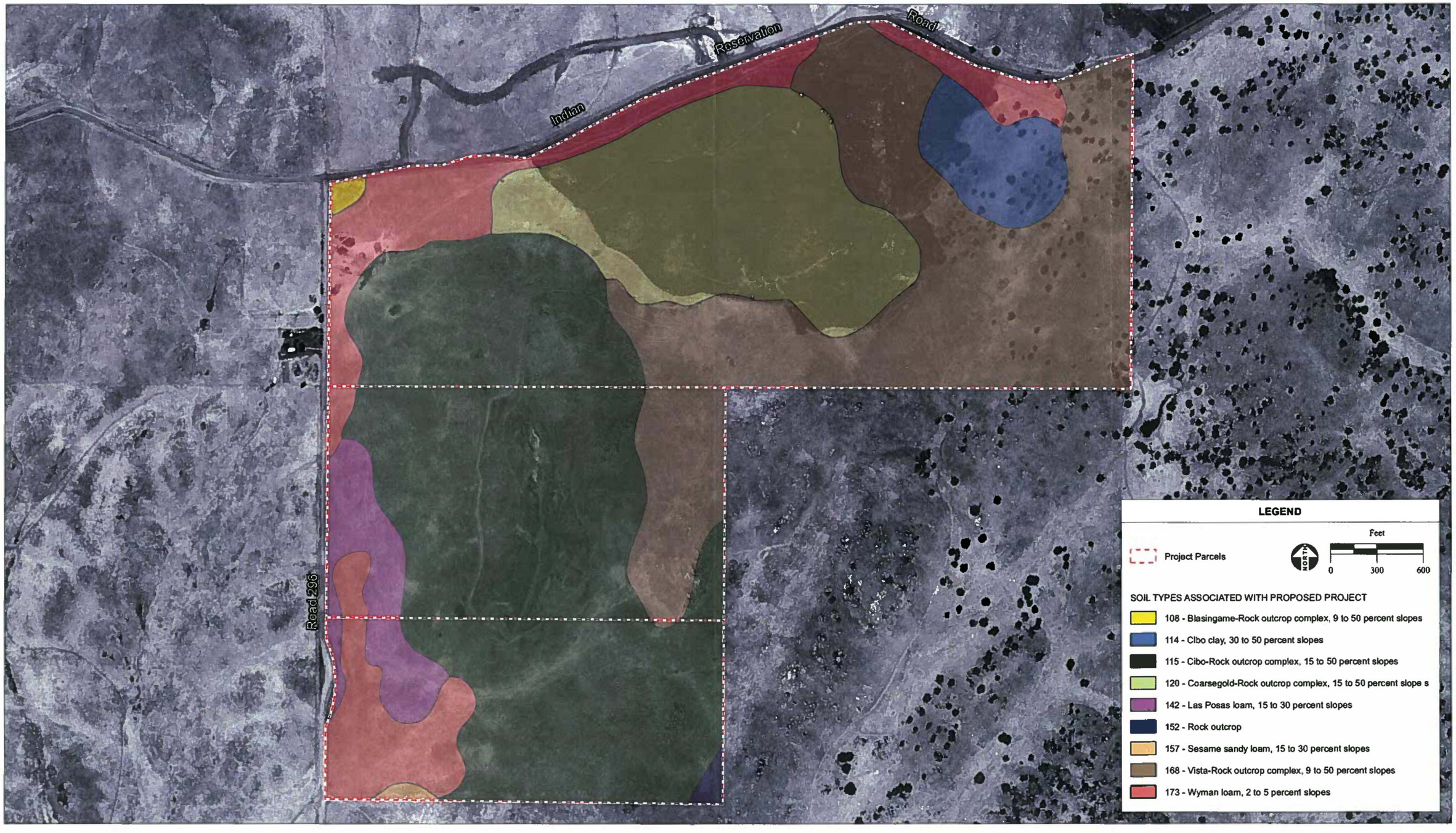
Four habitat types occur within the project parcels: nonnative annual grassland, limestone quarry, ruderal/developed, and ephemeral drainage. The habitat types observed within the project parcels are discussed in detail below. The habitat types are mapped in **Figure 5**. Representative photographs of the habitat types are illustrated in **Figure 6**. A comprehensive list of plants and wildlife identified within the project parcels is provided in **Attachment 2**.

Nonnative Annual Grassland

Nonnative annual grassland occurs throughout the majority of the project parcels (**Figure 6**: **Photograph 1**). Dominant vegetation observed within the project parcels includes: English plantain (*Plantago lanceolata*), cranesbill (*Geranium molle*), foxtail chess (*Bromus rubens*), soft brome (*Bromus hordeaceus*), wild oat (*Avena fatua*), and ripgut grass (*Bromus diandrus*).

Ruderal/Disturbed

Ruderal/disturbed areas occur within the project parcels. Ruderal/disturbed areas within the project parcels include an existing structure, ornamental landscaping, and graded access roads (**Figure 6**: **Photographs 2** and **3**). Dominant vegetation observed within the ruderal/disturbed areas includes: English plantain, ripgut grass, cranesbill, soft brome, Jimson weed (*Datura stramonium*), milkweed (*Asclepias* sp.), and ornamental landscaping. A total of four blue elderberry shrubs occur within the project parcels; two on the southern portion and two on the northwestern portion (**Figure** 6: **Photograph 4**).



SOURCE: NRCS Soil Survey Geographic (SSURGO) database for Tulare County, California, Central Part, 12/2007; National Agricultural Information Program aerial photograph, 2006; AES, 2009

Figure 4
Project Parcels Soils Map

SOURCE: NAIP Aerial Photograph, 7/1/2005; AES, 2009

Figure 5
Habitat Types and Wetland Features

PHOTO 1: View north of nonnative annual grassland from the south-central portion of the property.

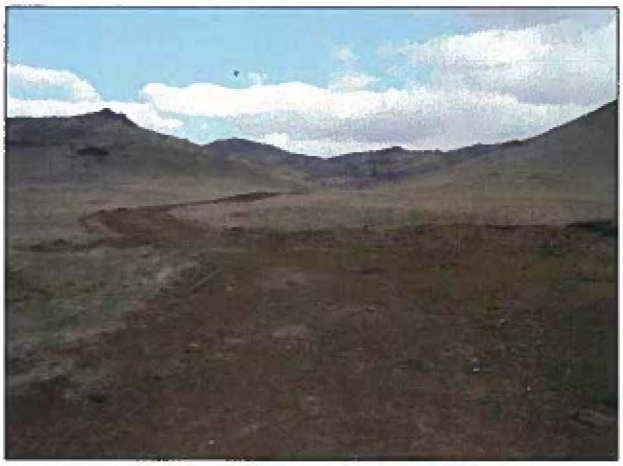


PHOTO 2: View east of graded access road on the northern portion of the property.

PHOTO 3: View north of the ruderal/disturbed areas on the northwestern portion of the property.

PHOTO 4: View north of the elderberry shrub within the northwestern portion of the property.

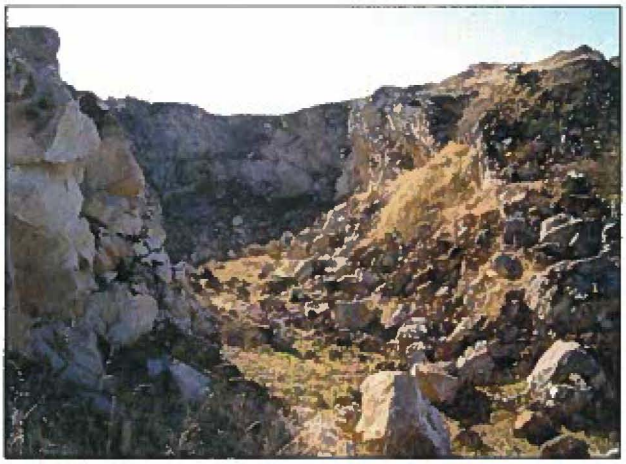


PHOTO 5: View south of a quarry on the central portion of the property.

PHOTO 6: View east of an ephemeral drainage on the central portion of the property.

SOURCE: AES, 2009

Figure 6
Site Photographs

Quarry

Five limestone quarries occur within the central portion of the project parcels at the top of three hills. An adit, a hand- or machine-dug horizontal tunnel with an airshaft, is included within this habitat type. The entrance to the adit is through an approximately 15-foot tunnel that was constructed through the side of a hill. Dominant vegetation observed within the limestone quarries includes: Fitch's hemizonia (*Hemizonia fitchii*), milkweed (*Asclepias* sp.), slender wild oat, wild oat, and ripgut grass (**Figure 6**: **Photograph 5**). No development is planned in the areas where the quarries and the adit are located within the project parcels.

Ephemeral Drainage

Three ephemeral drainages occur within the central portion of the project parcels (**Figure 6**: **Photograph 6**). Dominant species observed within the ephemeral drainages include: foxtail chess, Fitch's hemizonia, ripgut grass, and soft brome.

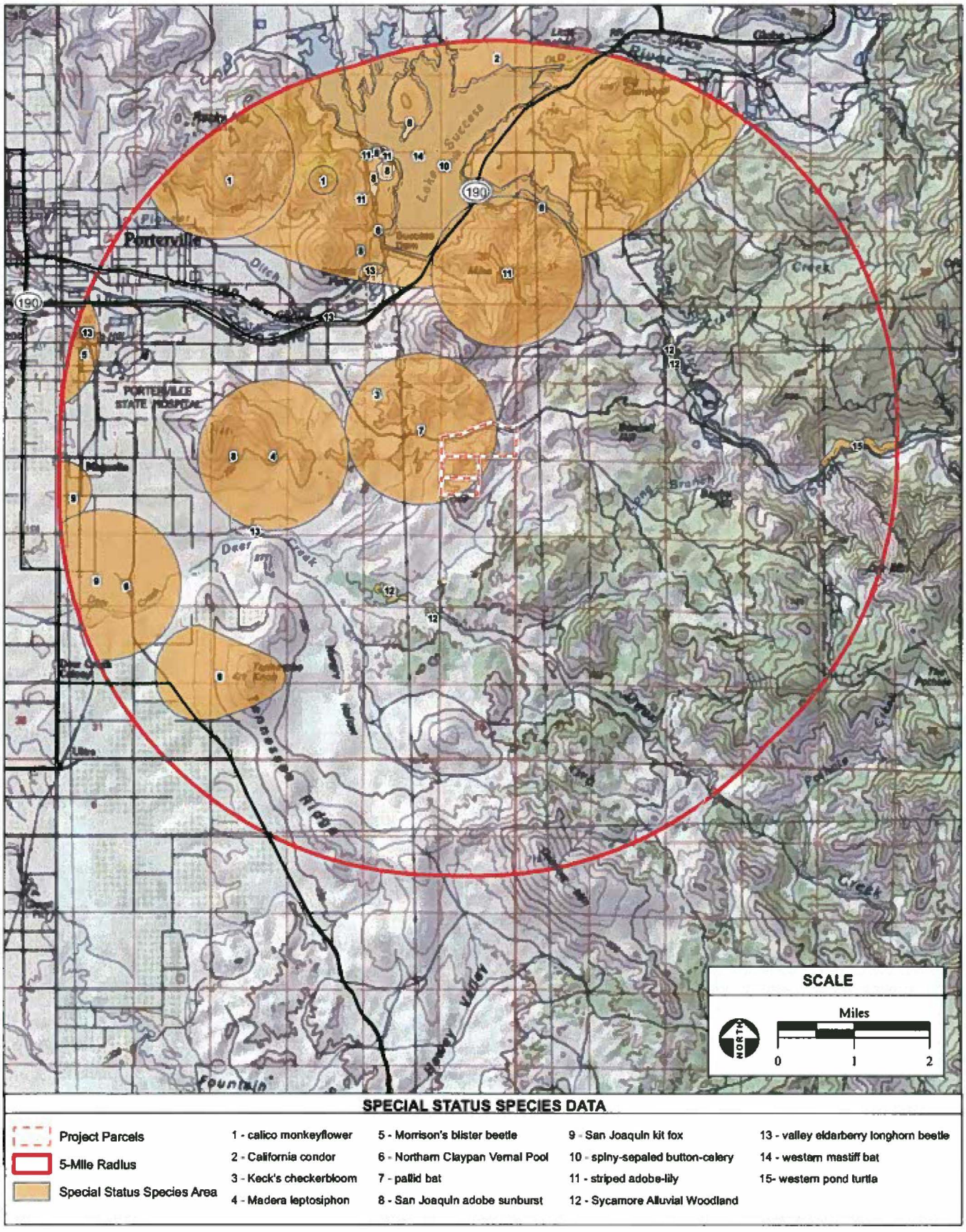
5.0 SPECIAL STATUS SPECIES

Special status has been defined to include those species that meet the definitions of rare or endangered plants or animals under CEQA, including species that are:

- Listed as endangered or threatened under the FESA (or formally proposed or candidates for listing);
- Listed as endangered or threatened under the CESA (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Game Code (Section 1901); and
- Designated as fully protected, pursuant to California Fish and Game Code (Section 3511, Section 4700, or Section 5050).

A summary of regionally occurring special status species was compiled in a table based on the USFWS file data and CNDDB and CNPS queries (**Attachment 1**). The table provides habitat requirements and a rationale as to whether the species has the potential to occur within the project parcels based on the presence of each species or its habitat during the December 8 and 9, 2009 biological surveys. Special status species without the potential to occur within the project parcels are not discussed further. **Figure 7** provides a CNDDB map of known occurrences of state and federally listed species documented to occur within five miles of the project parcels.

Table 1 provides a summary of the six special status plant species and six special status wildlife species with the potential to occur within the project parcels. Detailed descriptions of the special-status species with potential to occur within the project parcels are provided below.



SOURCE: "Success Dam, CA" USGS 7.5 Minute Topographic Quadrangle, Sections 12 & 13, T22S, R28E, Mt. Diablo Baseline & Meridian; California Natural Diversity Database, 8/2009; AES, 2009

Figure 7
CNDDB 5-Mile Radius Map

TABLE 1
POTENTIALLY OCCURRING SPECIAL STATUS SPECIES

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION
PLANTS				
Brodiaea insignis Kaweah brodiaea	--/CE/1B	Known from Tulare County (CNPS, 2009).	Bulbiferous herb found in cismontane woodland, meadows and seeps, and Valley and foothill grassland/granitic or clay, from 150 to 1,400 meters (CNPS, 2009).	April – June
Clarkia springvillensis Springville clarkia	FT/CE/1B	Known from Tulare County (CNPS, 2009).	Found in chaparral, cismontane woodland, Valley and foothill grassland/granitic, from 245 to 1,220 meters (CNPS, 2009).	May – July
Eryngium spinosepalum spiny-sepaled button-celery	--/--/1B	Known from Fresno, Madera, Merced, Stanislaus, Tulare, and Toulumne counties (CNPS, 2009).	Annual to perennial herb found in Valley and foothill grassland and vernal pools from 80 to 255 meters (CNPS, 2009).	April - May
Fritillaria striata striped adobe-lily	--/CT/1B	Known from Kern and Tulare counties (CNPS, 2009).	Found in cismontane woodland and Valley and foothill grassland/usually clay from 135 to 1,455 meters (CNPS, 2009).	February – April
Pseudobahia peirsonii San Joaquin adobe sunburst	FT/CE/1B	Known from Fresno, Kern, and Tulare counties (CNPS, 2009).	Found in cismontane woodland and Valley and foothill grassland/adobe clay, from 90 to 800 meters (CNPS, 2009).	March – April
Sidalcea keckii Keck's checkerbloom	FE,CH/--/1B	Known to occur in Colusa, Fresno, Merced, Napa, Solano, Tulare, and Yolo counties (CNPS, 2009).	Found in cismontane woodland and valley and foothill grassland/serpentinite, clay, from 120 to 425 meters (CNPS, 2009).	April – May
ANIMALS				
Invertebrates				
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT/--/--	Known from Amador, Butte, Calaveras, Colusa, El Dorado, Fresno, Glenn, Kern, Madera, Mariposa, Merced, Napa, Placer, Fresno, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba counties (NatureServe, 2009).	Found in riparian forest communities from 0 to 762 meters. Exclusive host plant is elderberry (*Sambucus* species), which must have stems at least one inch in diameter for the beetle (NatureServe, 2009).	Year round
Birds				
Gymnogyps californianus California condor	FE/--/--	Populations occur in Ventura, Santa Barbara, San Luis Obispo, and Monterey counties.	Inhabits a wide range of habitats with relatively open areas and adequate food supplies. Topographic relief is also required to provide uplift for takeoff and flight.	All Year
Mammals				
Antrozous pallidus pallid bat	--/CSC/--	Found in arid and semi-arid regions across much of the American west, up and down the coast from Canada and Mexico (Arizona-Sonora Desert Museum, 2006-2009).	Found in grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests from 0 to 2,000 meters. The species is most common in open, dry habitats with rocky areas for roosting. Roosts also	Year Round

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION
			include cliffs, abandoned buildings, bird boxes, and under bridges (Harris, 1990).	
Eumops perotis californicus Western mastiff bat	--/CSC/--	From central California, southward to central Mexico. In California, they have been recorded from Butte County southward in the western lowlands through the southern California coastal basins and the western portions of the southeastern desert region (Ahlbom, 2000).	Found in rugged, rocky areas where suitable crevices are available for day-roosts. Characteristically, day-roosts are located in large cracks in exfoliating slabs of granite or sandstone (Ahlborn, 2000).	Year Round
Taxidea taxus American badger	--/CSC/--	Known throughout most of California except in the northern North Coast (Ahlborn, 2005).	Found in the drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Badgers are generally associated with treeless regions, prairies, parklands, and cold desert areas. Cultivated lands have been reported to provide little usable habitat for this species (Ahlborn, 2005).	All Year
Vulpes macrotis mutica San Joaquin kit fox	FE/CT/--	Known from San Joaquin Valley and surrounding foothills of the Coast Ranges, Sierra Nevada, and Tehachapi Mountains (Duke et al., 1997).	Found in alkali sink, Valley grassland, foothill woodland. Hunts in areas with low sparse vegetation that allows good visibility and mobility. Pupping dens are built in loosely textured soils from 110 to 900 meters (Morrell, 1972).	Year round

STATUS CODES
FEDERAL: United States Fish and Wildlife Service
FE Federal Endangered
FT Federal Threatened
FC Federal Candidate for Listing
CH Critical Habitat

STATE: California Department of Fish and Game
CE California Listed Endangered
CT California Listed Threatened
CSC California Species of Special Concern

5.1 SPECIAL STATUS PLANTS

Special status plant species with the potential to occur in the vicinity of the project site are discussed below.

Kaweah Brodiaea (*Brodiaea insignis*)
Federal Status – None
State Status – Endangered
Other – CNPS List 1B

Kaweah brodiaea is a bulbiferous herb in the lily family (Liliaceae). It grows in cismontane woodland, meadows and seeps, and Valley and foothill grasslands on soils that are granitic or clay, from 150 to 1,400 meters. This species blooms from April through June (CNPS, 2009).

There are no documented CNDDB occurrences of this species within five miles of the project parcels. The nonnative annual grassland provides habitat for this species. This species was not observed within the project parcels, however, the December 8 and 9, 2009 biological surveys were conducted outside the evident and identifiable blooming period for this species. This species has the potential to occur within the project parcels.

Springville Clarkia (*Clarkia springvillensis*)
Federal Status – Threatened
State Status – Endangered
Other – CNPS List 1B

Springville clarkia is an annual herb in the evening primrose family (Onagraceae). It grows on granitic soils in chaparral, cismontane woodland, and Valley and foothill grassland from 245 to 1,220 meters. This species blooms from May through July (CNPS, 2009).

There are no documented CNDDB occurrences of this species within five miles of the project parcels. The nonnative annual grassland provides habitat for this species. This species was not observed within the project parcels, however, the December 8 and 9, 2009 biological surveys were conducted outside the evident and identifiable blooming period for this species. This species has the potential to occur within the project parcels.

Spiny-Sepaled Button-Celery (*Eryngium spinosepalum*)
Federal Status – None
State Status – None
Other – CNPS List 1B

Spiny-sepaled button-celery is an annual to perennial herb in the Apiaceae family. It grows in Valley and foothill grassland and vernal pools from 80 to 255. This species blooms from April through May (CNPS, 2009).

There is one documented CNDDB occurrence of this species within five miles from the project parcels. The nonnative annual grassland provides habitat for this species. This species was not observed within the project parcels, however, the December 8 and 9, 2009 biological surveys were conducted outside the evident and identifiable blooming period for this species. This species has the potential to occur within the project parcels.

Striped Adobe-Lily (*Fritillaria striata*)
Federal Status – None
State Status – Threatened
Other – CNPS List 1B

Striped adobe-lily is a bulbiferous herb in the lily family (Liliaceae). This species grow in cismontane woodland and Valley and foothill grassland, usually in clay soils, from 135 to 1,455 meters. This species blooms from February through April (CNPS, 2009).

There are three documented CNDDB occurrences of this species within five miles of the project parcels. The nonnative annual grassland provides habitat for this species. This species was not observed within the project parcels, however, the December 8 and 9, 2009 biological surveys were conducted outside the evident and identifiable blooming period for this species. This species has the potential to occur within the project parcels.

San Joaquin Adobe Sunburst (*Pseudobahia peirsonii*)
Federal Status – Threatened
State Status – Endangered
Other – CNPS List 1B

San Joaquin adobe sunburst is an annual herb in the sun flower family (Asteraceae). This species grows on adobe clay substrates in cismontane woodland and Valley and foothill grassland from 90 to 800 meters. This species blooms from March through April (CNPS, 2009).

There are eight documented CNDDB occurrences of this species within five miles of the project parcels. The nonnative annual grassland provides habitat for this species. This species was not observed within the project parcels, however, the December 8 and 9, 2009 biological surveys were conducted outside the evident and identifiable blooming period for this species. This species has the potential to occur within the project parcels.

Keck's Checkerbloom (*Sidalcea keckii*)
Federal Status – Endangered
State Status – None
Other – CNPS List 1B

Keck's checkerbloom is an annual herb in the mallow family (Malvaceae). It grows on serpentine and clay soils in cismontane woodland and Valley and foothill grassland from 120 to 425 meters. This species blooms from April through May (CNPS, 2009). Critical habitat has been designated for Keck's checkerbloom in Fresno and Tulare counties (**Figure 8**). The project parcels are not located within USFWS designated critical habitat for this species.

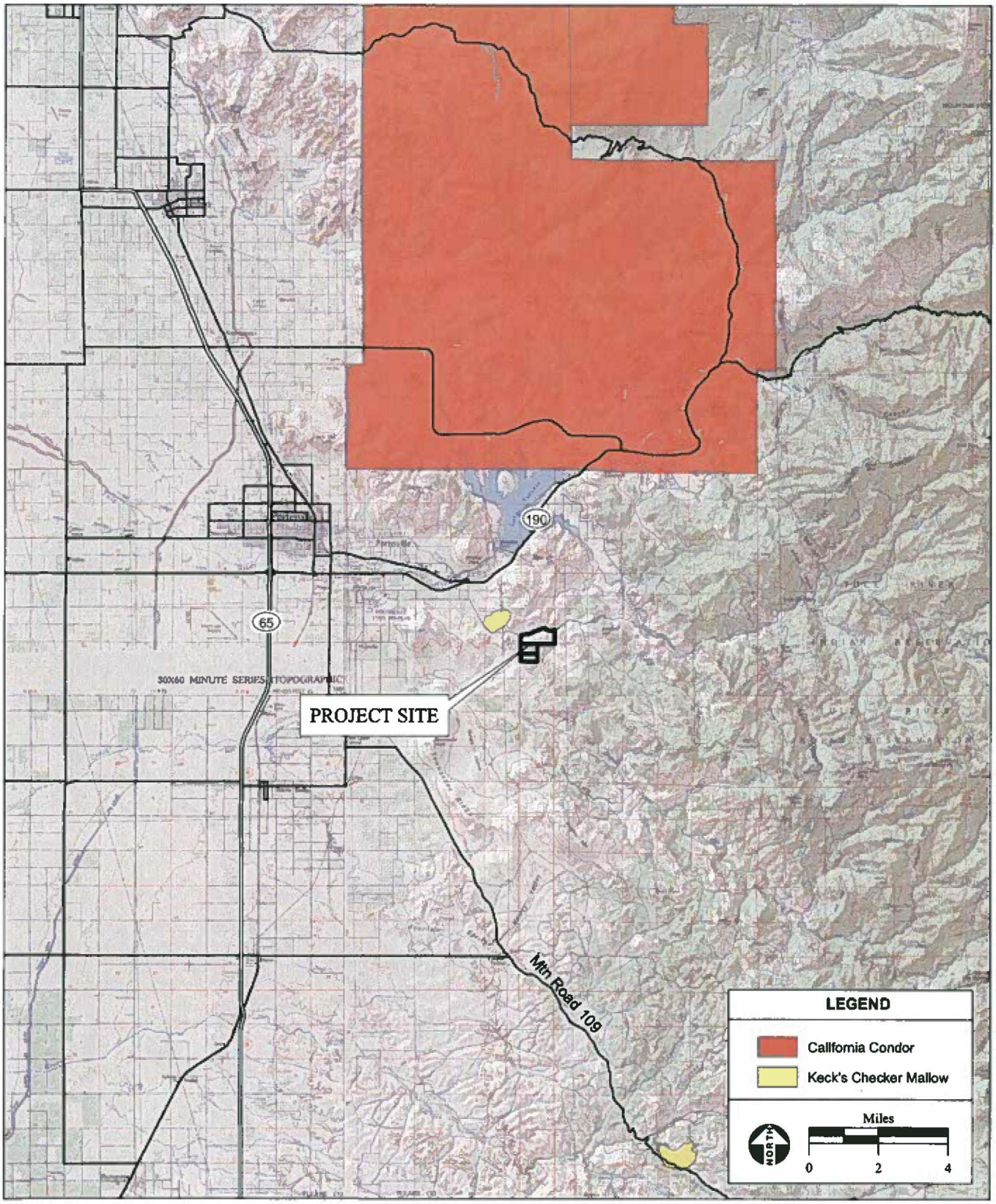
There is one documented CNDDB occurrence of this species within five miles of the project parcels. The nonnative annual grassland provides habitat for this species. This species was not observed within the project parcels, however, the December 8 and 9, 2009 biological surveys were conducted outside the evident and identifiable blooming period for this species. This species has the potential to occur within the project parcels.

5.2 SPECIAL STATUS WILDLIFE

Special status wildlife species with the potential to occur in the vicinity of the project site are discussed below.

Invertebrates
Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*)
Federal Status – Threatened
State Status – None

The Valley elderberry longhorn beetle (VELB) is completely dependent on its host plant, the elderberry (*Sambucus* spp.), which occurs in riparian forests and adjacent upland habitats of California's Central Valley (USFWS, 1999b). VELB larvae live within the soft pith of the elderberry where they feed for one-to-two years. Adults emerge from pupation inside the wood of elderberry shrubs during the spring as the plant begins to flower. The adults feed on the elderberry foliage up until they mate. Females lay their eggs in the crevices of elderberry bark. Upon hatching the larvae then tunnel into shrub stems and feed there. VELB typically utilize stems that are greater than one inch in diameter at ground level (USFWS, 2008).



SOURCE: USFWS Critical Habitat Portal, 2002-2006; HydroScience Engineers, 2008; ""Three Rivers, CA", "Isabella Lake, CA", "Visalia, CA" & "Delano, CA" USGS 100K Topographic Quadrangles, Mt. Diablo Baseline & Meridian; AES, 2009

Figure 8
USFWS Critical Habitats

There are eight documented CNDDB occurrences of this species within five miles of the project parcels. Four elderberry shrubs were observed within the project parcels; two on the northwestern side within the ruderal/disturbed area and two on the southeastern side within the nonnative annual grassland. No exit holes were observed within the elderberry shrubs during the December 8 and 9, 2009 biological surveys of the project parcels. The elderberry shrubs do not occur in the vicinity of any riparian forest. This species has the potential to occur within the project parcels.

Birds

California Condor (*Gymnogyps californianus*)

Federal Status – Endangered

State Status – None

California condors are scavengers that roam vast distances to feed on large carcasses. They require open habitats where the canopy does not obscure the view of carrion below. In addition, appropriate habitats require topography that creates reliable air movements for extended soaring flight. The California condor nests in caves, on cliffs, or in holes in giant sequoia trees. Nest sites must be partially sheltered and located on a cliff, steep slope, or tall tree to allow easy landing and takeoff from the air (Snyder and Schmitt, 2002). The USFWS has designated critical habitat for this species **(Figure 8)**. The project parcels are not located within USFWS designated critical habitat for this species.

There is one documented CNDDB occurrence of this species within five miles of the project parcels. The nonnative annual grassland provides foraging habitat for this species. The limestone quarries also provide nesting habitat for this species. This species was not observed foraging or nesting within the project parcels during the December 8 and 9, 2009 biological surveys of the project parcels. This species has the potential to forage within the project parcels.

Migratory Birds

Migratory birds and other birds of prey, protected under 50 CFR 10 of the MBTA, have the potential to nest in the trees and forage in the nonnative annual grassland within the project parcels. The nesting season for raptors and other migratory birds occurs between February and October. No birds were observed nesting during the biological surveys of the project parcels, however, the December 8 and 9, 2009 biological surveys were conducted outside of the nesting season.

Mammals

Pallid Bat (*Antrozous pallidus*)

Federal Status – None

State Status – Species of Concern

Pallid bats are found in grassland, shrubland, and woodland habitats from sea level up to mixed conifer forests through 2,000 meters. These species commonly occur in open, dry habitats with rocky areas for

roosting. Other roosts include cliffs, abandoned buildings, bird boxes, and under bridges (Harris, 2000). These species forage over open ground during the dawn and dusk hours. Pallid bats establish daytime roosts in caves, crevices, mines, large hollow trees, and unoccupied buildings. Pallid bats mate from October through February and most young are born from April through July (Harris, 2000). They occur in arid and semi-arid regions across much of the American west, up and down the coast from Canada and Mexico (Arizona-Sonora Desert Museum, 2006-2009).

There is one documented CNDDB occurrence of this species within five miles of the project parcels. The record was mapped as a polygon that surrounds the project parcels. The quarries and the existing structure within the nonnative annual grassland provide nesting habitat for this species. This species was not observed foraging or roosting during the December 8 and 9, 2009 biological surveys of the project parcels. This species has the potential to forage and roost within the project parcels.

Western Mastiff Bat (*Eumops perotis californicus*)
Federal Status – None
State Status – Species of Concern

Western mastiff bats are resident species that occur in open semi-arid and arid habitats including conifer, deciduous woodland, coastal scrub, grassland, palm oases, chaparral, and desert scrub. They also occur in urban areas. Roosting takes place in crevices within rock outcrops, high buildings, trees, and tunnels. Roosting sites require vertical faces in order to drop-off into flight. Western mastiff bat either roosts alone or in small groups, typically less than a hundred bats. They among alternate day time roosts. Young are born from April to August and occasionally into September. Western mastiff bats are known from central California, southward to central Mexico. In California, they are known from Butte County southward in the western lowlands through the southern California coastal basins and the western portions of the southeastern desert region (Ahlborn, 2000).

There is one documented CNDDB occurrence of this species within five miles of the project parcels. The limestone quarries, including an adit, and the existing structure within the nonnative annual grassland provide nesting habitat for this species. This species was not observed foraging or roosting during the December 8 and 9, 2009 biological surveys of the project parcels. This species has the potential to forage and roost within the project parcels.

American Badger (*Taxidea taxus*)
Federal Status – None
State Status – Species of Concern
Other – None

American badgers are found in dry, open habitats including grassland and open woodland. Suitable burrowing habitat requires dry, often sandy soil. Breeding occurs in summer and early fall, with young

being born from March to April (CDFG, 2005). American badgers are known throughout California, except in the northern North Coast (Ahlborn, 2005).

There are no CNDDB records for the American badger within five miles of the project parcels. The nonnative annual grassland provides habitat for this species. This species has the potential to occur within the project parcels.

San Joaquin Kit Fox (*Vulpes macrotis mutica*)
Federal Status – Endangered
State Status – Threatened

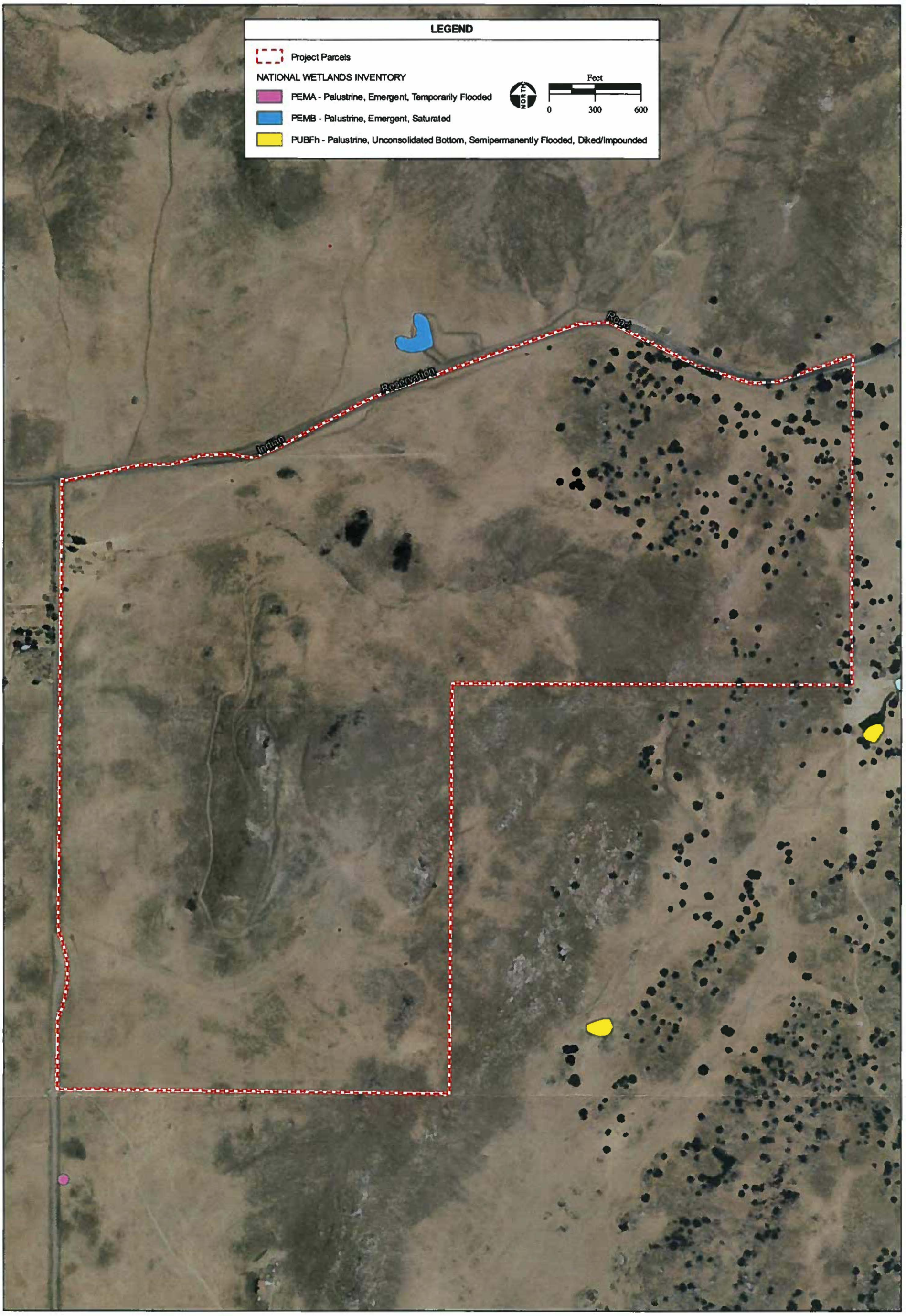
San Joaquin kit fox (SJKF) primarily inhabit grassland and scrubland communities. SJKF also inhabit oak woodland, alkali sink scrubland, and vernal pool and alkali meadow communities. Foraging habitat includes grassland, woodland, and open scrub. Suitable burrowing habitat includes an open, flat area with loose, generally sandy or loamy soils (Brown et al., 2006). SJKF are known from the San Joaquin Valley floor of Kern, Tulare, Kings, Fresno, Madera, San Benito, Merced, Stanislaus, San Joaquin, Alameda, and Contra Costa counties and the surrounding foothills of the coastal ranges, Sierra Nevada, and Tehachapi Mountains. SJKF also occur in the interior basins and ranges of Monterey, San Benito, San Luis Obispo, and Santa Clara counties and in the upper Cuyama River watershed in northern Ventura and Santa Barbara counties and southeastern San Luis Obispo County (Brown et al., 2006).

There are three documented CNDDB occurrences of this species within five miles of the project parcels. The nonnative annual grassland provides foraging habitat for this species. The project parcels does not provide denning habitat for this species. This species has the potential to occur within the project parcels.

6.0 WETLANDS AND OTHER WATERS OF THE U.S.

Ephemeral drainages (Class III) can be classified as linear features that channel and convey overland sheet flows during and immediately after significant storm events. Since these channels convey pulse flows from direct precipitation, the frequency and duration in which water is held does not typically support a dominant hydrophytic plant community. The morphology of these ephemeral channels is typified by an ordinary high water mark, moderate to high gradient, heavy entrenchment, deep scouring, and low sinuosity yielding poor substrate sorting as the fluvial process is minimized. As such, ephemeral drainages are typically dry for some portions of the year and have shorter periods of inundation.

The National Wetlands Inventory (NWI) map does not identify any wetland features or waterways within the project parcels (**Figure 9**). Three ephemeral drainages were observed during the December 8 and 9, 2009 biological surveys of the project parcels. No other wetland features were observed during the surveys. Although a formal delineation has not been conducted within the project parcels, these waterways are not likely to be subject to USACE jurisdiction as they drain only uplands and have no



SOURCE: USFWS National Wetlands Inventory, 1985; AES, 2009

Figure 9
National Wetlands Inventory

significant nexus on the "chemical, physical, and biological integrity of downstream traditional navigable waters" (USACE, 2007). In addition, the proposed project has been designed to avoid these ephemeral drainages.

7.0 IMPACTS AND MITIGATION MEASURES

7.1 SIGNIFICANCE CRITERIA

A project would be considered to have a significant impact on biological resources if it would:

- Have a substantial adverse effect on species having special status under the FESA or the CESA;
- Have a substantial adverse effect on habitat necessary for the future survival of such species, including areas designated as critical habitat by the CDFG or the USFWS and areas designated as Essential Fish Habitat (EFH) by NMFS;
- Result in take of nesting migratory bird species as defined by the MBTA (16 USC §703-712);
- Have a substantial adverse effect on riparian habitat as defined in Sections 1600-1616 of the Fish and Game Code;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means; or
- Conflict with local policies or ordinances.

7.2 PLANTS

Impacts

Grading activities associated with the proposed project would result in the removal of potential habitat for Kaweah brodiaea, Springville clarkia, spiny-sepaled button-celery, striped adobe-lily, San Joaquin adobe sunburst, and Keck's checkerbloom. Of these species, Springville clarkia, San Joaquin adobe sunburst, and Keck's checkerbloom are the only ones that are federally listed. The avoidance and mitigation measures identified below would reduce impacts to a less than significant level.

Mitigation Measures

- Focused botanical surveys shall be conducted by a qualified botanist during the blooming periods for Kaweah brodiaea (April through June), Springville clarkia (May through June), spiny-sepaled button-celery (April through May), striped adobe-lily (February through April), San Joaquin adobe sunburst (March through April), and Keck's checkerbloom (April through May) prior to commencement of construction activities within the nonnative annual grassland. A letter report shall be completed following the pre-construction survey to document the results. Should no species be observed, then no additional mitigation is required.
- Should Kaweah brodiaea, Springville clarkia, spiny-sepaled button-celery, striped adobe-lily, San Joaquin adobe sunburst, and/or Keck's checkerbloom be observed during the focused botanical surveys, the biologist shall contact the Tribe within one day following the pre-construction survey

to report the findings. A ten-foot buffer shall be established around the species using construction flagging prior to commencement of construction activities.

- Should avoidance of the state endangered or threatened plants including Kaweah brodiaea, Springville clarkia, striped adobe-lily, San Joaquin adobe sunburst, and/or Keck's checkerbloom be infeasible, then a Section 2081 permit from the CDFG would be required. Mitigation measures including the salvaging and the replanting of individuals onsite, would be discussed in detail within the permit.
- Should avoidance of spiny-sepaled button-celery, a CNPS-listed 1B species protected under the Native Plant Protection Act, be infeasible, then the CDFG would be notified at least ten days prior to commencement of ground-breaking activities to provide the CDFG the opportunity to salvage and relocate the species from the project site.

The proposed project would have no effect on federally listed Springville clarkia, San Joaquin adobe sunburst, or Keck's checkerbloom if the pre-construction surveys determine that no federal listed plants occur within the project site, or, if found, would be avoided within the project site. Conversely, the proposed project would adversely affect the federal listed Springville clarkia, San Joaquin adobe sunburst, or Keck's checkerbloom should the pre-construction surveys determine presence and avoidance of one or more of the federal listed plants is infeasible. The project site is outside of USFWS designated critical habitat for Keck's checkerbloom. The USFWS has not designated critical habitat for Springville clarkia or San Joaquin adobe sunburst. Therefore, the proposed project will have no effect on critical habitat for federal listed plants.

7.3 WILDLIFE

Invertebrates

Impacts

The project parcels contain four elderberry shrubs, two of which occur within the proposed project site. The project site provides potential habitat for the federally listed VELB within the two elderberry shrubs on the northwest side of the project parcels. The proposed project has been designed to avoid direct impacts to VELB. The proposed project could result in indirect impacts to VELB. Upon implementation of the mitigation measures identified below, potential impacts to VELB would be reduced to a less than significant level.

Mitigation Measures

- The Tribe shall comply with all avoidance measures including protective measures identified in the *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS, 1999b), to the maximum extent feasible. Complete avoidance measures include:
    - No construction activities shall occur within 100 feet of elderberry shrubs containing stems measuring 1.0 inches or greater in diameter.
    - Firebreaks may not be included in the buffer zone.

- The USFWS must be consulted before any disturbances within the buffer areas are considered.
- In buffer areas, construction-related disturbance authorized by the USFWS should be minimized and any damaged area should be promptly restored following construction.
- All areas to be avoided shall be fenced and flagged during construction activities. In areas where encroachment on the 100-foot buffer has been approved by the USFWS, a minimum setback of at least 20 feet from the dripline of each elderberry shall be implemented.
- Signs shall be erected every 50 feet along the edge of avoidance areas with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the FESA, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.
- Work crews shall be instructed about the status of the VELB and the need to protect its elderberry host plant.
- Staging areas shall be located at least 100 feet from elderberry shrubs with stems at least one inch in diameter at ground level. Temporary stockpiling of excavated or imported material shall occur only in approved construction staging areas. Excess excavated soil shall be used onsite or disposed of at a regional landfill or other appropriate facility.
- Equipment operators shall access the project site via existing roads. The operators shall minimize access on existing roads in the vicinity of the elderberry shrubs to the maximum extent feasible.
- Standard precautions shall be employed by the construction contractor to prevent the accidental release of fuel, oil, lubricant, or other hazardous materials.
- A litter control program shall be instituted within the project site. The contractor shall provide closed garbage containers for the disposal of all food-related trash items (e.g., wrappers, cans, bottles, food scraps). All garbage shall be removed daily from the project site.

The proposed project would have no effect on the federal listed VELB if no construction activities occur within 100-feet of the elderberry shrubs. The proposed project would not likely adversely affect VELB if encroachment of the 100-foot buffer is authorized by the USFWS. The project site is outside of USFWS designated critical habitat for VELB. The proposed project would have no effect on USFWS-designated critical habitat for VELB.

Mammals

Impacts

Potential roosting habitat for pallid bat and western mastiff bat occurs on the project parcels within the quarries, however, no construction activities are proposed in the vicinity of the quarries. Potential

roosting habitat occurs in the ornamental trees and the existing structure within the northwestern side of the project site. If active roosts are present in these areas, removal of trees and the existing structure and other construction activities associated with development of the proposed project could result in significant impacts to these species. Upon implementation of the mitigation measures identified below, potential impacts to these species would be reduced to a less than significant level.

Mitigation Measures

- If the ornamental trees (excluding elderberry shrubs) and the existing structure within the project site are proposed for removal, a qualified wildlife biologist shall conduct a focused survey for roosting bats no more than two weeks prior to the onset of construction activities. Trees that contain cavities will be thoroughly investigated for evidence of bat activity.
- If special status bats are found roosting within any trees and the existing structure slated for removal, the areas shall be demarcated by exclusionary fencing and avoided until a qualified biologist can assure that the bats have vacated.

Impacts

American badger has the potential to occur in the vicinity of the project site. Construction activities associated with grading within the nonnative annual grassland could impact upland and denning habitat for the American badger. Upon implementation of the mitigation measures identified below, potential impacts to the American badger would be reduced to a less than significant level.

Mitigation Measures

- A pre-construction survey shall be conducted by a qualified biologist for American badger within seven days prior to commencement of construction activities. If no American badgers are observed in the project site, then no additional mitigation measures are required.
- Should American badger be observed in the project site, then the biologist shall conduct sensitivity training to all crew members. The sensitivity training shall describe the biology and habitat requirements of the species and provide information as to what to do should any members identify the species within the project site.

Impacts

Potential denning habitat for SJKF occurs on the project parcels by the quarries, however, no construction activities are proposed in the vicinity of the quarries. SJKF has the potential to forage in the project site. The proposed project has the potential to impact foraging habitat for SJKF. Upon implementation of the mitigation measures identified below, potential impacts to SJKF foraging habitat would be reduced to a less than significant level.

Mitigation Measures

- A qualified wildlife biologist shall conduct an early evaluation of the project site for SJKF and/or signs of SJKF within 60 to days prior to the estimated onset of construction activities. The

qualified wildlife biologist shall submit the results of the early evaluation in writing to the USFWS and the USFWS will then evaluate the information presented. The USFWS will then generate a written response within 30 days of receiving the early evaluation results as to whether or not the project site is suitable SJKF habitat. If the USFWS decides that the site is suitable SJKF habitat, protocol level surveys may be required within those areas. The SJKF surveys must adhere to the USFWS's *San Joaquin Kit Fox Survey Protocol for the Northern Range* (USFWS, 1999a). Surveys shall be conducted in accordance with these promulgated guidelines in order to identify SJKF habitat features, evaluate use of those identified features, and assess potential impacts to the features. Survey results must be received and approved by the USFWS and the CDFG prior to the onset of construction activities. If SJKF or its habitat is not detected within the project site, no further mitigation is required unless the USFWS deems additional mitigation measures.

- In addition to the early evaluation, the following mitigation measures shall be implemented during construction activities to avoid project-related effects to SJKF in accordance the *U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior To or During Ground Disturbance* (1999c):
    - Habitat subject to permanent and temporary construction disturbances and other types of project-related disturbance shall be minimized. Project designs shall limit or cluster permanent project features to the smallest area possible while still permitting project goals to be achieved. To minimize temporary disturbances, all project-related vehicle traffic shall be restricted to established roads, construction areas, and other designated areas. These areas shall also be included in pre-construction surveys and, to the extent possible, shall be established in locations disturbed by previous activities to prevent further impacts.
    - Project-related vehicles shall observe a 20-mph speed limit in all construction areas, except on county roads and state and federal highways; this is particularly important at night when SJKF are most active. To the extent possible, night-time construction shall be minimized. Off-road traffic outside of designated project site should be prohibited.
    - To prevent inadvertent entrapment of SJKF or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than two feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals.
    - SJKF are attracted to den-like structures such as pipes and may enter stored pipe becoming trapped or injured. All construction pipes, culverts, or similar structures with a diameter of four inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for SJKF before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a SJKF is discovered inside a pipe, that section of pipe should not be moved until the USFWS has

been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved once to remove it from the path of construction activity, until the SJKF has escaped.

- All food-related trash items shall be disposed of in accordance with the VELB litter control program mitigation measure.
- No firearms shall be allowed on the project site during construction activities.
- To prevent harassment, mortality of SJKF or destruction of dens by dogs or cats, no pets shall be permitted on the project site during construction activities.
- Use of rodenticides and herbicides in the project site should be restricted during construction activities. This is necessary to prevent primary or secondary poisoning of SJKF and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation, as well as additional project-related restrictions deemed necessary by the USFWS. If rodent control must be conducted, zinc phosphide should be used because of proven lower risk to SJKF.
- A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a SJKF or who finds a dead, injured, or entrapped individual. The representative will be identified during the employee education program. The representative's name and telephone number shall be provided to the USFWS.
- An employee education program shall be conducted for any project that has expected impacts to SJKF or other endangered species. The training shall consist of a brief presentation by persons knowledgeable in SJKF biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and agency personnel involved in the project. The training shall include the following: a description of the SJKF and its habitat needs; a report of the occurrence of SJKF in the project site; an explanation of the status of the species and its protection under the FESA; and a list of measures being taken to reduce impacts to the species during project construction. A fact sheet conveying this information should be prepared for distribution to the above-mentioned people and anyone else who may enter the project site.
- Upon completion of the proposed project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc., shall be recontoured if necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the project, but that after project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas shall be determined on a site-specific basis in consultation with the USFWS, the CDFG, and revegetation experts.

- In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape, or the USFWS should be contacted for advice.
- Any contractor, employee, or military or agency personnel who inadvertently kills or injures a SJKF shall immediately report the incident to their representative. This representative shall contact the CDFG immediately in the case of a dead, injured, or entrapped SJKF. The CDFG contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or biologist.
- The USFWS Sacramento Office and the CDFG will be notified in writing within three working days of the accidental death or injury to a SJKF during project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information. The USFWS contact is the Chief of the Division of Endangered Species is at 2800 Cottage Way, Suite W2605, Sacramento, CA 95825, (916) 414-6620. The CDFG contact is Mr. Ron Schlorff at 1416 9th Street, Sacramento, California 95814, (916) 654-4262.

The proposed project may affect, but is not likely to adversely affect SJKF because SJKF has the potential to forage within the project site. The mitigation measures would reduce the potential to harm SJKF during project related activities by minimizing permanent and temporary construction disturbances and other types of project-related disturbances to the extent feasible, and ensuring that appropriate measures are taken during construction to minimize the potential to harm SJKF. Critical habitat has not been designated for SJKF. The proposed project would have no effect on critical habitat for SJKF.

Birds

Impacts

The project parcels provide potential nesting habitat for the California condor on the steep hills in the vicinity of the limestone quarries, however, the proposed project has been designed to avoid these areas. Therefore, the California condor would not be impacted by the proposed project.

The proposed project will have no effect on the California condor because the project has been designed to avoid potential nesting habitat for the species. The proposed project does not occur in areas where the USFWS has designated critical habitat for the California condor. The proposed project would have no effect on critical habitat for the California condor.

Mitigation Measures

- None required.

Impacts

Potential nesting habitat is present within the project site for migratory bird species and other birds of prey, including the red-tailed hawk. If active nests are present in these areas, tree removal and other construction activities associated with development of the proposed project could result in impacts to

these species. The nests and eggs of any bird are protected from take pursuant to California Fish and Game Code Section 3503. During construction of the proposed project, removal of an active nest during the breeding season, any disturbance that results in nest abandonment, or forced fledging of nestlings is a considered a take under the MBTA. Upon implementation of the mitigation measures identified below, potential impacts to nesting habitat for birds would be reduced to a less than significant level.

Mitigation Measures

- If construction begins during the nesting season for raptors and other migratory birds (between February and October), a qualified biologist shall conduct a pre-construction survey for active nests within 250 feet of the proposed project site no more than two weeks prior to construction. If no active nests are found, then no further mitigation is necessary.
- If any active nests are located in the project parcels, a 100-foot diameter buffer zone shall be established around the nest to maximum extent practicable. A biologist should monitor nests weekly during construction to evaluate potential nesting disturbance caused by construction activities. The boundary of the buffer shall be marked with yellow caution tape, surveyor's flagging, pin flags, stakes, etc. The buffer zone shall be maintained until the end of the breeding season or until the young have fledged. No construction activities should occur within 100 feet of a nest tree while young are in the nest. The biological monitor will have the authority to stop construction if construction results in evidence of potential nest abandonment. The caution tape, surveyor's flagging, pin flags, stakes, etc., may be removed when a biologist, whose qualifications are acceptable to approval agency staff, confirms that the nest(s) is no longer occupied and all young have fledged.
- If an active nest occurs in a tree scheduled for removal or during demolition of an existing structure, the species of nesting bird shall be determined to identify whether the species is protected under the MBTA. The nest tree shall be preserved until the CDFG and/or USFWS is contacted to obtain guidance on alternative buffers based on the species requirements.

7.4 WETLANDS AND OTHER WATERS OF THE U.S.

Impacts

There are three ephemeral drainages that occur on the project parcels. The proposed project has been designed to avoid these features. Therefore, the proposed project would have no impact to these features.

Mitigation Measures

- None required.

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ATTACHMENTS

ATTACHMENT 1

USFWS, CNDDB, AND CNPS LISTS

U.S. Fish & Wildlife Service

2.1 Sacramento Fish & Wildlife Office

1.0 Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the SUCCESS DAM (309C) U.S.G.S. 7 1/2 Minute Quad

Database last updated: December 1, 2009

Report Date: December 4, 2009

2.0 Listed Species
3.0 Invertebrates

Desmocerus californicus dimorphus

valley elderberry longhorn beetle (T)

4.0 Fish

Hypomesus transpacificus

delta smelt (T)

5.0 Amphibians

Rana aurora draytonii

California red-legged frog (T)

6.0 Reptiles

Gambelia (=Crotaphytus) sila

blunt-nosed leopard lizard (E)

7.0 Birds

Empidonax traillii extimus

southwestern willow flycatcher (E)

Gymnogyps californianus

California condor (E)

8.0 Mammals

Vulpes macrotis mutica

San Joaquin kit fox (E)

9.0 Plants

Pseudobahia peirsonii

San Joaquin adobe sunburst (T)

Sidalcea keckii

Critical habitat, Keck's checker-mallow (X)

Keck's checker-mallow (=checkerbloom) (E)

10.0 Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.

- (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

California Department of Fish and Game
Natural Diversity Database
CNDDB List of Special Status Species on Success Dam and Eight Surrounding Quads

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1	***Actinemys marmorata*** western pond turtle	ARAAD02030			G3G4	S3	SC
2	***Antrozous pallidus*** pallid bat	AMACC10010			G5	S3	SC
3	***Branchinecta lynchi*** vernal pool fairy shrimp	ICBRA03030	Threatened		G3	S2S3	
4	***Brodiaea insignis*** Kaweah brodiaea	PMLIL0C060		Endangered	G2	S2.1	1B.2
5	***Clarkia springvillensis*** Springville clarkia	PDONA05120	Threatened	Endangered	G1	S1.1	1B.2
6	***Cypseloides niger*** black swift	ABNUA01010			G4	S2	SC
7	***Delphinium purpusii*** rose-flowered larkspur	PDRAN0B1G0			G2	S2.3	1B.3
8	***Desmocerus californicus dimorphus*** valley elderberry longhorn beetle	IICOL48011	Threatened		G3T2	S2	
9	***Eryngium spinosepalum*** spiny-sepaled button-celery	PDAPI0Z0Y0			G2	S2.2	1B.2
10	***Eumops perotis californicus*** western mastiff bat	AMACD02011			G5T4	S3?	SC
11	***Fritillaria striata*** striped adobe-lily	PMLIL0V0K0		Threatened	G2	S2.1	1B.1
12	***Gulo gulo*** California wolverine	AMAJF03010		Threatened	G4	S2	
13	***Gymnogyps californianus*** California condor	ABNKA03010	Endangered	Endangered	G1	S1	
14	***Iris munzii*** Munz's iris	PMIRI090M0			G2	S2.3	1B.3
15	***Juncus nodosus*** knotted rush	PMJUN01210			G5	S2.3	2.3
16	***Lasiurus cinereus*** hoary bat	AMACC05030			G5	S4?	
17	***Leptosiphon serrulatus*** Madera leptosiphon	PDPLM09130			G1?	S1?	1B.2
18	***Lytta hoppingi*** Hopping's blister beetle	IICOL4C010			G1G2	S1S2	
19	***Lytta moesta*** moestan blister beetle	IICOL4C020			G2	S2	
20	***Lytta molesta*** molestan blister beetle	IICOL4C030			G2	S2	
21	***Lytta morrisoni*** Morrison's blister beetle	IICOL4C040			G1G2	S1S2	
22	***Mimulus pictus*** calico monkeyflower	PDSCR1B240			G2	S2.2	1B.2
23	***Northern Claypan Vernal Pool***	CTT44120CA			G1	S1.1	
24	***Pseudobahia peirsonii*** San Joaquin adobe sunburst	PDAST7P030	Threatened	Endangered	G2	S2.1	1B.1

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
25	***Rana boylii*** foothill yellow-legged frog	AAABH01050			G3	S2S3	SC
26	***Rana muscosa*** Sierra Madre yellow-legged frog	AAABH01330	Endangered		G1	S1	SC
27	***Sidalcea keckii*** Keck's checkerbloom	PDMAL110D0	Endangered		G1	S1.1	tB.1
28	***Sycamore Alluvial Woodland***	CTT62100CA			G1	S1.1	
29	***Taxidea taxus*** American badger	AMAJF04010			G5	S4	SC
30	***Vulpes macrotis mutica*** San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2T3	S2S3	

CNPS Inventory of Rare and Endangered Plants

Status: Plant Press Manager window with 11 items - Fri, Dec. 4, 2009, 18:41 b

- During each visit, we provide you with an empty "Plant Press" for collecting items of interest.
- Several report formats are available. Use the CSV and XML options to download raw data.

Reformat list as: Standard List - with Plant Press controls

DELETE unchecked items check all check none

open	save	scientific	common	family	CNPS
	☑	Brodiaea insignis	Kaweah brodiaea	Liliaceae	List 1B.2
	☑	Clarkia springvillensis	Springville clarkia	Onagraceae	List 1B.2
	☑	Delphinium purpusii	rose-flowered larkspur	Ranunculaceae	List 1B.3
	☑	Eryngium spinosepalum	spiny-sepaled button-celery	Apiaceae	List 1B.2
	☑	Fritillaria striata	striped adobe-lily	Liliaceae	List 1B.1
	☑	Iris munzii	Munz's iris	Iridaceae	List 1B.3
	☑	Juncus nodosus	knotted rush	Juncaceae	List 2.3
	☑	Leptosiphon serrulatus	Madera leptosiphon	Polemoniaceae	List 1B.2
	☑	Mimulus pictus	calico monkeyflower	Scrophulariaceae	List 1B.2
	☑	Pseudobahia peirsonii	San Joaquin adobe sunburst	Asteraceae	List 1B.1
	☑	Sidalcea keckii	Keck's checkerbloom	Malvaceae	List 1B.1

DELETE unchecked items check all check none

ATTACHMENT 1

FEDERAL, STATE, AND CNPS REGIONALLY OCCURRING SPECIAL-STATUS SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE PROPERTY

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR WITHIN THE PROPERTY
Plants					
Brodiaea insignis Kaweah brodiaea	--/CE/1B	Known from Tulare County (CNPS, 2009).	Found in cismontane woodland, meadows and seeps, and Valley and foothill grassland/granitic or clay, from 150 to 1,400 meters (CNPS, 2009).	April – June	**Yes**. See text.
Clarkia springvillensis Springville clarkia	FT/CE/1B	Known from Tulare County (CNPS, 2009).	Found in chaparral, cismontane woodland, Valley and foothill grassland/granitic, from 245 to 1,220 meters (CNPS, 2009).	May – July	**Yes**. See text.
Delphinium purpusii rose-flowered larkspur	--/--/1B	Known from Kern and Tulare counties (CNPS, 2009).	Found in chaparral, cismontane woodland, and pinyon and juniper woodland/rocky, often carbonate, from 300 to 1,340 meters (CNPS, 2009).	April – May	**No**. The property does not contain habitat for this species.
Eryngium spinosepalum spiny-sepaled button-celery	--/--/1B	Known from Fresno, Madera, Merced, Stanislaus, Tulare, and Toulumne counties (CNPS, 2009).	Annual to perennial herb found in Valley and foothill grassland and vernal pools from 80 to 255 meters (CNPS, 2009).	April - May	**Yes**. See text.
Fritillaria striata *Striped adobe-lily*	--/CT/1B	Known from Kern and Tulare counties (CNPS, 2009).	Found in cismontane woodland and Valley and foothill grassland/usually clay from 135 to 1,455 meters (CNPS, 2009).	February – April	**Yes**. See text.
Iris munzii Munz's iris	--/--/1B	Known from Tulare County (CNPS, 2009).	Found in cismontane woodland from 305 to 800 meters (CNPS, 2009).	March – April	**No**. The property does not contain habitat for this species.
Juncus nodosus *Knotted rush*	--/--/2	Known from Inyo, San Bernardino, Stanislaus and Tulare counties (CNPS, 2009).	Found in meadows and seeps (mesic) and marshes and swamps (lake margins), from 30 to 1,980 meters (CNPS, 2009).	July – September	**No**. The property does not contain habitat for this species.
Leptosiphon serrulatus Madera leptosiphon	--/--/1B	Known from Fresno, Kern, Madera, Mariposa, and Tulare counties (CNPS, 2009).	Annual herb found in cismontane woodland and lower montane coniferous forest from 300 to 1,300 meters (CNPS, 2009).	April – May	**No**. The property does not contain habitat for this species.
Mimulus pictus Calico monkeyflower	--/--/1B	Known from Kern and Tulare counties (CNPS, 2009).	Found in broadleafed upland forest and cismontane woodland/granitic, disturbed areas, from 100 to 1,300 meters (CNPS, 2009).	March – May	**No**. The property does not contain habitat for this species.
Pseudobahia peirsonii San Joaquin adobe sunburst	FT/CE/1B	Known from Fresno, Kern, and Tulare counties (CNPS, 2009).	Found in cismontane woodland and Valley and foothill grassland/adobe clay, from 90 to 800 meters (CNPS, 2009).	March – April	**Yes**. See text.
Sidalcea keckii Keck's checkerbloom	FE/--/1B	Known to occur in Colusa, Fresno, Merced, Napa, Solano, Tulare, and Yolo counties (CNPS, 2009).	Found in cismontane woodland and valley and foothill grassland/serpentinite, clay, from 120 to 425 meters (CNPS, 2009).	April – May	**Yes**. See text.

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR WITHIN THE PROPERTY
Animals					
Invertebrates					
Branchinecta lynchi vernal pool fairy shrimp	FT/--/--	Known from Shasta County south through the Central Valley to Riverside County in the South Coast Mountains Region (Eriksen and Belk, 1999).	Found commonly in a small swale earth slump or basalt-flow depression basin with grassy or muddy bottom in unplowed grassland from 10 to 290 meters in the Central Valley and up to 1,159 meters in the South Coast Mountains Region (Eriksen and Belk, 1999).	Wet season: December to May (adults) Dry season: June to November (cysts)	**No**. The property does not contain habitat for this species.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT/--/--	Known from Amador, Butte, Calaveras, Colusa, El Dorado, Fresno, Glenn, Kern, Madera, Mariposa, Merced, Napa, Placer, Fresno, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba counties (NatureServe, 2009).	Found in riparian forest communities from 0 to 762 meters. Exclusive host plant is elderberry (*Sambucus* species), which must have stems at least one inch in diameter for the beetle (NatureServe, 2009).	Year round	**Yes**. See text.
Fishes					
Hypomesus transpacificus Delta smelt	FT/CT/--	Known almost exclusively in the Fresno-San Joaquin estuary, from the Suisun Bay upstream through the Delta in Contra Costa, Fresno, San Joaquin, Solano, and Yolo counties. May also occur in the San Francisco Bay (Moyle, 2002).	Found in estuarine waters. Majority of life span is spent within the freshwater outskirts of the mixing zone (saltwater-freshwater interface) within the Delta (Moyle, 2002).	Consult Agency	**No**. The property does not contain habitat for this species.
Amphibians					
Rana aurora draytonii California red-legged frog	FT/CSC/--	Known along the Coast from Mendocino County to Baja California, and inland through the northern Fresno Valley into the foothills of the Sierra Nevada mountains, south to eastern Tulare County, and possibly eastern Kern County. Currently accepted range excludes the Central Valley (USFWS, 1994).	Found in permanent and temporary pools of streams, marshes, and ponds with dense grassy and/or shrubby vegetation from 0 to 1,500 meters (NatureServe, 2009).	November – June	**No**. The property does not contain habitat for this species.

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR WITHIN THE PROPERTY
Rana boylii Foothill yellow-legged frog	--/CSC/--	Ranges from northern Oregon west of the Cascades south along the coast to the San Gabriel mountains, and south along the western side of the Sierra Nevada mountains to Kern county; known populations from Lake County.	Found in woodland, chaparral, and forests associated with slow and gravelly streams and rivers.	March - June (breeding) July - September (non-breeding)	**No.** The property does not contain habitat for this species.
Rana muscosa Sierra Madre yellow-legged frog	FE/CSC/--	Known from Fresno, Tulare, Kern, Los Angeles, San Bernardino, and San Diego counties.	Found in lakes, meadow streams, isolated pools, and sunny riverbanks in the Sierra Nevada. Found in rocky streams in southern California.	March – July (breeding) August – February (non-breeding)	**No.** The property does not contain habitat for this species.
Reptiles					
Actinemys marmorata western pond turtle	--/CSC/--	Known from north of the San Francisco Bay Area and west of the Sierra Nevada Range in California (CaliforniaHerps.com, 2009).	Found in ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation and either rocky or muddy bottoms in woodland, forest, and grassland from 0 to 2,041 meters (Stebbins, 2003). Requires basking sites and suitable upland habitat for egg laying. Nest sites most often characterized as having gentle slopes (<15 percent) with little vegetation or sandy banks (CaliforniaHerps.com, 2009). Overwinter up to 50 meters from water (Rathbun et al., 2002) between December and January.	March – October	**No.** The property does not contain habitat for this species.
Gambelia sila Blunt-nosed leopard lizard	FE/--/--	Endemic to California. Inhabits the San Joaquin Valley and nearby valleys and foothills, from extreme northwest Santa Barbara County and western Kern County north to southern Merced County.	Semiarid grasslands, desert scrub habitats, alkali flats, washes, arroyos, canyons and low foothills. Prefers flat areas with open space for running, avoiding densely vegetated areas, from 30 to 730 meters. Do not appear to use slopes >30-40 degrees (CDFG, 2005).	All Year	**No.** The property does not contain habitat for this species.
Birds					

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR WITHIN THE PROPERTY
Cypseloides niger black swift	--/CSC/--	Breeds in the central and southern Sierra, the coastal cliffs and mountains of San Mateo, Santa Cruz, and Monterey counties, the San Gabriel, San Bernardino, and San Jacinto mountains of southern California, and within a small region of the Cascade Range.	Steep cliffs or ocean bluffs with ledges, cavities or cracks for nesting along ocean shore, inland deep canyons and often behind waterfalls. Forages in a wide variety of habitats including forests, canyons, valleys, and plains. Breeding elevations range from 0 to 2,285 meters.	May-July	**No**. The property does not contain habitat for this species.
Empidonax traillii extimus southwestern willow flycatcher	FE/--/--	Breeding locations in Sierra Nevada/Cascade region and portions of Riverside and San Diego counties.	Found in willow thickets.	May – September	**No**. The property does not contain habitat for this species.
Gymnogyps californianus California condor	FE/--/--	Populations occur in Ventura, Santa Barbara, San Luis Obispo, and Monterey counties.	Inhabits a wide range of habitats with relatively open areas and adequate food supplies. Topographic relief is also required to provide uplift for takeoff and flight.	All Year	**Yes**. The property provides foraging habitat for this species.
Mammals					
Anfrozous pallidus pallid bat	--/CSC/--	in arid and semi-arid regions across much of the American west, up and down the coast from Canada and Mexico (Arizona-Sonora Desert Museum, 2006-2009).	Found in grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests from 0 to 2,000 meters. The species is most common in open, dry habitats with rocky areas for roosting. Roosts also include cliffs, abandoned buildings, bird boxes, and under bridges (Harris, 1990).	Year round	**Yes**. See text.
Eumops perotis californicus Western mastiff bat	--/CSC/--	From central California, southward to central Mexico. In California, they have been recorded from Butte County southward in the western lowlands through the southern California coastal basins and the western portions of the southeastern desert region (Ahlborn, 2000).	Found in rugged, rocky areas where suitable crevices are available for day-roosts. Characteristically, day-roosts are located in large cracks in exfoliating slabs of granite or sandstone (Ahlborn, 2000).	Year round	**Yes**. See text.
Gulo gulo California wolverine	--/CT/--	Sightings reported in northern and eastern Sierra Nevada mountain range.	Found in areas with little human disturbance and dense forests. Dens in caves, cliffs, hollow logs, under rocks.	All Year	**No**. The property does not contain habitat for this species.

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR WITHIN THE PROPERTY
Taxidea taxus American badger	--/CSC/--	Known throughout most of California except in the northern North Coast (Ahlborn, 2005).	Found in the drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Badgers are generally associated with treeless regions, prairies, parklands, and cold desert areas. Cultivated lands have been reported to provide little usable habitat for this species (Ahlborn, 2005).	All Year	**Yes.** See text.
Vulpes macrotis mutica San Joaquin kit fox	FE/CT/--	Known from Contra Costa and Stanislaus counties south to Kern County (USFWS, 2008).	Found in alkali sink, valley grassland, foothill woodland. Hunts in areas with low sparse vegetation that allows good visibility and mobility. Pupping dens are built in loosely textured soils from 110 to 900 meters (Morrell, 1972).	Year round	**Yes.** See text.

STATUS CODES

FEDERAL: United States Fish and Wildlife Service
FE Federally Endangered
FT Federally Threatened
FC Federal Candidate for Listing

STATE: California Department of Fish and Game
CE California Listed Endangered
CT California Listed Threatened
CSC California Species of Special Concern
CFP California Fully-Protected

CNPS: California Native Plant Society
List 1A Plants Presumed Extinct in California
List 1B Plants Rare, Threatened, or Endangered in California and Elsewhere
List 2 Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
List 3 Plants About Which We Need More Information- A Review List

Months in parenthesis are uncommon; Counties designated with an asterisk (*) means that the population is extirpated; Counties designated with a (*?) means that the occurrence is confirmed, but possibly extirpated.

Sources: USFWS, 2009; CDFG, 2003 and 2009; CNPS, 2009; Moyle, 2002; CaliforniaHerps.com, 2009.

ATTACHMENT 2

PLANTS AND WILDLIFE SPECIES OBSERVED

Attachment 2

Plants and Wildlife Species Observed Within the Parcel Boundaries During the December 8 and 9, 2009 Biological Surveys

Plants observed within the parcel boundaries.

Family	Scientific Name	Common Name
Asclepiadaceae	*Asclepias* sp.	milkweed
Asteraceae	*Hemizonia fitchii*	Fitch's hemizonia
Caprifoliaceae	*Sambucus mexicana*	Blue elderberry
Euphorbiaceae	*Eremocarpus setigerus*	Dove weed; Turkey mullein
Geraniaceae	*Erodium botrys*	Filaree
	Geranium dissectum	Cranesbill
	Geranium molle	Cranesbill
Myrtaceae	*Eucalyptus globulus*	Blue Gum
Plantaginaceae	*Plantago lanceolata*	English plantain
Poaceae	*Avena barbata*	Slender wild oat
	Avena fatua	Wild oat
	Bromus diandrus	Ripgut grass
	Bromus hordeaceus	Soft brome
	Bromus rubens	Foxtail chess
Solanaceae	*Datura stramonium*	Jimson weed

Wildlife observed within the parcel boundaries.

Family	Scientific Name	Common Name
Icteridae	*Sturnella neglecta*	Western meadowlark
Aegithalidae	*Psaltriparus minimus*	Bushtit
Turdidae	*Turdus migratorius*	American robin
Corvidae	*Corvus brachyrhynchos*	American crow
Corvidae	*Corvus corax*	Common raven
Accipitridae	*Buteo jamaicensis*	Red-tailed hawk
Hirundinidae	*Tachycineta bicolor*	Tree swallow

Attachment C

Cultural Resources Study

CULTURAL RESOURCES STUDY

TULE RIVER TRIBE

HOUSING DEVELOPMENT PROJECT

DECEMBER 2009

CULTURAL RESOURCES STUDY

TULE RIVER TRIBE

HOUSING DEVELOPMENT PROJECT

DECEMBER 2009

Prepared By:

Analytical Environmental Services
1801 7th Street, Suite 100
Sacramento, CA 95811
www.analyticalcorp.com

CULTURAL RESOURCES STUDY

TULE RIVER TRIBE HOUSING DEVELOPMENT PROJECT

EXECUTIVE SUMMARY

This report presents the scope and results of a cultural resources inventory conducted for the Tule River Tribe Housing Development Project (Project), located southeast of the City of Porterville, Tulare County, California. The study has been prepared for Tule River Indian Tribe (Tribe) to analyze potential impacts associated with the construction of a low income housing development to benefit members of the Tribe. All cultural resources work was performed in compliance with Section 106 of the National Historic Preservation Act (NHPA) as amended, and its implementing regulations found at 36 CFR Part 800, as well as the California Environmental Quality Act (CEQA), Public Resources Code (PRC) Section 21083.2, CEQA Guidelines 15064.5, and PRC Section 5024.1.

The objectives of this study are to (1) identify and record cultural resources on the project site, (2) gather information to determine if the Proposed Project will have an adverse effect on any cultural resources identified within the Area of Potential Effects (APE), and (3) recommend procedures for avoidance or mitigation of adverse effects to resources eligible for inclusion in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR).

The Tule River Tribe proposes to construct a low income housing community development consisting of up to 54 low income housing units, a community garden, and community athletic fields on Tribally owned fee land within Tulare County, California. The proposed development site is currently used for cattle grazing and would be located on portions of three parcels identified by Assessor Parcel Numbers (APNs) 305-070-012, 305-010-025, and 305-010-026. The APE for the proposed Project includes the development footprint (housing, garden, athletic fields, roads, utilities, and associated infrastructure) as well as staging areas to be used for equipment parking and materials storage.

The Tribe received a 2008 Rural Housing and Economic Development (RHED) grant from the U.S Department of Housing and Urban Development (HUD). Use of the above referenced federal assistance for constructing the proposed Project triggers the requirement to comply with Section 106 of NHPA and the National Environmental Policy Act (NEPA). In addition, approval of the development is subject to approval by Tulare County, which constitutes a discretionary action that is subject to the requirements of the California Environmental Quality Act (CEQA).

Records searches of the APE and surrounding areas were conducted by staff of the Southern San Joaquin Valley Information Center (SSJVIC) on December 9, 2009. The records searches found that no cultural resources have been recorded within, immediately adjacent to, and/or within a ¼-mile radius of the APE.

In addition, the records search revealed that three previous cultural resources studies have been conducted within a ¼-mile radius of the APE.

On December 15 and 16, 2009 AES archaeologist Melinda McCrary, M.A., and archaeological technician Jennifer Bowden, B.A., conducted an intensive pedestrian survey of the APE as well as a significant buffer to the east to allow for modifications to the project design. As a result of the field study, three previously unrecorded resources (TR-1, TR-2 and TR-3) were identified and documented. The resources consist of two rock alignments (TR-I and TR-2) and a historic-period stone quarry (TR-3). In addition, an isolated historic-period artifact was identified (IF-1) which consists of a hole-in-top paint can. Isolated finds are considered *a priori* insignificant resources. SiteTR-2 is located within the APE and may be subject to impacts from the proposed Project. Sites TR-1 and TR-3 are located outside of the APE and would not be impacted by the Proposed Project.

Application of the relevant criteria and consideration of integrity resulted in the recommendation that TR-2 (rock alignment) is ineligible for listing on the NRHP or the CRHR. As such, this rock alignment does not qualify as a historic property or historical resource pursuant to 36 CFR 60.4 and PRC Section 50201, respectively. Assuming that the recommendations provided in this document are followed and the proposed design does not change in any significant way, the proposed Project will not affect known historic properties/resources and no further work is warranted to satisfy the requirements of Section 106 of the NHPA or CEQA.

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1.0 INTRODUCTION

This report presents the scope and results of a cultural resources inventory conducted for the Tule River Tribe Housing Development Project (Project), located southeast of the City of Porterville, Tulare County, California. The study has been prepared for Tule River Indian Tribe (Tribe) to analyze potential impacts associated with the construction of a low income housing development to benefit members of the Tribe. All cultural resources work was performed in compliance with Section 106 of the National Historic Preservation Act (NHPA) as amended, and its implementing regulations found at 36 CFR Part 800, as well as the California Environmental Quality Act (CEQA), Public Resources Code (PRC) Section 21083.2, CEQA Guidelines 15064.5, and PRC Section 5024.1.

The objectives of this study are to (1) identify and record cultural resources on the project site, (2) gather information to determine if the Proposed Project will have an adverse effect on any cultural resources identified within the Area of Potential Effects (APE), and (3) recommend procedures for avoidance or mitigation of adverse effects to resources eligible for inclusion in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR).

1.1 PROJECT LOCATION

The APE is located in a rural portion of Tulare County, California, to the southeast of the City of Porterville (**Figure 1**). This area is part of the Southern Sierra foothills and is accessed by Reservation Road. The project site is located within Sections 12 and 13 of Township 22 South, Range 28 East of the Mt. Diablo Base and Meridian, as depicted on the 'Success Dam, Calif.' United States Geological Survey (USGS) 7.5-minute topographical quadrangle (**Figure 2**). **Figure 3** is an aerial photograph which shows the location of the Housing Development. The topography of the project area ranges from flat alluvial areas adjacent to Road 296 to steep canyon slopes in the eastern portion of the project area.

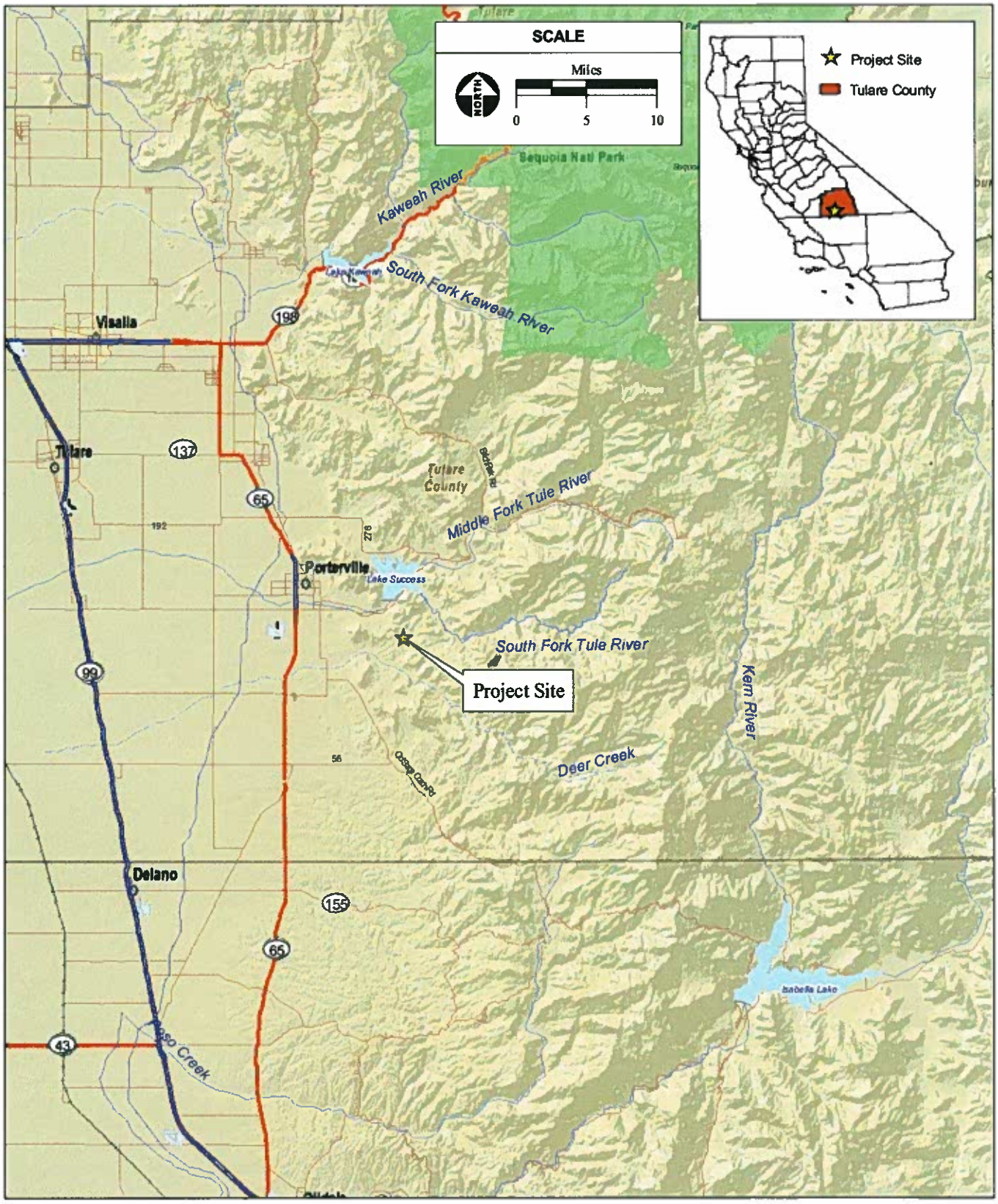
The APE for the proposed Project includes the development footprint (housing, garden, athletic fields, roads, utilities, and associated infrastructure) as well as staging areas to be used for equipment parking and materials storage.

1.2 PROJECT DESCRIPTION

The Tule River Tribe proposes to construct a low income housing community development consisting of up to 54 low income housing units, a community garden, and community athletic fields on Tribally owned fee land within Tulare County, California. The housing units would likely be occupied by members of the Tribe and by their spouses and children. The proposed development site is currently used for cattle grazing and would be located on portions of three parcels identified by Assessor Parcel Numbers (APNs) 305-070-012, 305-010-025, and 305-010-026. Water will be provided by domestic wells located on the property.

Construction of the Project would generally involve grubbing and clearing; grading, boring or trenching, and paving using heavy-duty and light-duty equipment; and construction of project-related structures. Construction equipment would include scrapers/earthmovers, wheeled or tracked bulldozers and loaders, boring, trenching and pipelaying equipment, dump trucks, and concrete trucks. All construction equipment and materials would enter the property from the north via Indian Reservation Road. All equipment and materials staging would occur within the development footprint, which is identified as the APE on the accompanying maps.

The Tribe has received a 2008 Rural Housing and Economic Development (RHED) grant from the U.S Department of Housing and Urban Development (HUD). Use of the above referenced federal assistance for constructing the proposed Project triggers the requirement to comply with Section 106 of NHPA and the National Environmental Policy Act (NEPA). In addition, approval of the development is subject to approval by Tulare County, which constitutes a discretionary action that is subject to the requirements of the California Environmental Quality Act (CEQA).

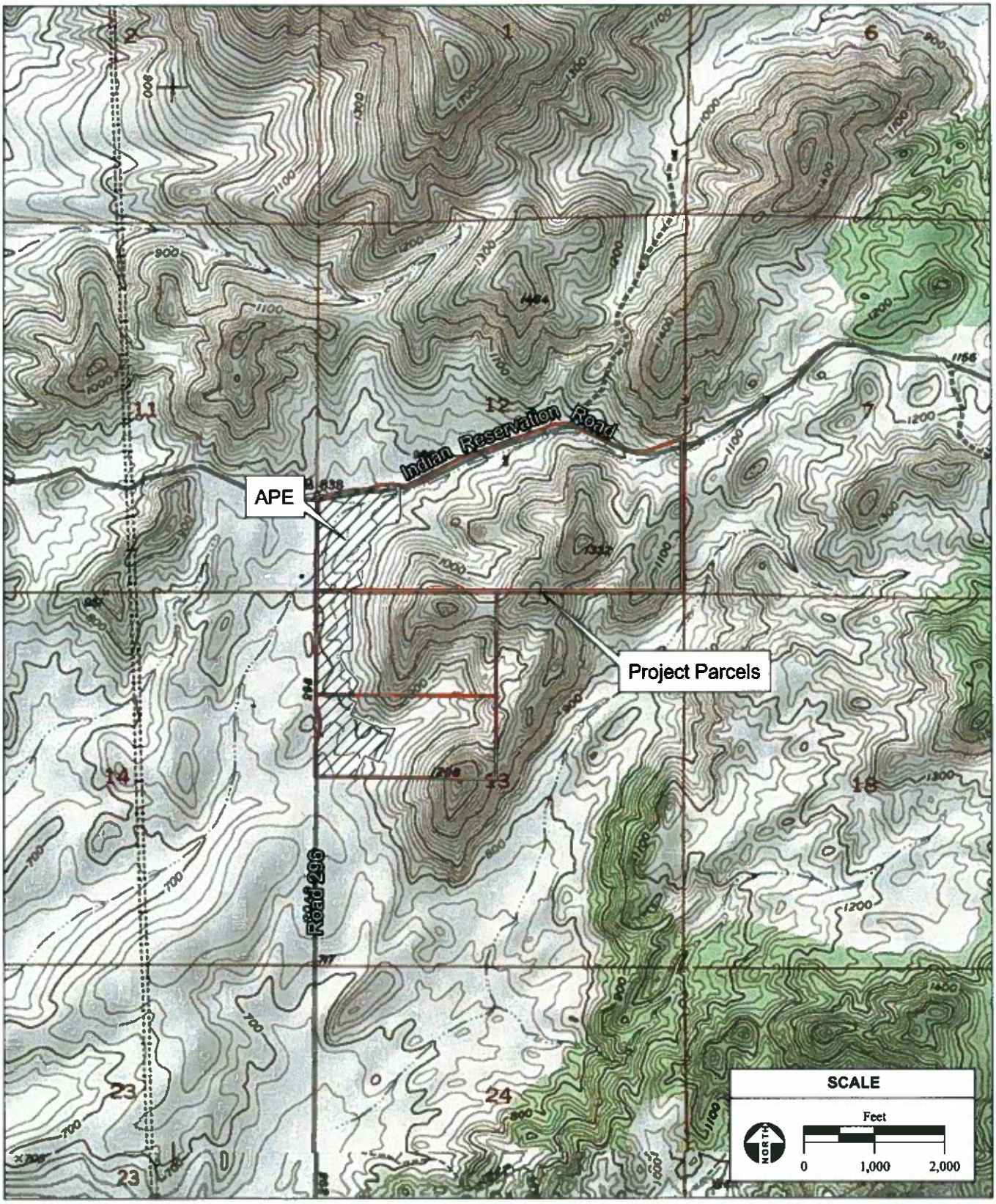


SOURCE: ESRI Data, 2009; AES 2009

Tule River Tribe Housing Development / 209563 ■

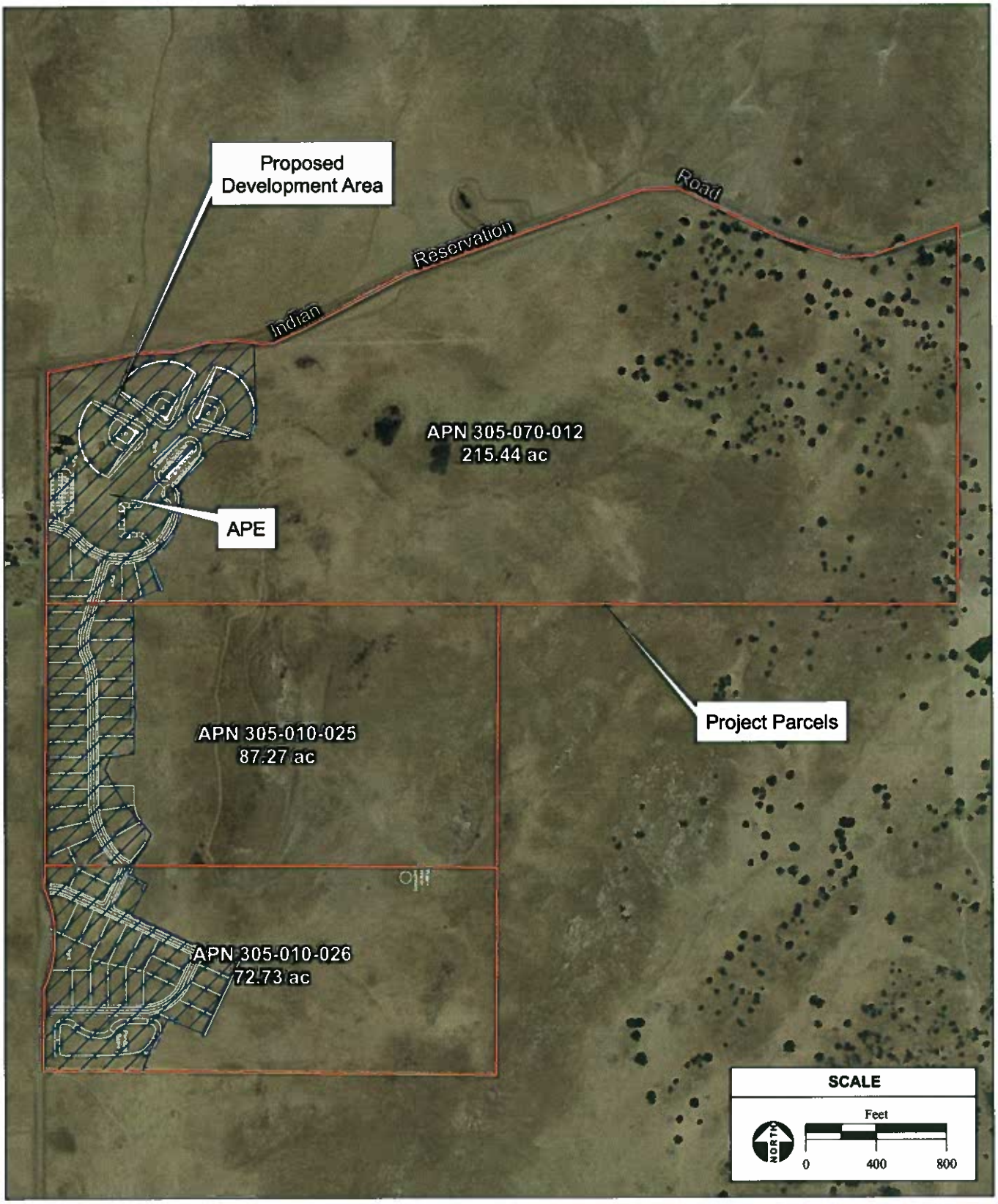
Figure 1

Regional Location Map



SOURCE: "Success Dam, CA" USGS 7.5 Minute Topographic Quadrangle, Sections 12 & 13, T22S, R28E, Mt. Diablo Baseline & Meridian; AES, 2009

Figure 2
Site and Vicinity



SOURCE: NAIP Aerial Photograph, 7/1/2005; AES, 2009

Figure 3
Aerial Photograph

2.0 REGULATORY SETTING

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. Numerous laws, regulations, and statutes at the federal level govern archaeological and historic resources deemed to have scientific, historic, or cultural value. The pertinent regulatory framework, as it applies to the proposed Project, is summarized below.

2.1 NATIONAL HISTORIC PRESERVATION ACT

Section 106 of the National Historic Preservation Act (NHPA) as amended, and its implementing regulations found in 36 CFR Part 800, require federal agencies to identify cultural resources that may be affected by actions involving federal lands, funds, or permitting. The significance of the resources must be evaluated using established criteria outlined in 36 CFR 60.4, as described below.

If a resource is determined to be a *historic property*, Section 106 of the NHPA requires that effects of the federal undertaking on the resource be determined. A historic property is defined as:

> *...any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in the National Register of Historic Places, including artifacts, records, and material remains related to such a property...(NHPA Sec. 301[5])*

Section 106 of the NHPA prescribes specific criteria for determining whether a project would adversely affect a historic property, as defined in 36 CFR 800.5. An impact is considered adverse when prehistoric or historic archaeological sites, structures, or objects that are listed, or eligible for listing, in the NRHP are subjected to the following:

- physical destruction of or damage to all or part of the property;
- alteration of a property;
- removal of the property from its historic location;
- change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- neglect of a property that causes its deterioration; and
- transfer, lease, or sale of the property out of federal control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

If the historic property will be adversely affected by development, then prudent and feasible measures to avoid or reduce adverse impacts must be taken. The State Historic Preservation Officer (SHPO) must be provided an opportunity to review and comment on these measures prior to project implementation.

2.2 NATIONAL REGISTER OF HISTORIC PLACES

The eligibility of a resource for listing in the NRHP is determined by evaluating the resource using criteria defined in 36 CFR 60.4 as follows: *The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, association, and*

A. That are associated with events that have made a significant contribution to the broad patterns of our history;

B. That are associated with the lives of persons significant in our past;

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important to prehistory or history.

Sites younger than 50 years, unless of exceptional importance, are not eligible for listing in the NRHP.

In addition to meeting at least one of the criteria listed above, the property must also retain enough integrity to enable it to convey its historic significance. The National Register recognizes seven aspects or qualities that, in various combinations, define integrity (NPS 1990). These seven elements of integrity are: location, design, setting, materials, workmanship, feeling, and association. To retain integrity a property will always possess several, and usually most, of these aspects.

While most historic buildings and many historic archaeological properties are significant because of their association with important events, people, or styles (criteria A, B, and C), the significance of most prehistoric and some historic-period archaeological properties is usually assessed under criterion D. This criterion stresses the importance of the information contained in an archaeological site, rather than its intrinsic value as a surviving example of a type or its historical association with an important person or event. It places importance not on physical appearance but rather on information potential.

2.3 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

NEPA requires that federal agencies take all practical measures to "preserve important historic, cultural, and natural aspects of our national heritage." NEPA's mandate for considering the impacts of a federal project on important historic and cultural resources is similar to that of Section 106 of the NHPA, and the

two processes are generally coordinated when applicable. Section 800.8(a) of NHPA's implementing regulations provides guidance on coordination with NEPA.

2.4 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

CEQA requires that, for projects financed by, or requiring the discretionary approval of public agencies in California, the effects that a project has on historical and unique archaeological resources must be considered (Public Resources Code [PRC] Section 21083.2). *Historical resources* are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, or scientific importance (PRC Section 50201). The 2000 CEQA *Guidelines* (Section 15064.5) define four cases in which a property may qualify as a significant historical resource for the purposes of CEQA review:

A. The resource is listed in or determined eligible for listing in the California Register of Historical Resources (CRHR). Section 5024.1 defines eligibility requirements and states that a resource may be eligible for inclusion in the CRHR if it:

    1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

    2. Is associated with the lives of persons important in our past;

    3. Embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or

    4. Has yielded, or may be likely to yield, information important in prehistory or history.

    In addition to meeting one or more of the above criteria, a significant property must also retain integrity. Properties eligible for listing in the CRHR must retain enough of their historic character to convey the reason(s) for their significance. Integrity is judged in relation to location, design, setting, materials, workmanship, feeling, and association. Properties that are listed in or eligible for listing in the National Register of Historic Places (NRHP) are considered eligible for listing in the CRHR, and thus are significant historical resources for the purpose of CEQA (Public Resources Code section 5024.1[d][1]).

B. The resource is included in a local register of historic resources, as defined in section 5020.1(k) of the Public Resources Code, or is identified as significant in a historical resources survey that meets the requirements of section 5024.1(g) of the Public Resources Code (unless the preponderance of evidence demonstrates that the resource is not historically or culturally significant).

C. The lead agency determines the resource to be significant as supported by substantial evidence in light of the whole record.

D. The lead agency determines that the resource may be a historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

A substantial adverse change to a historical resource(s) is considered a significant effect on the environment under CEQA. When it is determined that a project may cause a substantial adverse change, alternative plans or measures to mitigate the effects to the resource(s) must be considered.

3.0 NATURAL AND CULTURAL SETTING

3.1 NATURAL SETTING

The project site is located in a sparsely inhabited rural area, situated in the Sierra foothills, along of the South Fork of the Tule River. The topography of the Reservation and surrounding vicinity consists of rolling hills covered with short non-native grasses, scattered groves of trees, and various forbs. The project area has a steeply sloped terrain, consisting of hillsides, gullies, and ridges. Slopes within the project area vary, but are generally between ten and fifty percent. Elevations range between 920 and 1,900 feet above mean sea level (amsl).

Within the general vicinity there are two predominant life zones: The Upper Sonoran and Transition types. The project is situated within the Upper Sonoran zone, which is characterized by warm, dry summers and wet, cool winters. Natural vegetation within the study area is California Prairie, which is described as a dense to somewhat open, medium-tall bunchgrass community consisting primarily of needlegrass and spear grass, triple-awned grass, and foxtail fescue (Küchler, 1977:23; Munz, 1959:1476, 1535). Tree species in the region include blue oak, sycamore, live oak, and within riparian corridors, willows, cottonwood, and alder.

Three primary habitat types occur within and adjacent to the APE: nonnative annual grassland, ruderal/developed/quarry, and ephemeral drainage. The habitat types observed within the APE are summarized below. Nonnative annual grassland occurs throughout the majority of the project parcels. Dominant vegetation observed within the project parcels includes: English plantain (*Plantago lanceolata*), cranesbill (*Geranium molle*), foxtail chess (*Bromus rubens*), soft brome (*Bromus hordeaceus*), wild oat (*Avena fatua*), and ripgut grass (*Bromus diandrus*). Ruderal/disturbed areas within the project parcels include infrastructure, ornamental landscaping, and graded access roads. Dominant vegetation observed within the ruderal/disturbed areas includes: English plantain, ripgut grass, cranesbill, soft brome, Jimson weed (*Datura stramonium*), milkweed (*Asclepias* sp.), and ornamental landscaping. Several limestone quarry features occur within the central portion of the project parcels at the top of three hills. Dominant vegetation observed within the quarry area includes: Fitch's hemizonia (*Hemizonia fitchii*), milkweed (*Asclepias* sp.), slender wild oat, wild oat, and ripgut grass.

Geologically, the project area falls within the Sierra Nevada Physiographic Province, which is underlain by metamorphic and igneous rock consisting mainly of homogeneous granitic rocks. Serpentine, gabbro, and metavolcanic rocks are scattered throughout most of the western slope of the Sierra Nevada, which includes the project site. Nine soil types occur within the project parcels: (108) Blasingame-Rock outcrop complex, 9 to 50 percent slopes; (114) Cibo clay, 30 to 50 percent slopes; (115) Cibo-Rock outcrop complex, 15 to 50 percent slopes; (120) Coarsegold-Rock outcrop complex, 15 to 50 percent slopes; (142) Las Posas loam, 15 to 30 percent slopes; (152) Rock outcrop; (157) Sesame sandy loam, 15 to 30 percent slopes; (168) Vista-Rock outcrop complex, 9 to 50 percent slopes; and (173) Wyman loam, 2 to 5 percent slopes (NRCS, 2009). The majority of these soils are well-drained sandy loams that are

shallow to moderately deep deposits over granitic rock. The South Fork of the Tule River, a perennial drainage, is the dominant hydrological feature of the area. Improvements to the project vicinity include roads, agricultural outbuildings, and utilities (aerial and subsurface).

3.2 CULTURAL SETTING

PREHISTORY

The prehistory of the San Joaquin Valley may have its origins in late Pleistocene and Early Holocene sites dating from as early as 12,000 years ago (Moratto, 1984:62-66). The Farmington Complex sites in San Joaquin and Stanislaus Counties and the Tranquility Site in Fresno County are believed to be some of the earliest examples of human activity within the Central Valley area. The Fluted Point Tradition (or Big Game Hunting Tradition) in the San Joaquin Valley is represented by the Witt Site and other Tulare Lake shoreline finds which date from approximately 11,000 years ago (Riddell and Olson, 1969). Sizable prehistoric populations first appeared in the San Joaquin Valley with the Western Pluvial Lake Tradition (WPLT) which extended from approximately 11,000 to 7,000 years ago (Moratto, 1984). This period saw the emergence of a cultural tradition which was adapted to the wetland environments of Tulare and Buena Vista Lakes. Following the WPLT in central California, various regionalized cultural traditions and sequences emerged throughout the San Joaquin Valley, Sierra Foothills, and Coast Range areas. Early attempts to categorize the chronology and cultural attributes of the numerous prehistoric manifestations into a single scheme led to the development of the Central California Taxonomic System (CCTS). The CCTS was a tripartite division of Early, Middle, and Late Periods, that was based upon artifact types, burial patterns, and the condition of human bones (Moratto, 1984). Later recast by Heizer and Fenega (1939) as the Early, Middle, and Late Horizons, the CCTS assumed a basically uniform cultural succession for all of central California and soon became the dominate paradigm in California prehistory.

For all its usefulness in bringing some semblance of order to central California prehistory, the concept of Horizons as implied by the CCTS tended to obscure cultural variability, causing distinctive local manifestations to be overlooked (Moratto, 1984:237). Subsequent schemes have developed with a tendency toward understanding Central Valley prehistory in terms of local cultural patterns. Research emphasis has gravitated towards the understanding of cultural systems as they change through time, within a local and regional context.

The Buchanan Reservoir area on the Chowchilla River is one of the most intensively studied areas in the Central Sierran Foothill region. In four seasons of archaeological fieldwork between 1967 and 1970, T. F. King and M. J. Moratto excavated several sites (including CA-MAD-106, -107, -117, and -159) and tested 23 others (Moratto, 1984:315-327). These studies resulted in the documentation of some 20,000 artifacts, 140 burials, and 92 structural features. Moratto (1984) synthesized the abundant data, including temporal control provided by stratigraphy, cross dating, seriation of grave and house lots, and thirteen radio-carbon dates, and defined three phases of Central Sierran Foothill prehistory: the Chowchilla Phase (2,300-1,700 B.P.), the Raymond Phase (1,700-500 B.P.), and The Madera Phase (500-150 B.P.).

The Chowchilla Phase is characterized by a few large main settlements located along the banks of the Chowchilla River. Large, socially complex populations exploited local resources that included a limited utilization of acorns. Artifacts indicative of this phase include large projectile points such as Sierra concave base points and triangular contracting-stem points indicating the use of atlatl and dart technology, cobble mortars, cylindrical pestles, millingstones, and fish bone spear tips. Ornamental artifacts include Olivella and Halliotis ornaments and beads. Burials are extended and semi-extended and are accompanied by numerous grave goods including ochre. Evidence of trade with the Great Basin and southwest California is well documented. Chowchilla Phase artifact assemblages are considered similar in nature assemblages attributed to the Crane Flat Phase in Yosemite and the Windmiller Pattern in the Central Valley (Moratto, 1984:317).

The Raymond Phase is characterized by significantly smaller populations occupying older Chowchilla Phase sites. Acorn and seed resources emerge as the dominate subsistence strategy supported by hunting with little evidence of fishing. During this phase the bow and arrow are introduced, replacing the atlatl. Artifacts from this period include Rose Spring and Eastgate projectile points, bedrock mortars, cobble pestles, and the continued use of millingstones. Ornamental artifacts include *Olivella* beads. Burials are marked by stone cairns with tightly or loosely flexed interments and few grave goods. Trade networks are not well represented and violence appears to be common based on pathologies on human remains (Moratto, 1984:317).

The Madera Phase is marked by the village community pattern of large main villages with expanded populations near the river with smaller settlements developing in outlying areas. Structural evidence includes oval to circular pit houses and semi-subterranean ceremonial structures of wattle and daub. Acorns are now exploited and intensively supported by a broad spectrum of animal and vegetable resources such as small mammals and fowl. Bedrock mortars become abundant. The bow and arrow continue to be used and projectile points are represented by the smaller Desert Side-Notched and Cottonwood series. Ornamental artifacts include the development of an elaborate steatite industry of disc beads and pendants, bird bone tubular beads, and *Olivella* beads. Burials consist of flexed interments and cremations with a return to abundant grave goods. Evidence of trade consists of Brown Ware pottery from southwest California (Moratto, 1984:317).

ETHNOGRAPHY

At the time of European contact, typical Native American occupation throughout the state was characterized by separate and politically autonomous nations first referred to by ethnologist A.L. Kroeber as "tribelets" (Kroeber, 1925; Moratto, 1984). Tribelets were typically governed by a chief and tended to have one or more permanent village sites with smaller seasonal/temporary camps scattered throughout the tribelet territory for food procurement. Tribelets sharing similar cultural elements and linguistic traits comprised "nonpolitical ethnic groups" and have been grouped by ethnologists into the language families we are familiar with today. It is understood today that the "boundaries" between language families were

SOURCE: Kroeber, 1925; AES, 2009

Figure 4
Language Families

temporally and spatially fluid, with different groups often occupying the same areas over time. Many distinctions made by the early ethnographers were more an exercise in organization than a real reflection of socio-political identity.

The project site is located in an area shared between the Foothill and Southern Valley Yokuts language groups (**Figure 4**) on the western side of the Sierra Nevada as it transitions into the Great Central Valley (Spier, 1978:471; Wallace, 1978:463). The Foothill Yokuts were a group of about 15 tribelets that occupied the eastern Central Valley and surrounding Sierra Nevada foothills. Though loosely connected through trade and marriage, there was no self-identified Yokuts nation or overarching political unity. The distinctions between subgroups were mostly linguistic and territorial (Spier, 1978:471; Wallace, 1978:462). The Tule River Indian Reservation is within ethnographic territory of the Yaudanchi Yokuts (Kroeber, 1925; Latta, 1999). The Yaudanche territory was known to include the area along the Tule River around the present town of Porterville. Latta (1999:197) reports a Yaundanche village between the forks of the lower branches of the Tule River by the name *Chahmiktu*.

The individual Yokuts tribelets maintained close connections with each other and with neighboring Miwok and Monache groups through trade, travel, assemblies and ceremonies, visiting, excursions for resource exploitation, and marriage (Wallace, 1978; Spier, 1978). They played a pivotal role in trade and resource exploitation in the San Joaquin Valley with trade generally conducted with acorns moving eastward into Nevada, while pine nuts, obsidian, shells from the coast, and rabbit skins were imported and exchanged with groups to the north, south, and west.

It has been estimated that at the time of European contact, the foothills of the Sierra Nevada were the most densely inhabited area in California. The Native American population of the region, comprised primarily of the Yokuts and their Monache neighbors to the east, was estimated to have exceeded 180 persons per square mile with a total population of about 4,000 in 1770 (Spier, 1978). Foothill Yokut villages, like the villages of neighboring groups, were small and loosely organized with no principal village site. Each village typically averaged approximately 13 individuals in anywhere from three to eight huts.

After AD 1770, Spanish colonial expeditions, along with the mission system and the Euro-American invasion, caused great disruptions both in settlement patterns and population of the native Californians. Exposure to illnesses brought by Spaniards, Mexicans, and later Americans, led to significant attrition rates due to diseases for which they had little or no immunity. The most significant impact came from the epidemic of 1833 (most likely malaria), which claimed an estimated 75 percent of the Central Valley's native inhabitants by 1846 (Moratto, 1984). Although some Foothill Yokuts became residents of the Tule River Indian Reservation, most settled in hamlets or isolated dwellings scattered throughout their traditional territory. Early explorers and 20th century ethnographers have documented what remained of the Foothill Yokut culture post contact. Particulars of their material culture and society relevant to the identification of artifacts and features at the project site are described below (Wallace, 1978).

Hunting, fishing, and gathering of plant foods comprised the subsistence strategy of the Yokuts. Seasonal movements to various elevations on the Sierra Nevada foothills were common to maximize the exploitation of resources. Deer were the primary game staple, hunted by stalking in disguise, driving into ambush, tracking, or trapping with a spring-pole device that caught the animal by the leg. Animals were dispatched by the bow and arrow (Spier, 1978). Bears were also hunted, being driven from their caves in the spring into hunting parties lead by a bowman. Ground squirrels and rabbits were commonly smoked from their holes or pulled out by twisting long flexible sticks into their fur.

Acorns and pine nuts, after gathering, were stored in elevated granaries located near the dwellings. Manzanita berries were mashed and strained with water to create a cider-like beverage. Insects, grubs, seeds, and yucca roots were also eaten and honey was favored when it could be found (Wallace,1978).

Obsidian was the principal material used for making stone tools, particularly for knives, scrapers, and projectile points. Bows were fashioned from California laurel or juniper wood. Steatite was a common material used in the making of cooking vessels. Yokut basketry was a highly developed art, with designs and materials similar to those of the Monache. Twined cooking baskets were commonly found among both groups (Wallace, 1978). Woven textiles were not locally made.

Yokut dwellings took any one of three forms; 1) a conical grass and willow twig-thatched house with excavated floor, 2) an oval grass-thatched house with a center ridgepole, or 3) an open flat shade grass structure used as a shaded outdoor living and work place during the hot weather. Sweathouses, when present, constituted the other major structure of a village and were similar in construction to the oval house with a center ridgepole. The floor of the sweathouse was usually excavated several feet below grade and the roof was made saplings held under brush and covered with earth.

HISTORY

Many of the traditional lifeways and land-use patterns that served the Yokut peoples for centuries changed first with the establishment of the Spanish missions and second with an influx of foreign settlers during the Gold Rush. Native Americans were first brought into the missions, both willingly and by force, to be converted to Christianity, to learn farming and other "civilized" skills, and to serve as laborers. Large numbers of the mission inhabitants died of diseases introduced by foreign settlers and from malnutrition. Later, by the mid-1800s, foreign settlement within the Tulare County region had not only displaced the native people from their villages and land-based resources, but had also disrupted culturally and economically significant seasonal gathering strategies and trade (Wallace, 1978).

Three Spanish colonial expeditions traveled within the vicinity of the project area. In April 1776, a Franciscan friar, Father Francisco Garces, and his expedition traveled from San Gabriel across the mountains east of the Ridge Route and came down into the San Joaquin Valley along Tejon Creek. Garces crossed the Kern River about eight miles east of Bakersfield and traveled as far north as the White

River. At the White River, Garces stayed at two Rancherias (villages) just south of the Tule River Indian Reservation. Both the 1806 expedition of Moraga and the 1819 expedition of Estudillo traveled through the Porterville area and stayed at Rancherias in nearby Koyete territory (Hoover et al., 1990). In 1827 and 1828, Jedediah Smith traversed the region and was soon followed by employees of the Hudson's bay Company as well as American fur trappers, Ewing Young and Kit Carson. By the spring of 1844, John C. Fremont led the first American Expedition across what would become Tulare County (Hoover et al., 1990).

After the United States acquired California, Tulare County was established in 1852 from portions of northern Los Angeles County and southern Mariposa County with the county seat located in Visalia the same year. The town of Porterville was established at the old Tule River Station site by Porter Putnam (Hoover et al., 1900:511). Putman developed the station into a popular stopping place and hotel, which was known then as Porter's Station. The town that grew up around the station was laid out in 1864 and later named Portersville, then Porterville (Hoover et al., 1990; Gudde, 1998: 299). The town was incorporated in 1902 as miners moved into the area to extract magnetite ore. The Chamber of Commerce was formed in 1907. A City Manager-Council form of government was established in 1926, and a Charter was adopted. The City had grown to a community of 5,000 persons in 1920. Agriculture supplemented by the Central Valley Water Project has been the major source of economic growth in the area. The City is the center of a large farming area noted especially for citrus and livestock. Citrus crops, particularly oranges has lent to the Porterville's prosperity (City of Porterville, 2008).

The Tule River Indian Reservation was established by Presidential Executive Order as a homeland for Tule River, Kings River, Owens River, Monache Cajon and other scattered bands of Indians in 1873 after long and protracted conflicts with white settlers. The hostilities began in March of 1856 when a cow herder complained to authorities in Visalia, the county seat, that 500 head of cattle had been stolen in the Yokohl Valley. After an investigation, it was found that one or two calves had been taken by Native Americans in Frasier Valley. Later that month, a fire in a sawmill east of Visalia was also attributed to Native Americans, and local white settlers formed a posse called the Mounted Volunteers to protect settler interests. Bands of Native Americans from the Deer, Tule, and White River regions fled to the area now known as Battle Mountain, caching food for an extended stay. This was interpreted by the local posse as an act of war, and the militia attacked the Indian fortifications with a cannon. After 26 days of intermittent fighting, the Tribes were routed and sent to the site of the first reservation near Alta Vista School in Springfield (Hoover et al., 1990:510). This reservation was eventually discontinued due to settlement pressures from Euroamericans. The Tule River Reservation was one of four Indian reservations authorized by Congress in 1864, representing a small portion of the aboriginal lands lost by the Indians throughout the Central Valley of California in the 1800s.

Mining in Tulare County in the late 19th and early 20th centuries saw the discovery and extraction of an expanded array of valuable resources. In the early 1880s mining in Tulare County was centered around the Mineral King Mining District, located to the northeast of Visalia. This district was comprised of

multiple mines, which extracted various types of minerals (Irelan, 1888). In 1892, the State Mineralogist reported Tulare County mines extracting a limited quantity of materials including gold and silver, iron ore, chryophrase and magnesite (Irelan, 1893). By 1922, the types of known minerals in Tulare County had expanded to include the following material types: antimony, asbestos, clays, chromes, gems, feldspar, gold, granite, graphite, gypsum, iron, limestone, magnesite, natural gas, silver and zinc-lead. For a period in the early 19th century, magnestie was an important product of Tulare County. In 1916, over 20 mines in Tulare County were extracting magnesite. However, the extraction of magnesite in Tulare County declined rapidly and was nearly obsolete by 1920. Natural gas and silver were also important commodities extracted by mining in Tulare County in the early 20th century. Natural gas was developed in many areas throughout the county and was mainly used to generate power for the landowners' others enterprises. Many silver deposits were also known throughout Tulare County in the historical period (Hamilton, 1922).

4.0 METHODS AND RESULTS

4.1 RECORDS AND LITERATURE SEARCH

Prior to the field survey, a records search was conducted by staff at the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System, on December 9, 2009 (RS#s 09-464). The SSJVIC, housed at California State University-Bakersfield, is an affiliate of the State of California Office of Historic Preservation as the official state repository of archaeological and historic records and reports for a five-county area that includes Tulare County. Additional research was conducted using the information files and literature maintained by AES.

The records search and literature review for this study was done to (1) determine whether known cultural resources had been recorded within or adjacent to the study area and to determine if the APE was subject to surveys in the past; (2) assess the likelihood of unrecorded cultural resources based on archaeological, ethnographic, and historical documents and literature; and (3) to review the distribution of nearby archaeological sites in relation to their environmental setting.

Included in the review were the *California Inventory of Historical Resources* (California Office of Historic Preservation [OHP], 1976), OHP's *Five Views: An Ethnic Historic Site Survey for California* (1988), *California Historical Landmarks* (1990), *California Points of Historical Interest* (1992), and the *Historic Properties Directory Listing for Tulare County* (2009). The *Historic Properties Directory* includes the *NRHP*, the *California Register of Historical Resources*, and the most recent listings (through October 2009) of the *California Historical Landmarks and California Points of Historical Interest.*

The records search found that no cultural resources have been recorded inside or within ¼-mile of the APE. The records search revealed that no cultural resource studies have been conducted within the limits of the APE. However, three cultural resources studies have been conducted adjacent to, or within ¼-mile of the APE (Cantwell, 1979: TU-234; Schiffman, 1999: TU-993; and Unknown, 1981: TU-270). A complete list of these studies can be found in **Appendix A**.

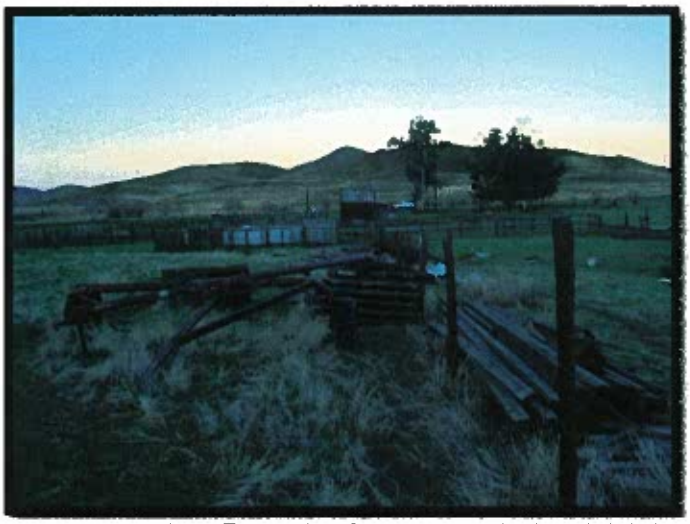
Site indicators for the presence of prehistoric sites in this area may include, but not be limited to, ground depressions; darkened soil areas indicative of middens; fire scorched and/or cracked rock; modified obsidian, quartzite or other vitreous minerals; and grinding stones including manos and metates. Historic era artifacts may include, but not be limited to metal objects including nails; containers or miscellaneous hardware; glass fragments; ceramic or stoneware objects or fragments; milled or split lumber; trenches; feature or structure remains such as buildings or building foundations; and trash dumps.

4.2 NATIVE AMERICAN CONSULTATION

On December 7, 2009, the State of California Native American Heritage Commission (NAHC) was asked to review the Sacred Lands file for information on Native American cultural resources on the project site

(**Appendix B**). The NAHC sent a reply letter on December 15, 2009 stating that no cultural properties were identified in the search of the Sacred Lands File. A list of two Native American contacts was provided by the NAHC, who were contacted by letter on December 22, 2009. The letters solicited information related to the location and character of Native American cultural resources within the APE. No response has been received to date. A summary of the correspondences are presented in **Appendix B**.

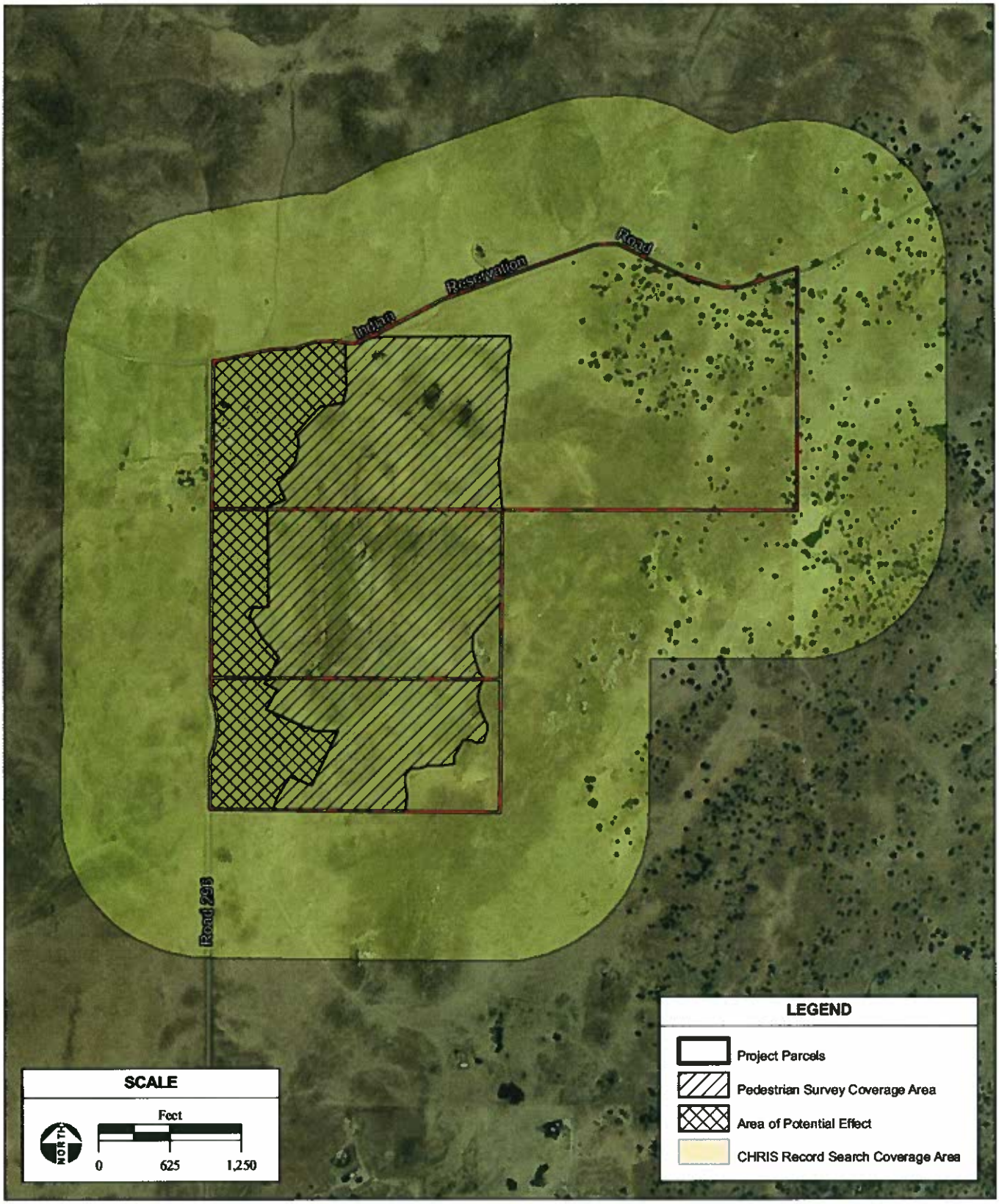
4.3 FIELD SURVEY



Photograph 1. Example of modern agricultural debris abandoned on the property just east of Noted Find 2, view to the west

On December 15 and 16, 2009, AES archaeologists Melinda McCrary, M.A., RPA, and Jennifer Bowden, B.A. conducted an intensive pedestrian survey of the APE as well as a significant buffer to the east. As previously noted, the APE includes the area subject to ground disturbance associated with the proposed Project, as well as a portion of an abandoned mine located east of the proposed development. The portion of the former mine that would be fenced to prevent access was also surveyed and is considered part of the APE for the proposed Project. Survey transects ranged from 5 to 25 meters apart, based on topography, ground surface visibility, and sensitivity for cultural resources. Survey coverage is shown on **Figure 5**.

The APE was examined for archaeological remains and elements of the historic built environment. Surface visibility varied between 10 to 70 percent visibility across the APE. Portions of the APE were covered in dense grasses and other areas were nearly void of all vegetation. Special attention was paid to the areas where no vegetation was present in an effort to detect cultural material in the native soil. In addition, rodent burrow backdirt piles, cutbanks along seasonal drainages, and road cuts were examined for indicators of buried archaeological deposits. Special attention was paid to bedrock outcrops within the APE to inspect for the presence of milling features. The property was used for cattle ranching in the recent past and abandoned agricultural equipment was noted within the subject parcels. This includes boat trailers, milled lumber with wire nails, bails of barbed wire, and wood pallets (**Photograph 1**).



SOURCE: NAIP Acrial Photograph, 7/1/2005; AES, 2009

Figure 5
Survey Coverage

4.4 FINDINGS

Photograph 2. TR-1, view to the east.

As a result of the records searches, Native American consultation, and field surveys, three previously unrecorded (TR-1, -2, and -3) resources were identified, recorded, mapped, and photographed within the APE. A Trimble Global Positioning System (GPS) was used to precisely record the location of all three resources (**Figure 6**). Three noted finds and one isolated find were also encountered during the visual inspection of the property. These finds are considered *a priori* insignificant features and objects. The location of each find is presented in **Figure 6**, but is given no further consideration in this report. The resources encountered during the surveys are described below. Department of Parks and Recreation (DPR) forms for the three resources are provided in **Appendix C**. Of the resources documented, only TR-2 lies within the APE.

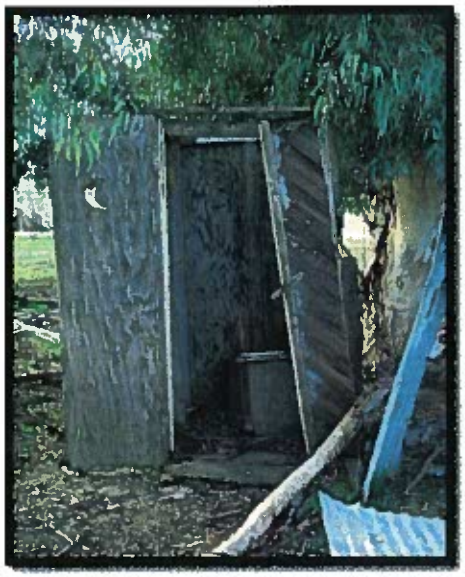
Resource TR-1 was encountered on December 15, 2009 and consists of a rock alignment. The location of TR-1 is depicted on **Figure 6**. This resource is roughly 121.4 feet in length and has collapsed on the northern margin. Just south of the rock alignment is an unnaturally flat and level area that likely constituted a road at one time, which was buttressed on the down-hill slope by the rock alignment (**Photograph 2**). The rock alignment is made of unmodified, dry stacked limestone. The alignment is oriented east/west (270 degrees) and curves to the north on the western end. The stones that comprise the alignment are a variety of sizes, ranging from less than one foot in diameter to roughly three feet in diameter. Orange and green mosses were present on the tops of the stones. The rock alignment terminates at the east end at a north/south oriented modern barbed wire fence. The west end of the alignment terminated abruptly with no obvious reason. One church-key opened tin can and a length of strap metal approximately 2 inches in width was observed in association with TR-1. Church-key can openers date to after 1935 (IMACS, 2001:471.6). TR-1 is located just outside of (to the east) of the APE and would not be impacted by the Project.

Photograph 3. TR-2, view to the east.

Resource TR-2 was encountered on December 15, 2009 and consists of a rock alignment (**Photograph 3**). The location of TR-2 is depicted on **Figure 6**. It is comprised of unmodified field stones ranging in size from two to three feet in diameter. TR-2 is 243 feet in length and is oriented northwest/southeast. This resource is discontinuous and in very poor condition. TR-2 does not appear to be associated with TR-1, nor does it appear to function as TR-1. The rock alignment appears to have been a single course of stones,

SOURCE: NAIP Aerial Photograph, 7/1/2005; AES, 2009

Figure 6
Cultural Resources Within the Project Area

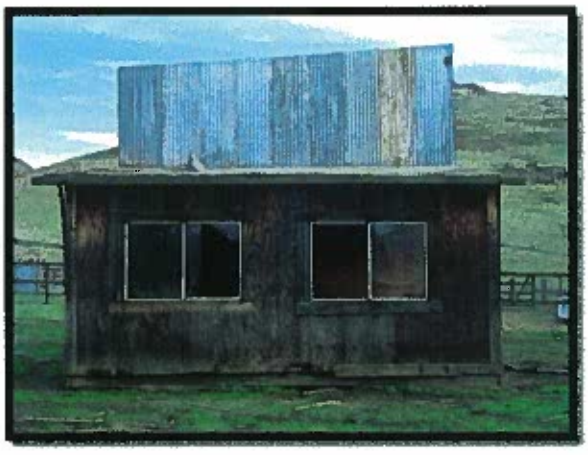


Photograph 4. East Elevation of Noted Find 1, view to the west

as the paucity of stones does not indicate any level of wall collapse. No artifacts were observed in association with TR-2. This rock alignment is not depicted on the 1892 Tulare County map (Thompson, 1892). This resource is located within the APE and will be impacted by the proposed Project. TR-2 may be classified among the simple dry-laid stone alignments using the Tremaine and Lopez (1998:30) typology. A resource evaluation for TR-2 is presented in **Section 5.3**.

Three Noted Finds were documented within the APE, none of which constitute potentially significant resources requiring further investigation or treatment. Noted Find 1 was encountered on December 15, 2009 and is comprised of a modern outhouse located in the northwest corner of the property (**Photograph 4**). It is located within the project footprint. The outhouse is in very poor condition and is leaning precariously to the south. The exterior was constructed with simple modern plywood and the interior box was constructed of modern wood paneling. This outhouse was constructed with wire nails, metal staples and other modern materials. The floor of the outhouse is linoleum and the ceiling is corrugated metal. This structure does not appear to be more than 45 years old as indicated by the modern materials. Furthermore, this outhouse is not depicted on the 1955 aerial photograph of the project area. Aerial photographs of the project area are presented in **Appendix D**. Noted Find 1 is associated with Noted Find 2.

Noted Find 2 is also located in the northwest portion of the APE (**Photograph 5**). The location of Noted Find 2 is depicted on **Figure 6**. The structure is a rural utilitarian vernacular building with a shed style roof on a raised wood foundation. The windows are contemporary aluminum sash style. The structure is located roughly 200 feet to the southeast of the outhouse (Noted Find 1). The northwest/southeast elevations were roughly 15 feet in length, while the northeast/southwest elevations are roughly 18 feet in length. The structure is made of wood stick framing (2 x 4s), plywood and wire nails. The roof is also made of wood with a facade of corrugated metal affixed vertically along the horizontal axis.



Photograph 5. West Elevation of Noted Find 2, view to the east.

The structure that comprises Noted Find 2 is of simple construction and consists of a single room. The interior is walled with sheet rock that remains largely intact. Furniture, such as a recliner and other

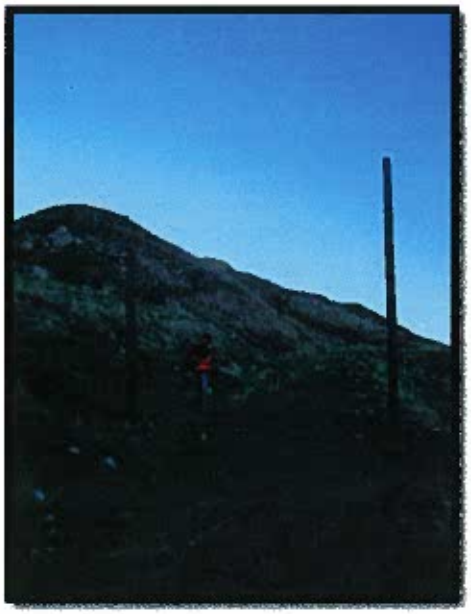
miscellaneous domestic debris, were left in the structure when it was abandoned. A rusty General Electric box with modern wires is present on the south elevation. A cattle trough is located directly east of the structure. The entire structure and outhouse complex are enclosed by a barbed wire fence. An additional modern fence encloses another space to the east adjacent to the fence that encloses the structure. The fence that comprises the northern boundary of both enclosures is oriented east/west and continues to the east beyond the APE. Modern agricultural tools and other debris are stacked on both sides of the fence. The structure has deteriorated considerably and is in poor condition. A single fragment of curved amethyst colored glass was found on the surface near the southeast corner of the structure. No other historic-period artifacts were noted and the amethyst glass fragment is not clearly associated with Noted Find 2, despite the close spatial relationship.

Aerial photographs from 1955 and 1964 were examined to determine the date of construction for Noted Find 1 and Noted Find 2. Noted Find 1 was not present on either of the aerial photographs. While the 1955 and 1963 aerial photographs show a clump of trees in the vicinity of the Noted Find 2, the structure is not visible. Noted Find 2 is visible on a1976 aerial photograph, suggesting its construction between 1964 and 1976. Noted Find 1 does not appear on an aerial photograph until 1987. Sanborn Fire Insurance Maps do not lend additional information as maps were not created for the project area. Historic aerial photographs of the project site are presented in **Appendix D**.

Photograph 6: Isolated Find 1 or Hole-in-top can, plan view

Isolated Find-1 was encountered on December 15, 2009 and is comprised of a rusted hole-in-top can lid (**Photograph 6**). This artifact has a diameter of approximately 6 ½ inches and exhibits internally rolled seams. This artifact likely functioned as a lid to a paint can. It was isolated and found in the central part of the property at UTM 1075657mE, 3987612mN (**Figure 6**), within the APE. Hole-in-top cans gained popularity in the mid 1840s and was virtually replaced by the sanitary can in the late 19th century (IMACS 2001: 471.1). This artifact was found in isolation with no indication that it represents a buried or otherwise more substantial cultural deposit. Isolated finds are considered *a priori* insignificant, in keeping with standard professional practices.

Noted Find 3 was encountered on December 15, 2009 and consists of an abandoned concrete well. This feature is located in the southwest portion of the APE. The location of Noted Find 3 is depicted in **Figure 6**. It consists of a concrete apron with a pipe protruding from the surface. Two sets of partially buried modern irrigation pipes, oriented southeast/northwest and northeast/southwest are visible to the east of the concrete apron. Also piles of milled lumber were present to both the east and west of the well. All of the lumber had wire nails and appear modern. No other artifacts or features were observed within the general vicinity of this noted find.



Photograph 7: TR-3, Feature 1 (road) and Feature 2 (gate), view to the south

Resource TR-3 was encountered on December 16, 2009 and consists of a historic stone quarry complex with ten features. This site is located well beyond the area subject to ground disturbance as part of the proposed Project. Site TR-3 is comprised of a road (Feature 1), a fence/gate (Feature 2), five distinct areas where quarrying of white to dark gray stone occurred (Features 3-7), a vertical mine shaft, horizontal adit, and air hole (Feature 8, 9 and 10, respectively). When viewed as a whole, the site spans roughly ½ mile north/south.

Aubury (1906) briefly mentions a quarry that likely corresponds to TR-3. Aubury (1906:108) states: "*Robert James, Porterville, Owner. A deposit of dark gray marble, claimed to be suitable for building purposes; located 8 miles southeast of Porterville, on the road to the South Tule Indian Reservation.*" Resource TR-3 is located approximately eight miles southeast of Porterville and may be the same quarry. However, a previous Phase I Environmental Site Assessment of the property (Winzler and Kelly, 2006) included interviews with Cliff Hyder, a former owner of the property. He states the mines were used to quarry limestone in the 1940s and 1950s and the 'tunnel' (adit) was used to store explosives (Winzler and Kelly, 2006: 14, 126). A "*Lime Kiln*" is depicted in the southeast quarter of Section 12 (Township 22 South, Range 28 East) on the 1892 "Historical Atlas of Tulare County." It is likely this feature depicted on the 1892 Tulare County map is related to at least one of the features within TR-3.

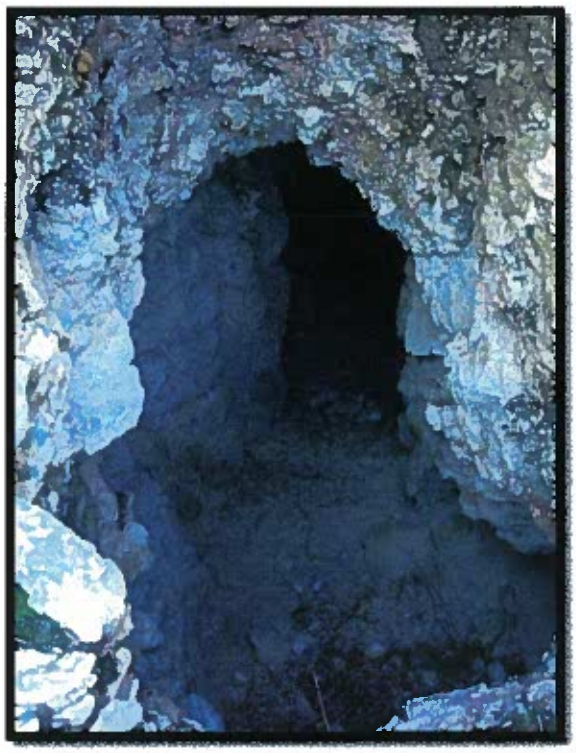
Feature 1 is the road that leads up to the largest (Features 3 and 4) of the visible quarrying locations (**Photograph 7**). It begins at the base of the hill and winds around until it reaches the summit where the quarries are located. The road is roughly thirteen feet in width winds around the entire mountain. It is an unimproved dirt road that does not appear to have been used in the recent past, particularly in the higher elevations. The road is moderately covered in vegetation. Near the summit of the hill, the road travels through one set of switchbacks, presumably due to the steep slope. Before reaching the quarries, the road passes through two milled lumber poles with metal wire wrapped around both, that used to constitute a gate (Feature 2). The milled lumber poles are approximately 10 feet in height. The imprint of a fence that is connected to the gate continues on the ground surface to the west beyond the project area

Photograph 8: East Wall of Feature 3 (quarry) with red paint, view east

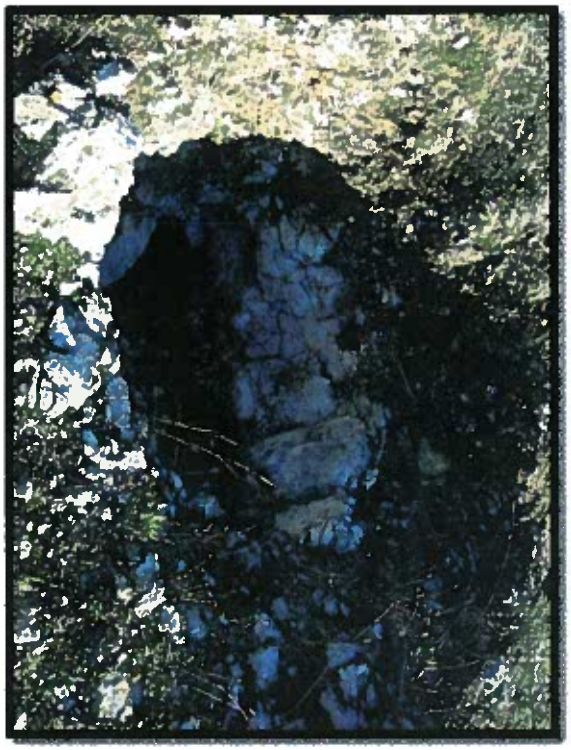
as far as the eye can see. Only four poles remain intact on the imprint of the fence line, two of which comprise the gate. The gate/fence that constitutes Feature 2 is oriented at 243 degrees.

Features 3, 4, 5, 6 and 7 are all distinct areas where quarrying occurred (**Photograph 8**). The location of each feature is indicated on **Figure 6.** The quarries varied in size from 15 to 25 feet in depth. Feature 3 has several imprints where holes were drilled into the stone presumably to insert sticks of dynamite to aid in the quarrying process. This phenomenon was not observed on any of the other quarry features. The tops of Features 5 and 6 had been painted with red paint, which had dripped over the side of the rocks down the length of the stones. No discernable figures, shapes, or text were observed within the paint. Moreover, a paint bucket with red paint dripping over the side was observed partially buried the ground to the east of Feature 6. The location of the paint bucket is mapped on **Figure 6** as Artifact 1 (A-1).

Features 7, 8, 9 and 10 are the located in the northernmost portion of site TR-3 and constitute a large area where quarrying occurred (Feature 7), a crude mine shaft with horizontal wood berms surrounding the top (Feature 8), a small air hole (Feature 9), and an adit with a metal and wood door (Feature 10). Features 8, 9 and 10 are presented in **Photographs 9, 10,** and **11.** The crude mine shaft (Feature 8) has an opening measuring roughly three by four feet. The air hole is roughly one foot in diameter. The adit (Feature 10) retains a door at the entrance made of metal and wood. The following alpha-numeric sequence was stamped and written on the jam of the door: CW-3542-38-LI-7B1. No artifacts were encountered in association with the adit.



Photograph 9: Crude mine shaft (Feature 8), view west



Photograph 10: Unimproved air hole (Feature 9), view west

Photograph 11: Adit Door (Feature 10), view to the south

5.0 RESOURCE EVALUATION

As a result of the field survey undertaken in December 2009, portions of one previously unrecorded historic-period resource (TR-2) were identified within the APE of the proposed Project.

5.1 SUMMARY OF RESOURCE – TR-2

TR-2 is a rock alignment located in the western portion of the project site and the eastern boundary of the project footprint (**Figure 6**). The rock alignment is roughly 243 feet in length, of which a total of the western half is within the APE of the proposed Project. The following discussion provides a significance evaluation for the portion of TR-2 located within the APE.

5.2 EVALUATION CRITERIA

The foregoing contextual discussion presented in **Section 3.2.3** summarized the major historical themes that are relevant to the resource under consideration. At the regional and local level, the economic focus of Porterville was primarily farming and ranching, with mining forming a minor focus.

To have significance under this theme, a resource must have the relevance and importance necessary to illustrate the historic context discussed above, in addition to possessing the physical attributes, of sufficient integrity, that are necessary to convey the aspect of history with which it is associated. Thus, a resource must meet one or more of the following criteria to be considered eligible to the NRHP or CRHR:

- Be closely related to a farming, cattle ranching or mining undertaking that made a significant contribution to the development of the region (criteria A and 1);
- Demonstrate a strong association with a person of local, state, or national significance (criteria B and 2);
- Embody distinctive characteristics of a agriculture or mining features, method of construction, be the first of its kind, or otherwise reflect technological and/or engineering innovation as it relates to agriculture or mining in the region (criteria C and 3); or
- Has yielded or is likely to yield important information beyond what is readily available as an article of the historical record (criteria D and 4).

5.3 TR-2 RESOURCE EVALUATION

During the growth of the agricultural and ranching industry in the greater Porterville area, slight modifications to the landscape were commonly made by farmers to improve their land whether it be for cattle or citrus. The parcels comprising the project area and the parcels adjunct to the project area continue to sustain livestock. TR-2 is likely one of many slight modifications made to the landscape by the landowner in an effort to improve their land. It is indistinguishable from the many improvements made by landowners near Porterville and throughout Tulare County. In other words, TR-2 is not

connected to the events in the past that have made a significant contribution to the broad patterns of local, regional or state history (Criterion A).

TR-2 is not associated with any persons of significance within the community of Porterville and surrounding Tulare County. Previous to the Tribe gaining ownership of the parcel containing TR-2 it was owned jointly by Cliff Hardin. While Mr. Hardin is a respected member of the community, he has not risen to local, state or national significance (Criterion B). Resource TR-2 is not remarkable or unique in construction and is in fact very simple in design (Criterion C). Moreover, this rock alignment is of simple construction according to the typology devised by Tremaine and Lopez (1998). Finally, it is highly unlikely that this segment of levee has the potential to yield information important to the history beyond the historical record (Criterion D).

The integrity of this segment of TR-2 has been significantly reduced due to the poor condition of the resource. The alignment is discontinuous in many places due to unknown causes. TR-2 retains little to no integrity.

With the foregoing considerations in mind, it is recommended that this segment of TR-2 is ineligible for listing on the NRHP and the CRHR. As such, TR-2 does not qualify as a historic property or historical resource pursuant to 36 CFR 60.4 and PRC Section 50201, respectively.

6.0 CONCLUSTION AND RECOMMENDATIONS

6.1 CONCLUSIONS

A full accounting of all potential cultural resources within the APE was achieved through a records search, literature review, Native American consultation, and field survey. The survey resulted in the identification of three resources (TR-1, TR-2, and TR-3), one of which (TR-2) is located within the APE established for the proposed Project. Application of the appropriate NRHR and CRHR criteria resulted in the recommendation that TR-2 does not qualify as a historic property or historical resource pursuant to 36 CFR 60.4 and PRC Section 50201, respectively.

6.2 RECOMMENDATIONS

Based on the findings that the single resource identified within the APE is eligible for listing in the CRHR or NRHP, a finding of *No Historic Properties Affected* is recommended. The following protocols are recommended to mitigate adverse impacts in the unlikely event of an inadvertent discovery of buried archaeological resources or human remains.

TR-1

The western portion of the rock alignment is located proximal to the northeastern boundary of the project footprint. In order to avoid impacts to TR-1, construction fencing should be erected near the resource on the northeastern boundary of the project footprint. This step will reduce the likelihood that inadvertent impacts to TR-1 may occur.

INADVERTENT DISCOVERY

In the event that buried archaeological material, such as flaked stone, historic debris, or human remains are inadvertently discovered during ground-disturbing activities, work should stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop treatment measures in consultation with appropriate agencies. At the same time, the Yokut Archaeological Advisory Team (YAAT) of the Tule River Indian Tribe should be consulted regarding the treatment of any archaeological resources encountered.

HUMAN REMAINS

There is a remote possibility that an unanticipated discovery of human remains could occur during implementation of the Project. Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human grave. If human graves are encountered on the project site, work should halt in the vicinity and the Tulare County Coroner should be notified immediately to determine if the cause of death must be investigated. At the same time, an archaeologist should be contacted to evaluate the find. If human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification.

If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the NAHC within 24 hours. The descendants or most likely descendants (MLD) of the deceased will be contacted, and work will not resume until they have made a recommendation for the means of treating and disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in 36 CFR Part 800.13 of NHPA, 43 C.F.R. § 10.4, and PRC §5097.98.

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APPENDIX A

RECORD SEARCH MATERIALS

ANALYTICAL ENVIRONMENTAL SERVICES

December 1, 2009

Southern San Joaquin Valley Information Center
California State University, Bakersfield
9001 Stockdale Highway
Bakersfield, CA 93311-1099

RE: Record Search Request for Tule River Tribe HUD Housing Project (AES project #209563)

Dear SSJVIC,

Analytical Environmental Services (AES) requests a PRIORITY record search for the above-referenced project located in Tulare County. The SSJVIC is authorized to bill AES at 1.5 times the standard rates for this record search, up to $800 without prior verbal approval. As part of the record search, please complete the following:

- Map all sites and surveys within a 0.25-mile radius of the three-parcel project area;
- Provide copies of all site records for sites located within or immediately adjacent to the project area;
- Provide copies of all survey reports for surveys conducted at least partially within the project area;
- Provide bibliographic references for all surveys located outside the project area, but within a 0.25-mile radius;
- Check the most recent listings for the Historic Properties Database for Tulare County and any other relevant federal, state, and local registers; and
- Photocopy historic plats and maps for the project area.

The proposed project is located at the southeast corner of the intersection of Reservation Road and County Road 296 in Tulare County. The project would include development of approximately 60 acres within the three project parcels identified on the attached map; remaining portions of the parcels would remain undeveloped. Initial development would include 10 low-income housing units, a small community wastewater treatment facility, community athletic fields, and a community garden. Future development may include as many as 60 total homes, and expansion of the community garden into a commercial nursery facility. The project area is identified on the attached Success Dam, CA 7.5' USGS Quadrangle; T22S/R28E, Sections 12 and 13.

Please feel free to contact me directly if you have any questions or concerns regarding this record search request. My résumé and a completed SOQ have been previously submitted to the SSJVIC. I can be reached at 916-447-3479, or by email at jbowden@analyticalcorp.com. Thank you for your prompt attention to this matter.

Sincerely,

Jennifer Bowden
Environmental Associate/Cultural Resources Division

encl. (access agreement, record search request form, map)

Appendix 4

California Historical Resources Information System
Information Center Rules of Operation Manual

ACCESS AGREEMENT

Number: _____

I, the undersigned, have been granted access to historical resources information on file at the _____
SSJV Information Center of the California Historical Resources Information System.

I understand that any CHRIS Confidential Information I receive shall not be disclosed to individuals who do not qualify for access to such information, as specified in Section III(A-E) of the CHRIS Information Center Rules of Operation Manual, or in publicly distributed documents without written consent of the Information Center Coordinator.

I agree to submit historical Resource Records and Reports based in part on the CHRIS information released under this Access Agreement to the Information Center within sixty (60) calendar days of completion.

I agree to pay for CHRIS services provided under this Access Agreement within sixty (60) calendar days of receipt of billing.

I understand that failure to comply with this Access Agreement shall be grounds for denial of access to CHRIS Information.

Print Name: Jennifer Bowden Date: Dec 1, 2009

Signature: _____

Affiliation: AES

Address: 1801 7th St. #100 City/State/Zip: Sacramento, CA 95811

Billing Address (if different from above): Same (attn: Barbara Stabell)

Telephone: 916/447-3479 Fax: 916/447-1665 Email: jbowden@analyticalcorp.com

Purpose of Access: NEPA / CEQA compliance record search

Reference (project name or number, title of study, and street address if applicable): Tule River HUD Housing Project (AES # 209563)

County: Tulare Township/Range/Section or UTMs: T22S/R28E Sec 12, 13

USGS 7.5' Quad: Success Dam

Appendix 5

California Historical Resources Information System
Information Center Rules of Operation Manual

CONFIDENTIAL RECORDS SEARCH REQUEST FORM

Date: Dec. 1, 2009 Access Agreement Number: _____

TO: SSJV Information Center

Name: Jennifer Bowden

Affiliation: AES

Address: 1801 7th St., Ste 100

City: Sacramento State: CA Zip: 95811

Email: jbowden@analyticalcorp.com

Phone: 916/447-3479 Cell Phone: 510/415-7819 Fax: 916/447-1665

Project Name / Reference: Tule River Tribe HUD Housing Project (AES #209563)

Project Street Address: intersection Indian Reservation Road / County Rd. 296 (SE corner)

Project Description: Development of 60 acres within 3 parcels (total 375ac).
10 houses (future potential ≤ 60 houses), community garden & athletic fields, sewer plant

County: Tulare

USGS 7.5' Quad: Success Dam

Township/Range/Section or UTMs: T22S/R28E Sec. 12, 13

PRIORITY RESPONSE (Additional Fee): (yes) / no

EMERGENCY RESPONSE (Additional Fee): yes / no

TOTAL FEE NOT TO EXCEED: $ 200

Special Instructions: Please fax/email results summary letter and FedEx full results. Charge to our FedEx acct # 230758824. Thanks!

Appendix 5 (continued)

California Historical Resources Information System
Information Center Rules of Operation Manual

Include the following information (check as necessary) for the records search area shown on the attached map. Any selection left unmarked will be considered a "0" or a "no."

Map of Resource Locations:	within search area		✓ yes	___ no
	within ___ mi radius	0.25mi	✓ yes	___ no
Resource Database Printout:	within search area		✓ yes	___ no
	within ___ mi radius		✓ yes	___ no
Copy of Resource Records:	within search area		✓ yes	___ no
	within ___ mi radius		___ yes	✓ no
Map of Report Locations:	within search area		✓ yes	___ no
	within ___ mi radius	0.25mi	✓ yes	___ no
Report Database Printout:	within search area		✓ yes	___ no
	within ___ mi radius		✓ yes	___ no
Copy of Entire Report:	within search area		✓ yes	___ no
	within ___ mi radius		___ yes	✓ no
Copy of Title Page Only:	within search area		___ yes	✓ no
	within ___ mi radius		✓ yes	___ no

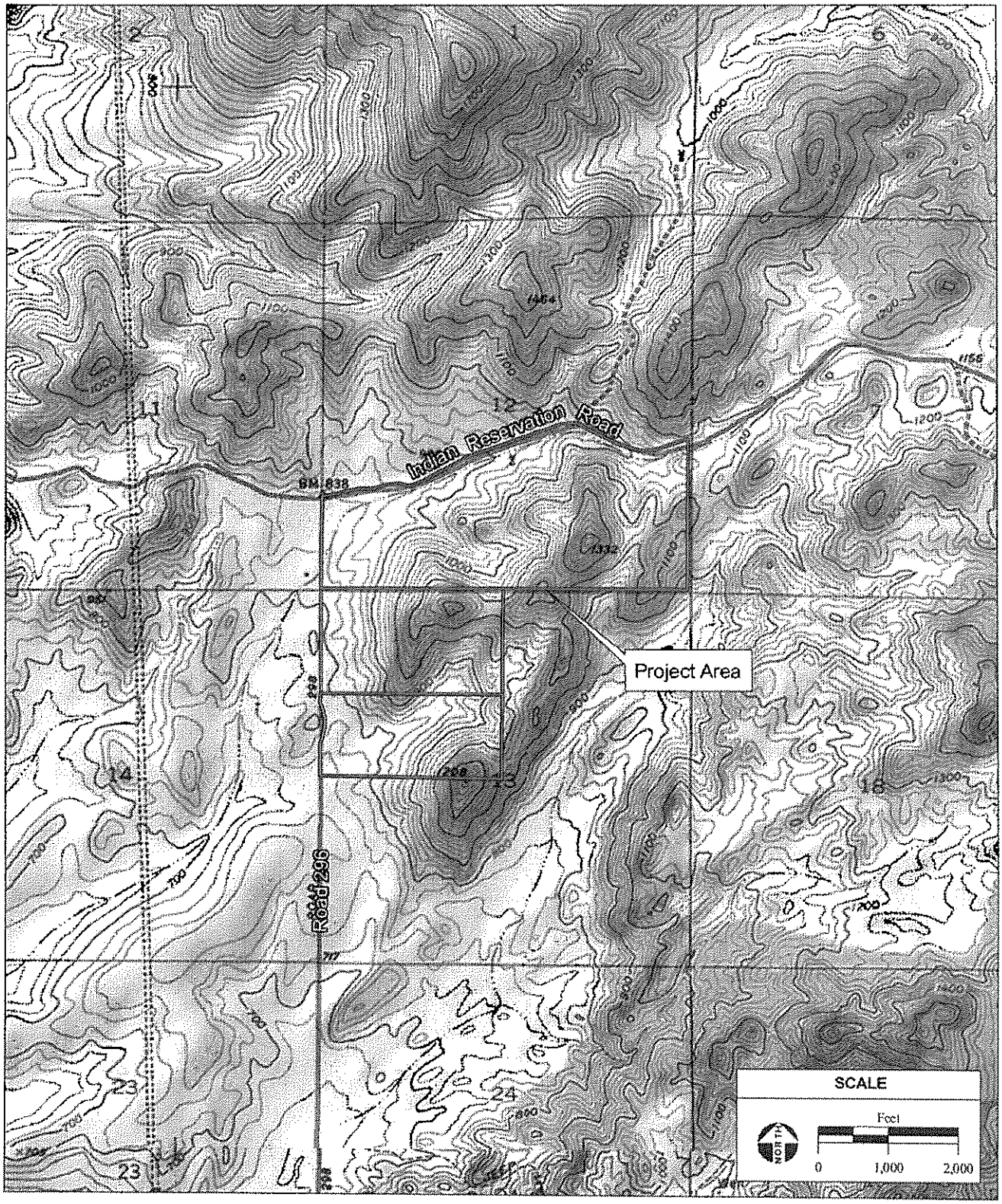
		REVIEW	PROVIDE DOCUMENTATION
OHP Historic Properties Directory*:	within search area	✓ yes ___ no	___ yes ___ no
	within mi radius 0.25mi	✓ yes ___ no	___ yes ___ no
OHP Archaeological Determinations of Eligibility:	within search area	✓ yes ___ no	___ yes ___ no
	within mi radius 0.25mi	✓ yes ___ no	___ yes ___ no
California Inventory of Historical Resources (1976):	within search area	✓ yes ___ no	___ yes ___ no
	within mi radius 0.25mi	✓ yes ___ no	___ yes ___ no

only if positive

*Includes, but not limited to, information regarding National Register of Historic Places, California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys.

Listed below are sources of additional information that may be available at the Information Center. Indicate if a review and documentation of any of the following types of information is requested.

Caltrans Bridge Survey	___ yes	✓ no
Ethnographic Information	___ yes	✓ no
Historical Literature	___ yes	✓ no
Historical Maps	✓ yes	___ no
Local Inventories	✓ yes	___ no
Plat Maps	✓ yes	___ no
Shipwreck Inventory	___ yes	✓ no
Soil Survey Maps	___ yes	✓ no



SOURCE: "Success Dam, CA" USGS 7.5 Minute Topographic Quadrangle,
Sections 12 & 13, T22S, R28E, Mt. Diablo Baseline & Meridian; AES, 2009

Tule River HUD / 209563

Exhibit A

Topographic Parcel map

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

FRESNO KERN KINGS MADERA TULARE

Southern San Joaquin Valley Information Center
California State University, Bakersfield
9001 Stockdale Highway
31 MW
Bakersfield, California 93311-1022
(661) 654-2289 FAX (661) 654-2415
E-mail: ssjvic@csub.edu

TO: Jennifer Bowden **(RS# 09-464)**
Analytical Environmental Services (AES)
1801 7th St., Suite 100
Sacramento, CA 95811

DATE: December 9, 2009

RE: Project# 209563: Tule River Tribe HUD Housing Project

County: Tulare

Map(s): Success Dam 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The Southern San Joaquin Valley Information Center is under contract to the State Office of Historic Preservation and is responsible for the local management of the California Historical Resources Inventories. The following are the results of a search of the cultural resources files at the Southern San Joaquin Valley Information Center. These files include known and recorded archaeological and historic sites, inventory and excavation reports filed with this office, and properties listed in the Historic Property Data File (10/23/09), on the National Register of Historic Places, the California Historical Landmarks, the California Inventory of Historic Resources, the California Points of Historical Interest, and the California Register.

PRIOR CULTURAL RESOURCE INVENTORIES WITHIN PROJECT AREA AND A ONE-QUARTER MILE RADIUS

According to the information in our files, there have been no previous cultural resource studies conducted within the project area. There have been three (3) studies conducted immediately adjacent, TU-234, 270, and 993. Surveys and their associated report numbers are plotted on the project map.

KNOWN CULTURAL RESOURCES WITHIN THE PROJECT AREA AND A ONE-QUARTER MILE RADIUS

There are no recorded cultural resources within the project area or a one-quarter mile radius and it is not known if any exist there.

(RS # 09-464)

There are no cultural resources within the project area that are listed in the National Register of Historic Places, California Inventory of Historic Resources, California State Historic Landmarks, the California Register, or the California Points of Historical Interest.

COMMENTS

Enclosed are title pages of the above referenced reports. If you have any questions or need additional information, please don't hesitate to contact our office at (661) 654-2289.

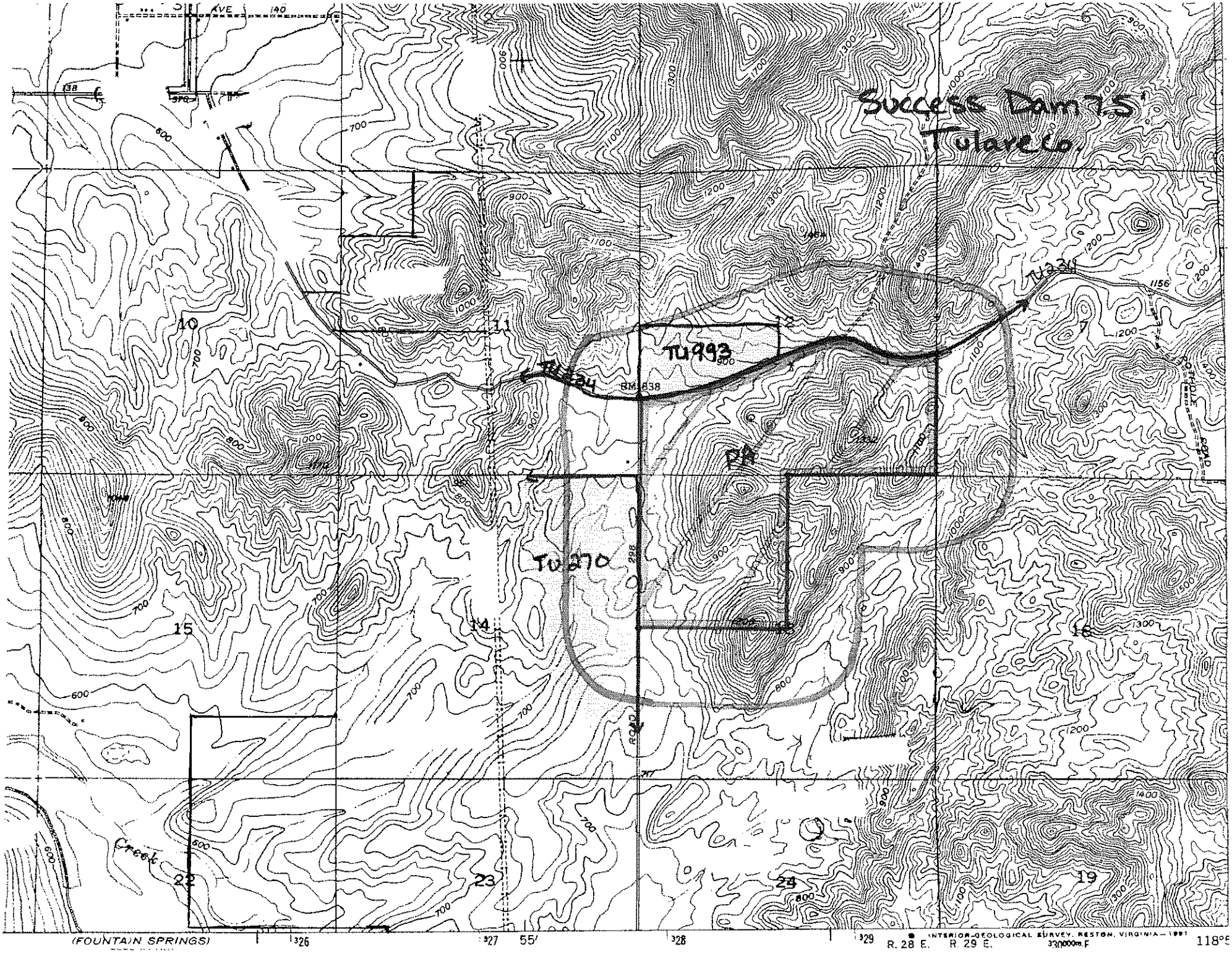
By

Brian E. Hemphill, Ph.D.
Coordinator

Date: December 9, 2009

Fee: $225.00/hr. (Priority Service)

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.


Success Dam 7.5'
Tulare Co.
Tu234
Tu993
Tu234
BM 838
PA
Tu270
Creek
10
11
12
7
15
14
16
22
23
24
19
(FOUNTAIN SPRINGS)
326
327
328
329
55'
R. 28 E.
R 29 E.
118°

ARCHAEOLOGICAL INVESTIGATION

FOR THE

HOSFELDT PROPERTY

Success Dam, CA 7.5' USGS Topographic Quadrangle

Tulare County, California

Key Words:
Surface Survey
No Archaeological Resources
Yokuts Indians
61.46 Acres Surveyed
Section 12, T22S; R28E.

Prepared by:

Robert A. Schiffman
6101 Ridgetop Terrace
Bakersfield, CA 93306
(805) 872-9430

July, 1999

ARCHEOLOGICAL AND HISTORICAL SURVEY REPORT

MOUNTAIN ROAD 137

FROM MP0.0 TO MP8.0

By R. J. Cantwell

Southern San Joaquin Valley
Archaeological Information Center
9001 Stockdale Highway
Bakersfield, CA 93311-1099

Submitted

October 29, 1979

ARCHEOLOGICAL AND HISTORICAL

FIELD RECONNAISSANCE

In Addendum to:

ENVIRONMENTAL IMPACT REPORT REGARDING

ARCHEOLOGICAL AND HISTORICAL RESOURCES ON THE RUMBLEY PROPERTY

SOUTHEAST OF PORTERVILLE, TULARE COUNTY, CALIFORNIA

Dated: June 18, 1981

Submitted

July 1, 1981

APPENDIX B

Consultation Documents

Consultation Log (December 2009)

Organization	Contact	Letter	Phone Calls	Results
Native American Heritage Comission	Debbie Pilas-Treadway	12/7/2009	N/A	Responded on 12/15/09 with "sacred land file failed to indicate the presence of Native American cultural resources within 1/2 mile of project area."
Tule River Indian Tribe	Ryan Garfield, Chairperson	12/22/2009		No response to date.
	Ryan Wermuth	12/22/2009		No response to date.

ANALYTICAL ENVIRONMENTAL SERVICES

December 7, 2009

Debbie Pilas-Treadway
Native American Heritage Commission
915 Capitol Mall, Rm. 364
Sacramento, CA 95814

RE: Tule River Tribe HUD Housing Project, Tulare County, CA

Dear Ms. Pilas-Treadway;

Analytical Environmental Services (AES) is conducting a cultural resources study in support of the above referenced project. We respectfully request a check of the Sacred Lands files for the project area and a list of appropriate Native American contacts for consultation.

The Tule River Tribe HUD Housing Project site is located at the southeast corner of the intersection of Reservation Road and County Road 296 in Tulare County, California. The site corresponds to Sections 12 and 13, Township 22 South, Range 28 East of the Mount Diablo Base and Meridian on the U.S. Geological Survey (USGS) 7.5-minute "*Success Dam, California*" topographic quadrangle.

If you have any questions, please feel free to contact me directly. Thank you for your assistance in this matter. Results may be faxed to the number below.

Sincerely,

Melinda McCrary, RPA
Archaeologist

enc.

1801 7TH STREET, SUITE 100 • SACRAMENTO, CA 95811 • TEL 916-447-3479 FAX 916-447-1665
www.analyticalcorp.com

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

December 15, 2009

Melinda McCrary, M.A., Archaeologist
Analytical Environmental Services
1801 7th Street, Suite 100
Sacramento, CA 95811

Sent by FAX to 916-447-1665
No. of Pages: 3

Re: Request for a Sacred Lands File Search and Native American Contacts List for a Proposed Telecommunications Facility Project "Tule River Tribe HUD Housing Project"; Tulare County, California

Dear Ms. McCrary:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources (c.f. CA Public Resources Code §21070; also c.f. *Environmental Protection Information Center v. Johnson (1985) 170 Cal App. 3rd 604*), was able to perform a record search of its Sacred Lands File (SLF) for the affected project area (APE) requested. The California Environmental Quality Act (CEQA; CA Public Resources Code Section 21000 – 21177)) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c)(f) CEQA guidelines). Section 15382 of the 2007 CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." The NAHC SLF search **did not indicate** the presence of Native American cultural resources within one-half - mile radius of the proposed project (APE).

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and individuals as 'consulting parties' under both state and federal law.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the names of the nearest tribes and interested Native American individuals that the NAHC recommends as 'consulting parties,' for this purpose, that may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We recommend that you contact persons on the attached list of Native American contacts. Furthermore we suggest that you contact the California Historic Resources Information System (CHRIS) at the Office of Historic Preservation Coordinator's office (at (916) 653-7278, for referral to the nearest Information Center of which there are 10.

Consultation with tribes and interested Native American consulting parties, on the NAHC list ,should be conducted in compliance with the requirements of federal NEPA (42 U.S.C. 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 [f]*et seq)*, 36 CFR Part 800.3, the President's Council on Environmental Quality (CSQ; 42 U.S.C. 4371 *et seq*) and NAGPRA (25 U.S.C. 3001-3013), as appropriate. .

Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a

project. Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

The response to this search for Native American cultural resources is conducted in the NAHC Sacred Lands Inventory, established by the California Legislature (CA Public Resources Code §5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code §6254.10) although Native Americans on the attached contact list may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of "historic properties of religious and cultural significance' may also be protected the under Section 304 of the NHPA or at the Secretary of the Interior' discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C, 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibly threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Attachment: Native American Contacts List (NOTE: we further recommend that other forms of 'proof of mailing or proof of contact be utilized instead of 'Return Receipt Requested' Certified or Registered Mail.) Further, we suggest a follow-up telephone call to the contacts if the replies are not received or need clarification.

Native American Contact
Tulare County
December 9, 2009

Tule River Indian Tribe
Ryan Garfield, Chairperson
P.O. Box 589
Porterville , CA 93258
chairman@tulerivertribe-nsn.
(559) 781-4271
(559) 781-4610 FAX

Yokuts

Ron Wermuth
P.O. Box 168
Kernville , CA 93238
warmoose@earthlink.net
(760) 376-4240 - Home
(916) 717-1176 - Cell

Tubatulabal
Kawaiisu
Koso
Yokuts

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Tule River Tribe HUD Housing Project; Tulare County.

ANALYTICAL ENVIRONMENTAL SERVICES

December 22, 2009

Tule River Indian Tribe
Ryan Garfield, Chairperson
P.O. Box 589
Porterville, CA 93258

RE: Cultural Resources Evaluation for Tule River Housing Development, Tulare County, California

Dear Mr. Garfield,

Analytical Environmental Services (AES) is conducting a cultural resources study in support of the above referenced project. We would like to request any information you may have regarding Native American cultural resources within or adjacent to the project area.

The Tule River HUD Project site is located southeast of the City of Porterville within Tulare County, California. The site corresponds to Sections 12 and 13 of Township 22 South, Range 28 East of the Mount Diablo Base and Meridian on the United States Geological Survey (USGS) 7.5-minute "*Success Dam, California*" topographic quadrangle. The subject property is depicted on the enclosed map.

If you have any questions, please feel free to contact me directly via telephone or at mmccrary@analyticalcorp.com. Thank you for your assistance in this matter.

Sincerely,

Melinda M. McCrary, RPA
Archaeologist

encl.

ANALYTICAL ENVIRONMENTAL SERVICES

December 22, 2009

Ron Wermuth
P.O. Box 168
Kernville, CA 93238

RE: Cultural Resources Evaluation for Tule River Housing Development, Tulare County, California

Dear Mr. Wermuth,

Analytical Environmental Services (AES) is conducting a cultural resources study in support of the above referenced project. We would like to request any information you may have regarding Native American cultural resources within or adjacent to the project area.

The Tule River HUD Project site is located southeast of the City of Porterville within Tulare County, California. The site corresponds to Sections 12 and 13 of Township 22 South, Range 28 East of the Mount Diablo Base and Meridian on the United States Geological Survey (USGS) 7.5-minute "*Success Dam, California*" topographic quadrangle. The subject property is depicted on the enclosed map.

If you have any questions, please feel free to contact me directly via telephone or at mmccrary@analyticalcorp.com. Thank you for your assistance in this matter.

Sincerely,

Melinda M. McCrary, RPA
Archaeologist

encl.

APPENDIX C

Department of Park & Recreation Forms (DPR 523)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

Page 1 of 2 *Resource Name or #: TR-1 (Temporary Number)

P1. Other Identifier:
*P2. Location: ☒ Not for Publication ☐ Unrestricted *a. County: Tulare
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
*b. USGS 7.5' Quad: Success Dam Date: 1956 (P-R 1977) T 22S; R 28E; ¼ of ¼ of Sec 12; M.D. B.M.
c. Address: City: Zip:
d. UTM: Zone: ; mE/ mN (G.P.S.)
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

TR-1 was encountered on December 15, 2009 and consists of a rock alignment. This resource was roughly 121.4 feet in length and had collapsed to the north. Just south of the rock alignment was an unnaturally flat area which likely constituted a road. The alignment was made of unmodified, dry stacked field stones of limestone. The alignment was oriented east/west (270 degrees) and curves to the north on the western end. The stones that comprise the alignment are a variety of sizes, ranging from less than 1 foot in diameter to roughly three feet in diameter. Orange and green mosses were present on the tops of the stones. The rock alignment terminates n the east end at a north/south oriented modern barbed wire fence. The west end of the alignment terminated abruptly with no obvious reason. One church-key opened tin can and a length of strap metal approximately 2 inches in width was observed in association with TR-1. Church-key can openers date to after 1935 (IMACS, 2001: 471:6). This resource is collapsed with one course partially intact and in poor condition.

*P3b. Resource Attributes: (List attributes and codes) AH11
*P4. Resources Present: ☐Building ☐Structure ☐Object ☒Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #)

*P6. Date Constructed/Age and Sources: ☒Historic ☐Prehistoric ☐Both

*P7. Owner and Address:
Tule River Indian Tribe,

*P8. Recorded by: (Name, affiliation, and address)
Melinda McCrary, AES
1801 W. 7th Street, Ste. 100
Sacramento, CA 95811

*P9. Date Recorded: 12/15/09
*P10. Survey Type: (Describe)
Intensive Pedestrian

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")
AES, Dec. 2009
A Cultural Resources Study, Tule River Tribe Housing Development Project. On file, AES Sacramento, CA.

*Attachments: ☐NONE ☐Location Map ☐Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

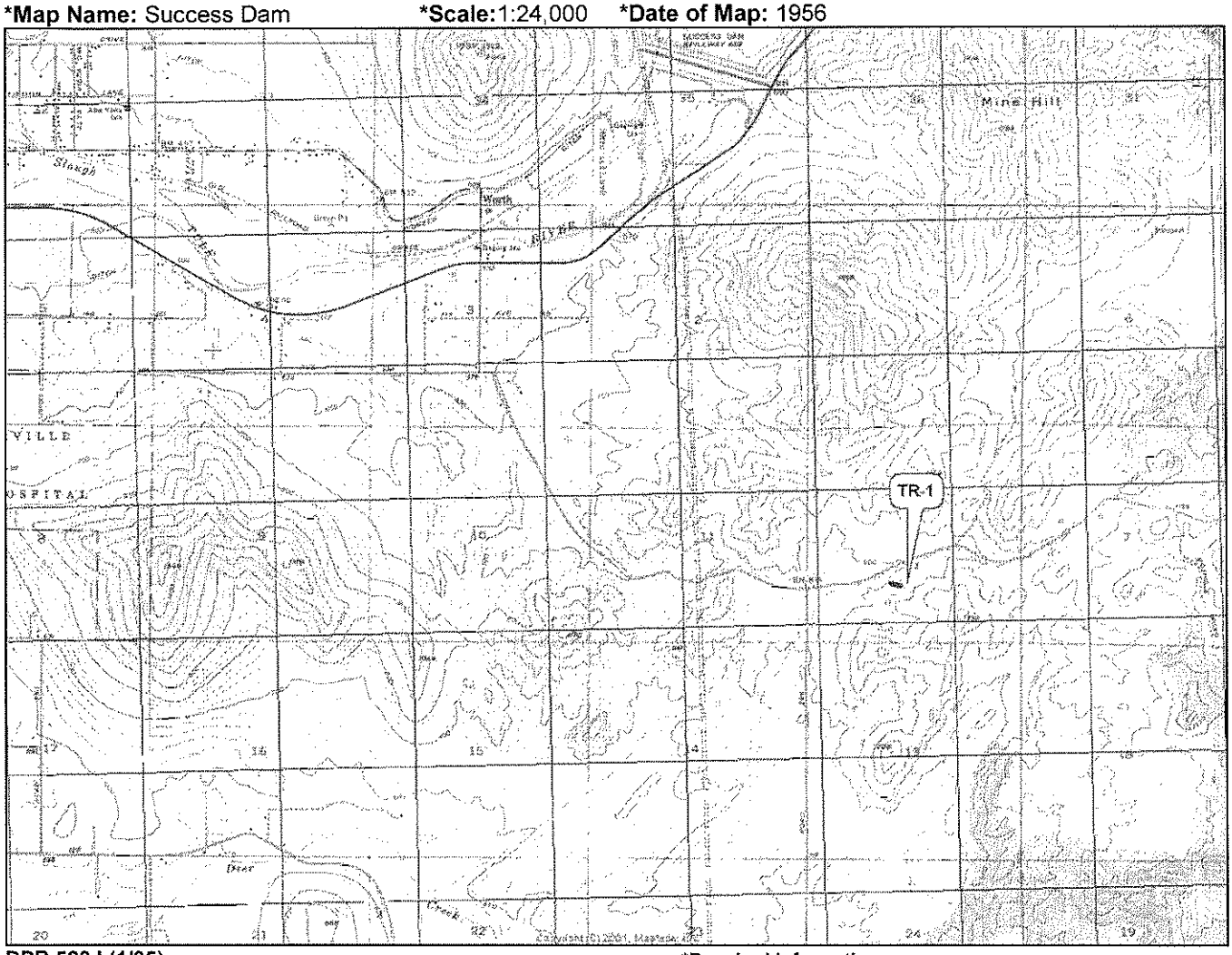
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

*Resource Name or #: TR-1 (Temporary Number)

*Map Name: Success Dam *Scale: 1:24,000 *Date of Map: 1956



*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

*Resource Name or #: TR-2 (Temporary Number)

P1. Other Identifier:

*P2. Location: ☒ Not for Publication ☐ Unrestricted *a. County: Tulare

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Success Dam Date: 1956 (P-R 1977) T 22S;R 28E; ¼ of ¼ of Sec 12; M.D. B.M.

c. Address: City: Zip:

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: ~900 ft.

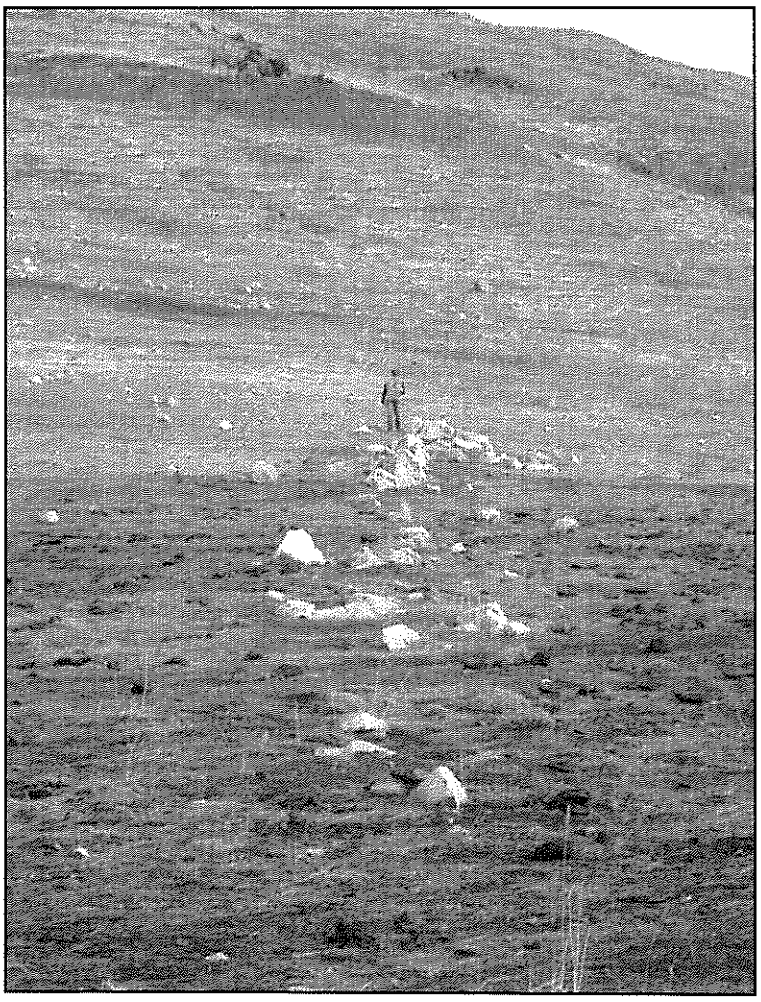
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Resource TR-2 was encountered on December 15, 2009 and consists of a rock alignment. It was comprised of unmodified field stones ranging in size from two to three feet in diameter. TR-2 was 243 feet in length and is oriented northwest/southeast. The rock alignment appears to have been a single course of stones, as the paucity of stones does not indicate any level of wall collapse. This resource was discontinuous and in very poor condition. No artifacts were observed in association with TR-2. This rock alignment is not depicted on the 1892 Tulare County map (Thompson, 1892). This resource is located within the APE and will be impacted by the proposed Project. According to Tremaine and Lopez (1998:30) typology for stone fences in Napa County, TR-2 is of simple construction.

*P3b. Resource Attributes: (List attributes and codas) AH11

*P4. Resources Present: ☐Building ☐Structure ☐Object ☒Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) TR-2, view to the southeast,12/15/09



*P6. Date Constructed/Age and Sources: ☒Historic ☐Prehistoric ☐Both

*P7. Owner and Address:
Tule River Indian Tribe,
340 North Reservation Road
Porterville, CA 93257

*P8. Recorded by: (Name, affiliation, and address)
Melinda McCrary, AES
1801 W. 7th Street, Ste. 100
Sacramento, CA 95811

*P9. Date Recorded: 12/15/09

*P10. Survey Type: (Describe)
Intensive Pedestrian

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

AES, Dec. 2009
A Cultural Resources Study, Tule River Tribe Housing Development Project. On file, AES Sacramento, CA.

*Attachments: ☐NONE ☒Location Map ☐Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

***Recorded by:** AES, 1801 7th Street, Ste. 100 Sacramento, Ca ***Date:** December 15, 2009 ☒ Continuation ☐ Update

During the growth of the agricultural and ranching industry in the greater Porterville area, slight modifications to the landscape were commonly made by farmers to improve their land whether it be for cattle or citrus. The parcels comprising the project area and the parcels adjunct to the project area continue to sustain livestock. TR-2 is likely one of many slight modifications made to the landscape by the landowner in an effort to improve their land. It is indistinguishable from the many improvements made by landowners near Porterville and throughout Tulare County. In other words, TR-2 is not connected to the events in the past that have made a significant contribution to the broad patterns of local, regional or state history (Criterion A). TR-2 is not associated with any persons of significance within the community of Porterville and surrounding Tulare County. Previous to the Tribe gaining ownership of the parcel containing TR-2 it was owned jointly by Cliff Hardin. While Mr. Hardin is a respected member of the community, he has not risen to local, state or national significance (Criterion B). Resource TR-2 is not remarkable or unique in construction and is in fact very simple in design (Criterion C). Moreover, this rock alignment is of simple construction according to the typology devised by Tremaine and Lopez (1998). Finally, it is highly unlikely that this segment of levee has the potential to yield information important to the history beyond the historical record (Criterion D).

The integrity of this segment of TR-2 has been significantly reduced due to the poor condition of the resource. The alignment is discontinuous in many places due to unknown causes. TR-2 retains little to no integrity. With the foregoing considerations in mind, it is recommended that this segment of TR-2 is ineligible for listing on the NRHP and the CRHR. As such, TR-2 does not qualify as a historic property or historical resource pursuant to 36 CFR 60.4 and PRC Section 50201, respectively.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

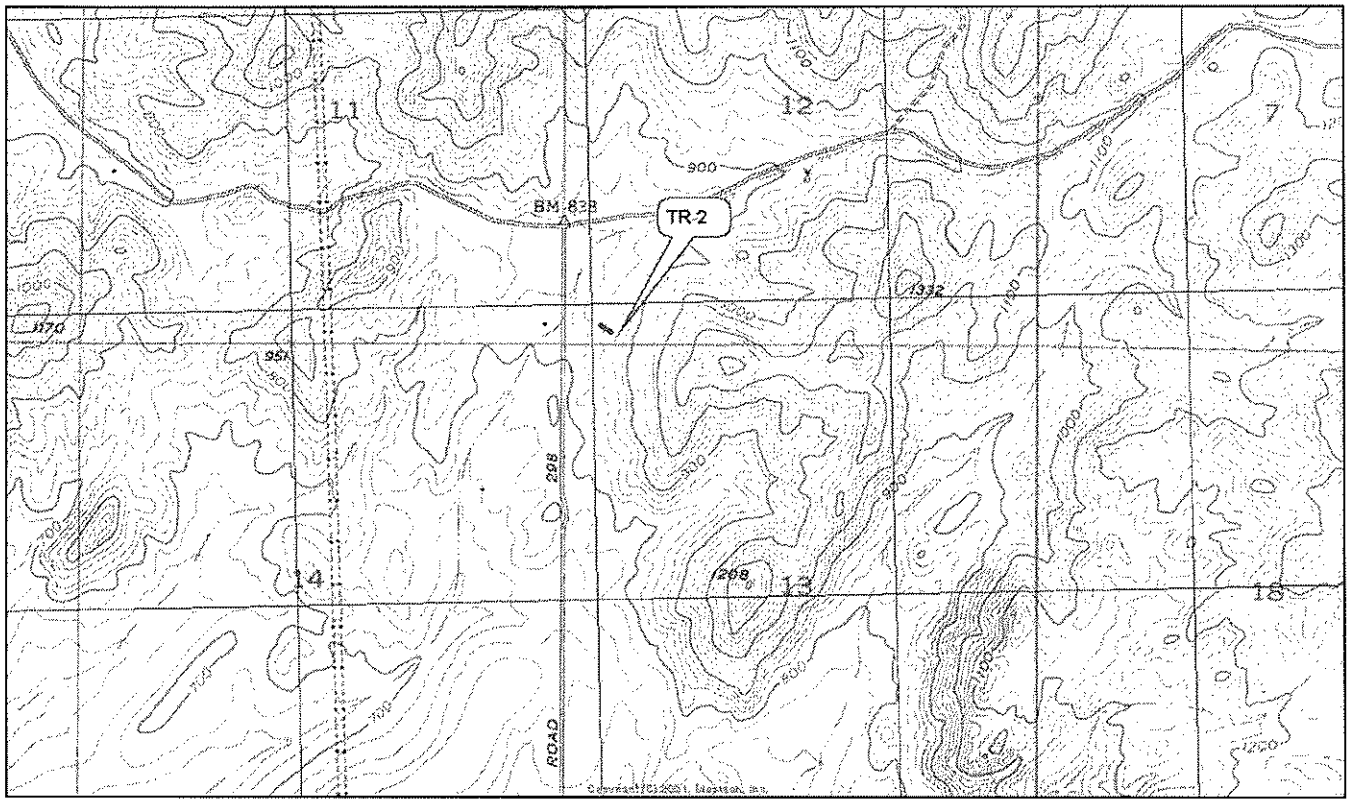
LOCATION MAP

Primary #
HRI#
Trinomial

*Resource Name or #: TR-2 (Temporary Number)

*Map Name: Success Dam

*Scale: 1:24,000 *Date of Map: 1956



*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

*Resource Name or #: TR-3 (Temporary Number)

P1. Other Identifier:

*P2. Location: ☒ Not for Publication ☐ Unrestricted *a. County: Tulare

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Success Dam Date: 1956 (P-R 1977) T 22S;R 28E; ¼ of ¼ of Sec 12; M.D. B.M.

d. UTM: Zone: Feature 4:1076892mE, 3987949mN
Feature 5:1076930mE, 3987903mN
Feature 6: 1076911mE, 3987856mN
Feature 7: 1077096mE, 3987859mN
Feature 8: 1076955mE, 3988213mN
Feature 10:1076898mE, 3988262mN

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Resource TR-3 was encountered on December 16, 2009 and consists of a historical quarry complex with eight features. This site is located well beyond the area of potential effect and will not be impacted by the proposed project. The complex was comprised of a road (Feature 1), a fence and gate (Feature 2), five distinct areas where quarrying of white to dark gray stone occurred (Features 3-7), a joined mine shaft, adit and air hole (Feature 8). When viewed as a whole, the entire site spans a length of roughly ½ mile north/south. The material quarried here appears to be a mineral such as quartz or marble. Aubury (1906: 108) briefly mentions a quarry that is likely the same resource as was observed within the project area. Aubury (1906: 108) states "*Robert James, Porterville, Owner. A deposit of dark gray marble, claimed to be suitable for building purposes; located 8 miles southeast of Porterville, on the road to the South Tule Indian Reservation.*" Resource TR-3 is located approximately eight miles southeast of Porterville and may be the same quarry. However, the Phase I assessment of the property included interviews with Cliff Hyder, a former owner of the property. He states the mines were used to quarry limestone in the 1940s and 1950s and the 'tunnel' (adit) was used to store explosives (Winzler and Kelly, 2006: 14, 126).

*P3b. Resource Attributes: (List attributes and codes) AH9

*P4. Resources Present: ☐Building ☐Structure ☐Object ☒Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #)
TR-3, Feature 3, view to the south, 12/16/09

*P6. Date Constructed/Age and Sources: ☒Historic
☐Prehistoric ☐Both
Unknown

*P7. Owner and Address:
Tule River Indian Tribe,
340 North Reservation Road
Porterville, CA 93257

*P8. Recorded by: (Name, affiliation, and address)
Melinda McCrary, AES
1801 W. 7th Street, Ste. 100
Sacramento, CA 95811

*P9. Date Recorded: 12/16/09

*P10. Survey Type: (Describe)
Intensive Pedestrian

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

AES, Dec. 2009
A Cultural Resources Study, Tule River Tribe Housing Development Project. On file, AES Sacramento, CA.

*Attachments: ☐NONE ☒Location Map ☐Sketch Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

*Required Information

***P3a. Description: (continued from page 1)**

Feature 1 is the road that leads up to the largest (Features 3 and 4) of the five quarries. It begins at the base of the hill and winds around it until it reaches the summit where the quarries are located. The road is roughly four feet in width winds around the entire mountain. It is an unimproved dirt road that does not appear to have been used in the recent past, particularly in the higher elevations. The road is moderately covered in vegetation. Near the summit of the hill, the road goes travels through one set of switchbacks, presumably due to the steep slope. Before reaching the quarries, the road passes through two milled lumber poles with metal wire wrapped around both, that used to constitute a gate. The milled lumber poles are approximately 10 feet in height. The imprint of a fence that is connected to the gate continues on the ground surface to the west beyond the project area as far as the eye can see. Only four poles remain intact on the imprint of the fence line, two of which comprise the gate. The gate/fence that constituted Feature 2 is oriented at 243 degrees.

Features 3, 4, 5, 6 and 7 are all distinct areas where quarrying occurred. The quarries varied in size from 15 to 25 feet in depth. Feature 3 has several imprints where holes were drilled into the stone presumably to insert sticks of dynamite to aid in the quarrying process. This phenomena was not observed on any of the other quarry features. The tops of Features 5and 6 had been painted with red paint, which had dripped over the side of the rocks down the length of the stones. No figures or shapes were observed within the paint. Moreover a paint bucket with red paint dripping over the side was observed embedded into the ground to the east of Feature 6.

Features 7, 8, 9 and 10 are the located in the northernmost portion of site TR-1 and constitute a large area where quarrying occurred (Feature 7), a crude mine shaft with horizontal wood berms lining the ceiling (Feature 8), an unimproved air hole (Feature 9), and an adit with a metal and wood door (Feature 10). Features 7-10 are well outside the project footprint; the location of each feature is presented on **Figure 6**. The crude mine shaft (Feature 8) had an opening of roughly four feet in height and three feet in width. The air hole was roughly 1 foot in diameter. The adit (Feature 11) was closed off by a door with a metal exterior lined on the inside with rough hewn wood planks that swings outward. On the jam of the door was stamped and written with the same sequence of numbers and letters: CW-3542-38-LI-7B1. The interior of the mine was 124.5 feet in length, 6 feet in height, and 4.2 feet in width. Two fragments of milled lumber were discarded in the floor of the mine. At the back of the adit was a partially collapsed wood timber with large boulders on top that appeared to cause of the collapse. No artifacts were encountered within the adit.

Quarry UTMs

References:

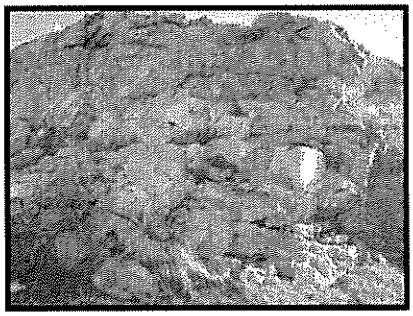
AES
2009 A Cultural Resources Study, Tule River Tribe Housing Developmetn Project. On file, AES Sacramento, CA.

Aubury, L.E.
1906 *The Structural and Industrial Materials of California*. California Mining Bureau, Bulletin 38.

Winzler and Kelly Consulting Engineers
2006 Phase I Environmental Site Assesmetn for Assessor's Parcel Numbers 305-010-012, 305-010-025 and 305-010-026, 30110 Reservation Road, Porterville California. On file at Winzler and Kelly Consulting Engineers, Eureka, California.

*Recorded by: M. McCrary, AES, Sacramento, CA *Date: Dec. 2009 ☒ Continuation ☐ Update

TR-3, Feature 1 (road) and Feature 2 (gate), view to the south

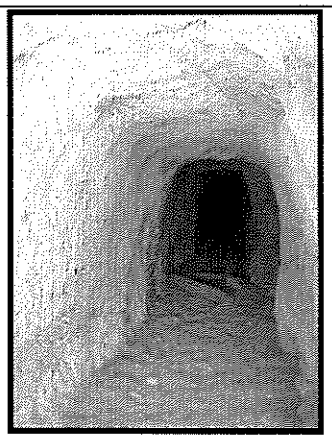


TR-3, East wall of feature 3 with red paint, view east

TR-3, Feature 8, view to the west

TR-3, Feature 9, view to the south

TR-3, Feature 10, view to the south



TR-3, Feature 10, view to the south

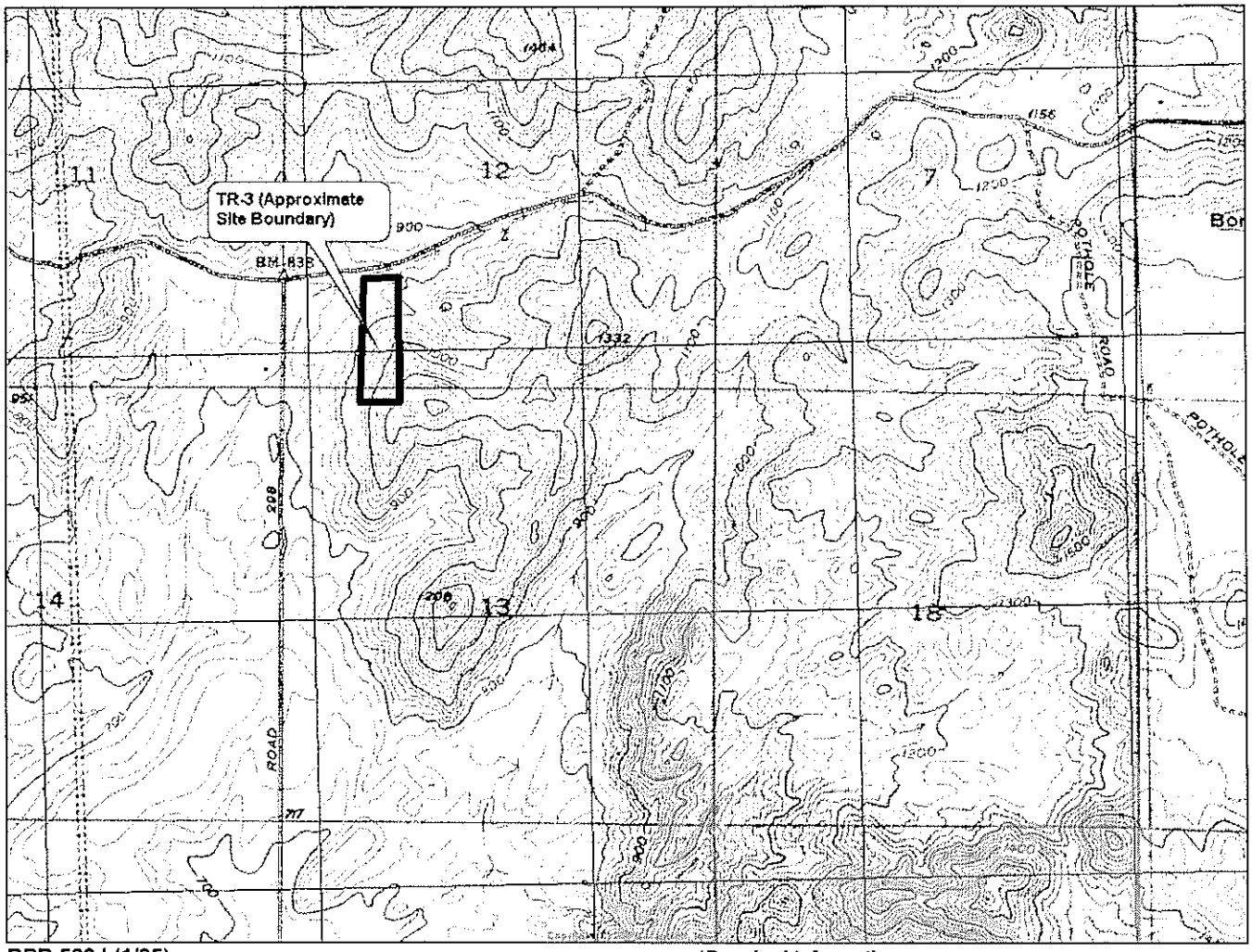
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

*Resource Name or #: TR-3 (Temporary Number)

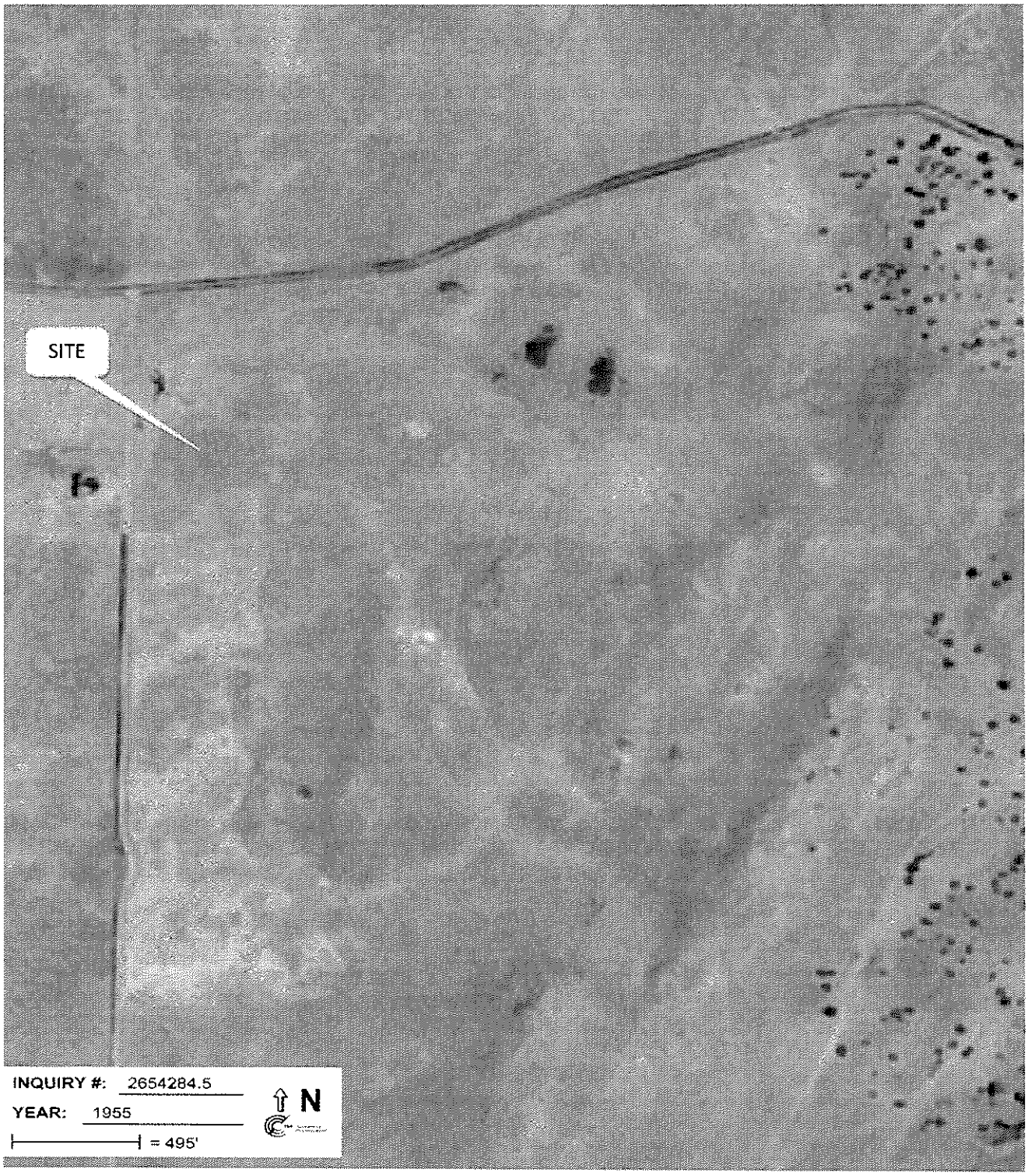
*Map Name: Success Dam *Scale: 1:24,000 *Date of Map: 1956



*Required Information

APPENDIX D

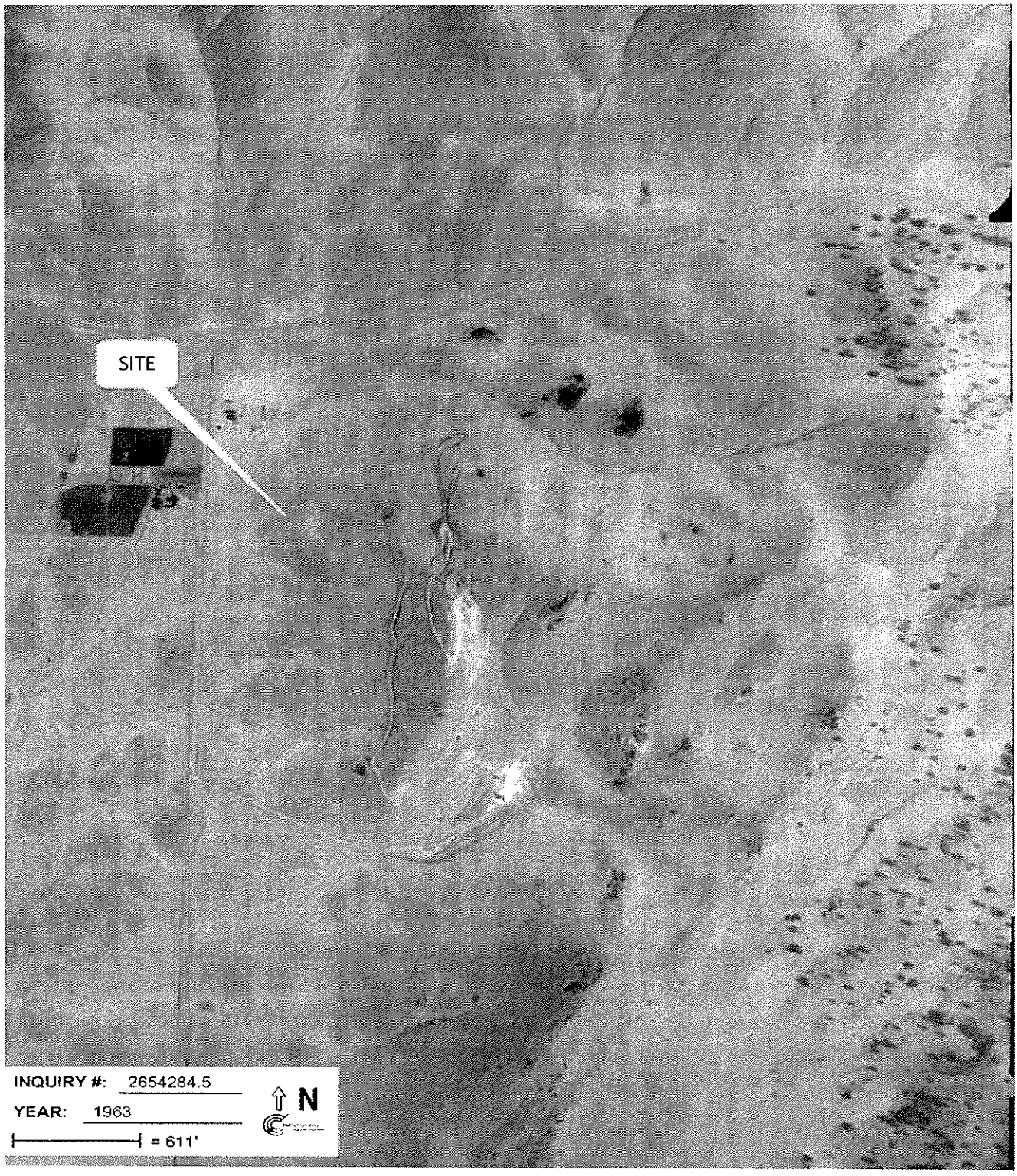
Aerial Photographs



PROJECT NO. 209563	
DESIGNED BY: MO	SCALE: NTS
DRAWN BY: MO	DATE: 12/15/09

Aerial Photograph 1955

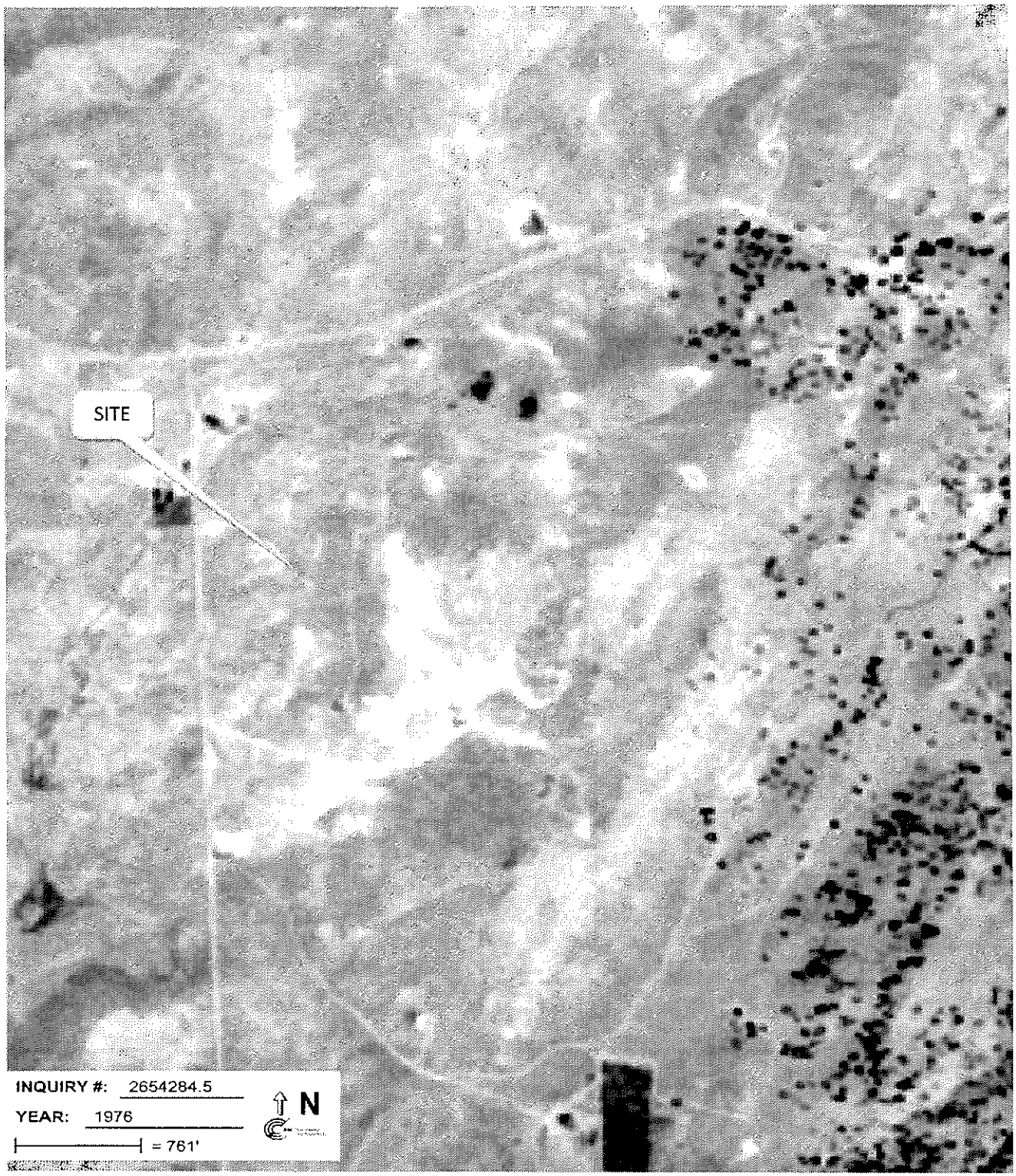
Tule River Tribe Housing Development Project
Porterville, CA 93257



PROJECT NO. 209563	
DESIGNED BY: MO	SCALE: NTS
DRAWN BY: MO	DATE: 12/15/09

Aerial Photograph 1963

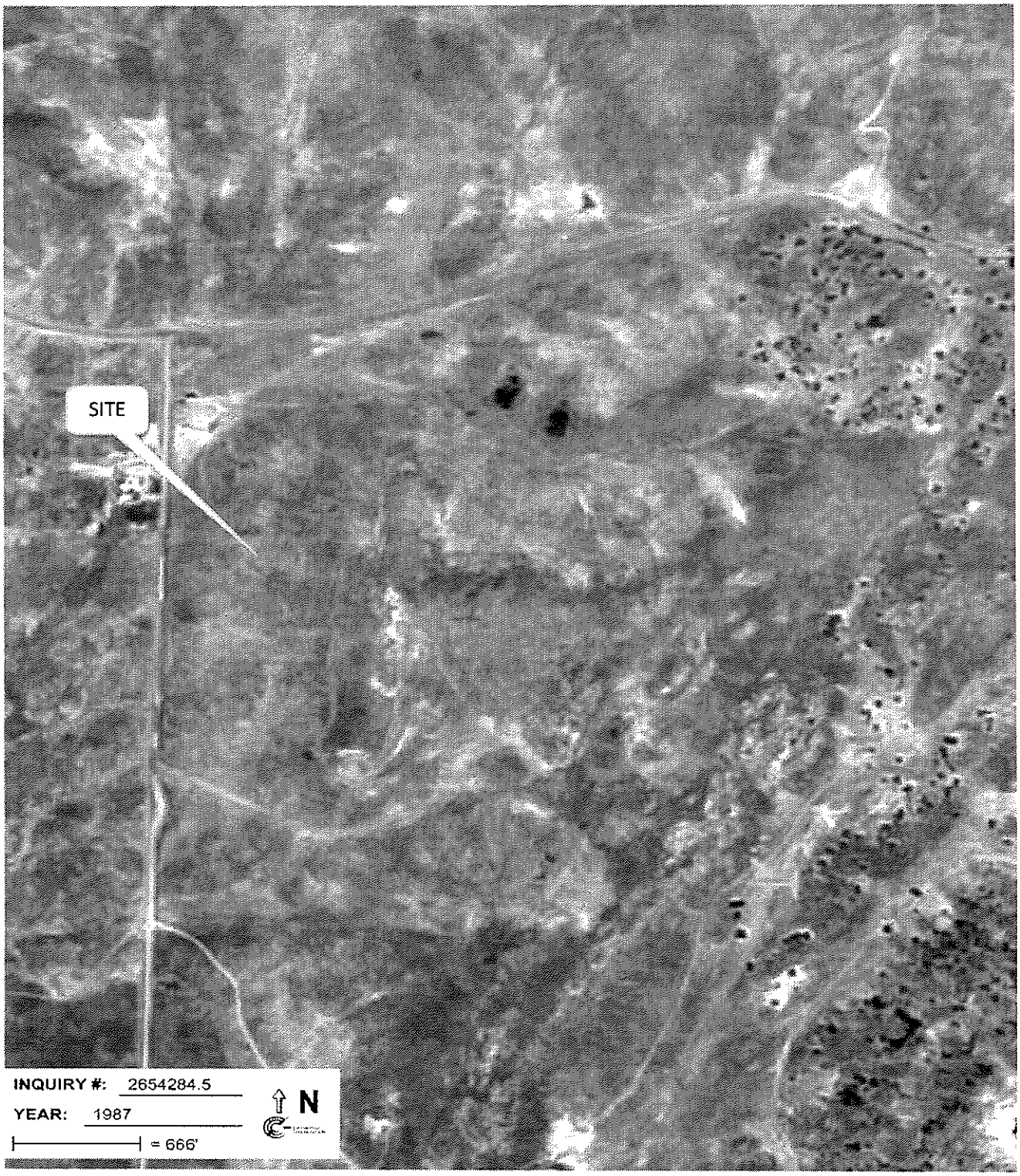
Tule River Tribe Housing Development Project
Porterville, CA 93257



PROJECT NO. 209563	
DESIGNED BY: MO	SCALE: NTS
DRAWN BY: MO	DATE: 12/15/09

Aerial Photograph 1976

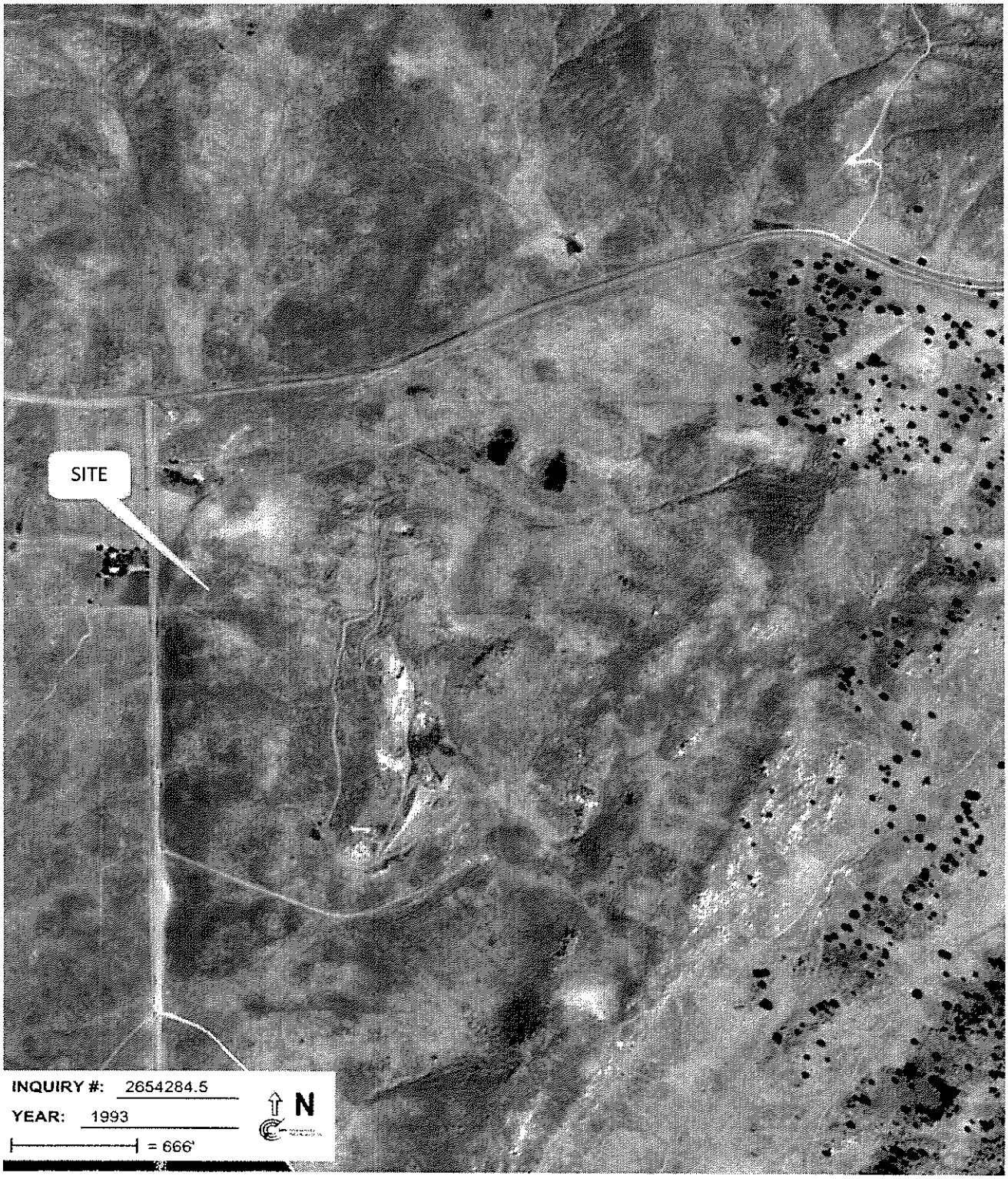
Tule River Tribe Housing Development Project
Porterville, CA 93257



PROJECT NO. 209563	
DESIGNED BY: MO	SCALE: NTS
DRAWN BY: MO	DATE: 12/15/09

Aerial Photograph 1987

Tule River Tribe Housing Development Project
Porterville, CA 93257



PROJECT NO. 209563	
DESIGNED BY: MO	SCALE: NTS
DRAWN BY: MO	DATE: 12/15/09

Aerial Photograph 1993

Tule River Tribe Housing Development Project
Porterville, CA 93257

Attachment D

Mitigation Monitoring
And
Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the proposed Hyder Ranch Sports Park (Project) in Tulare County (County). The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements.

Table 1 presents the mitigation measures identified for the proposed Project. Each mitigation measure is numbered with a symbol indicating the topical section to which it pertains, a hyphen, and the impact number. For example, BIO-2 would be the second mitigation measure identified in the Biological analysis of the IS/MND.

The first column of Table 1 identifies the mitigation measure. The second column, entitled "Party Responsible for Implementing Mitigation," names the party responsible for carrying out the required action. The third column, "Implementation Timing," identifies the time the mitigation measure should be initiated. The fourth column, "Party Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last column will be used by the County to ensure that individual mitigation measures have been monitored.

Table 1: MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
BIO-1 Focused botanical surveys shall be conducted by a qualified botanist during the blooming periods for Kaweah brodiaea (April through June), Springville clarkia (May through June), spiny-sepaled button-celery (April through May), striped adobe-lily (February through April), San Joaquin adobe sunburst (March through April), and Keck's checkerbloom (April through May) prior to commencement of construction activities within the nonnative annual grassland. A letter report shall be completed following the pre-construction survey to document the results. Should no species be observed, then no additional mitigation is required.	The Applicant	Prior to construction	Tulare County Resource Management Agency	
BIO-2 (Avoidance). Should Kaweah brodiaea, Springville clarkia, spiny-sepaled button-celery, striped adobe-lily, San Joaquin adobe sunburst, and/or Keck's checkerbloom be observed during the focused botanical surveys, the biologist shall contact the Tribe within one day following the pre-construction survey to report the findings. A ten-foot buffer shall be established around the species using construction flagging prior to commencement of construction activities.	The Applicant	Prior to and During construction	Tulare County Resource Management Agency	
BIO-3 (Habitat Replacement/Relocation). Should avoidance of the state endangered	The Applicant	Prior to and During construction	Tulare County Resource	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
or threatened plants including Kaweah brodiaea, Springville clarkia, striped adobe-lily, San Joaquin adobe sunburst, and/or Keck's checkerbloom be infeasible, then a Section 2081 permit from the CDFG would be required. Mitigation measures including the salvaging and the replanting of individuals onsite, would be discussed in detail within the permit.			Management Agency	
BIO-4 (Habitat Relocation). Should avoidance of spiny-sepaled button-celery, a CNPS-listed IB species protected under the Native Plant Protection Act, as well as Springville clarkia and San Joaquin adobe sunburst (federally threatened), and Keck's checkerbloom (federally endangered), be infeasible, then the CDFG would be notified at least ten days prior to commencement of ground-breaking activities to provide the CDFG the opportunity to salvage and relocate the species from the Project site	The Applicant	Prior to construction	Tulare County Resource Management Agency	
BIO-5 (Preconstruction Survey). A pre-construction survey shall be conducted by a qualified biologist for California condor within seven days prior to commencement of construction activities. If no California condors are observed in the Project site, then no additional mitigation measures are required.	The Applicant	Prior to construction	Tulare County Resource Management Agency	
BIO-6 (Preconstruction Survey). If the ornamental trees (excluding elderberry	The Applicant	Prior to construction	Tulare County Resource	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
shrubs) and the existing structure within the Project site are proposed for removal, a qualified wildlife biologist shall conduct a focused survey for roosting bats no more than two weeks prior to the onset of construction activities. Trees that contain cavities will be thoroughly investigated for evidence of bat activity.			Management Agency	
BIO-7 (Avoidance). If special status bats are found roosting within any trees, the areas shall be demarcated by exclusionary fencing and avoided until a qualified biologist can assure that the bats have vacated.	The Applicant	Prior to and During construction	Tulare County Resource Management Agency	
BIO-8 (Preconstruction Survey). A pre-construction survey shall be conducted by a qualified biologist for American badger within seven days prior to commencement of construction activities. If no American badgers are observed in the Project site, then no additional mitigation measures are required.	The Applicant	Prior to construction	Tulare County Resource Management Agency	
BIO-9 (Employee Education Program). Should American badger be observed in the Project site, then the biologist shall conduct sensitivity training to all crew members. The sensitivity training shall describe the biology and habitat requirements of the species and provide information as to what to do should any members identify the species within the Project site.	The Applicant	Prior to construction	Tulare County Resource Management Agency	
BIO-10 (Preconstruction Survey). Pre-	The Applicant	Prior to construction	Tulare County	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
construction surveys shall be conducted on the site no less than 14 days and no more than 30 days prior to the beginning of ground disturbance, construction activities, and/or any project activity likely to impact the San Joaquin kit fox. The primary objective is to identify kit fox habitat features (e.g., potential dens and refugia) on the project site and evaluate their use by kit foxes. If an active kit fox den is detected within or immediately adjacent to the area of work, the USFWS and CDFW shall be contacted immediately to determine the best course of action**.** Survey results must be received and approved by the USFWS and the CDFG prior to the onset of construction activities. If SJKF or its habitat is not detected within the project site, no further mitigation is required unless the USFWS deems additional mitigation measures.			Resource Management Agency	
BIO-11 Should kit fox be found within the Project site during preconstruction surveys the Project will avoid the habitat occupied by kit fox and the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFW will be notified.	The Applicant	During construction	Tulare County Resource Management Agency	
BIO-12 (Minimization). Permanent and temporary construction activities and other types of Project-related activities shall be carried out in a manner that	The Applicant	During construction	Tulare County Resource Management Agency	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
minimizes disturbance to kit foxes. Minimization measures include, but are not limited to: restriction of Project-related vehicle traffic to established roads, construction areas, and other designated areas; inspection and covering of structures (e.g., pipes), as well as installation of escape structures, to prevent the inadvertent entrapment of kit foxes; and proper disposal of food items and trash. See Appendix B for more details.				
BIO-13 (Mortality Reporting). In the event of accidental death or injury to a San Joaquin kit fox during Project-related activities, the Sacramento Field Office of the USFWS and the Fresno Field Office of CDFG shall be notified in writing within three working days. Notification shall include the date, time, location of the incident or of the finding of a dead or injured animal, and any other pertinent information.	The Applicant	During construction	Tulare County Resource Management Agency	
BIO-14 (Employee Education Program). Prior to the start of construction at the proposed Project site the applicant will retain a qualified biologist to conduct a meeting to train all construction staff that will be involved with the proposed Project on all sensitive biological resources, including the San Joaquin kit fox, with the potential to occur on or near the Project site. This training will include	The Applicant	Prior to construction	Tulare County Resource Management Agency	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
a description of the sensitive biological resources and their habitat requirements; a report of the occurrence of any sensitive biological resources in the proposed Project area; an explanation of the status of the species and its protection under the endangered species act; and a list of the measures being taken to reduce impacts to the species during proposed Project construction and implementation.				
BIO-15 (Preconstruction Survey). If construction begins during the nesting season for raptors and other migratory birds (between February and October), a qualified biologist shall conduct a pre-construction survey for active nests within 250 feet of the proposed project site no more than two weeks prior to construction. If no active nests are found, then no further mitigation is necessary.	The Applicant	Prior to construction	Tulare County Resource Management Agency	
BIO-16 (Avoidance). If any active nests are located in the project parcels, a 100-foot diameter buffer zone shall be established around the nest to maximum extent practicable. A biologist should monitor nests weekly during construction to evaluate potential nesting disturbance caused by construction activities. The boundary of the buffer shall be marked with yellow caution tape, surveyor's flagging, pin flags, stakes, etc. The buffer zone shall be maintained until the end of the breeding season or until the young	The Applicant	Prior to and During construction	Tulare County Resource Management Agency	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
have fledged. No construction activities should occur within 100 feet of a nest tree while young are in the nest. The biological monitor will have the authority to stop construction if construction results in evidence of potential nest abandonment. The caution tape, surveyor's flagging, pin flags, stakes, etc., may be removed when a biologist, whose qualifications are acceptable to approval agency staff, confirms that the nest(s) is no longer occupied and all young have fledged.				
BIO-17 (Minimization). If an active nest occurs in a tree scheduled for removal or during demolition of an existing structure, the species of nesting bird shall be determined to identify whether the species is protected under the MBTA. The nest tree shall be preserved until the CDFG and/or USFWS is contacted to obtain guidance on alternative buffers based on the species requirements.	The Applicant	Prior to and During construction	Tulare County Resource Management Agency	
CUL-1 If, in the course of Project construction, any archaeological or historical resources are uncovered, discovered, or otherwise detected or observed, activities within one hundred (100) feet of the find shall be ceased. A qualified archaeologist shall be contacted and advise the County of the site's significance. If the findings are deemed significant by the Tulare County	The Applicant	During construction	Tulare County Resource Management Agency	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
Resources Management Agency, appropriate mitigation measures shall be required prior to any resumption of work in the affected area of the proposed Project. Where feasible, mitigation achieving preservation in place will be implemented. Preservation in place may be accomplished by, but is not limited to: planning construction to avoid archaeological sites or covering archaeological sites with a layer of chemically stable soil prior to building on the site. If significant resources are encountered, the feasibility of various methods of achieving preservation in place shall be considered, and an appropriate method of achieving preservation in place shall be selected and implemented, if feasible. If preservation in place is not feasible, other mitigation shall be implemented to minimize impacts to the site, such as data recovery efforts that will adequately recover scientifically consequential information from and about the site. Mitigation shall be consistent with CEQA Guidelines section 15126.4(b)(3).				

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
CUL-2 If cultural resources are encountered during construction or land modification activities work shall stop and the County shall be notified at once to assess the nature, extent, and potential significance of any cultural resources. If such resources are determined to be significant, appropriate actions shall be determined. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions to be determined by a qualified archaeologist. For example, activities within 50 feet of the find shall be ceased.	The Applicant	During construction	Tulare County Resource Management Agency	
CUL-3. In accordance with State Health and Safety Code Section 7050.5 and Public Resource Code Section 5097.98, if human remains are unearthed during project construction, no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and disposition of such remains. If the remains are determined to be Native American, the Coroner must notify the Native American Heritage Commission (NAHC) within 48 hours of the Coroner's determination. The NAHC will then identify the person(s) thought to be the most likely descendent of the deceased Native American, who will then assist in determining what course of action shall be taken in handling the	The Applicant	During construction	Tulare County Resource Management Agency	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
remains.				
GEO-1. If ground disturbing activities, including but not limited to vegetation removal, clearing and grubbing, grading, excavation, stockpiling, and backfilling, occur during the rainy season (October 15th to May 1st), storm runoff from the construction area shall be regulated through a stormwater management/ erosion control plan that shall include temporary onsite silt traps and/or basins with multiple discharge points to natural drainages and energy dissipaters. Stockpiles of loose material shall be covered and runoff diverted away from exposed soil material. If work stops due to rain, a positive grading away from slopes shall be provided to carry the surface runoff to areas where flow would be controlled, such as the temporary silt basins. Sediment basins/traps shall be located and operated to minimize the amount of sediment transport off-site. Any trapped sediment shall be removed from the basin or trap and placed at a suitable location on site, away from concentrated flows, or removed to an approved disposal site.	The Applicant	During construction	Tulare County Resource Management Agency	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
GEO-2. Temporary erosion control measures (such as fiber rolls, staked straw bales, detention basins, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) shall be provided until perennial or landscaping vegetation is established.	The Applicant	During construction	Tulare County Resource Management Agency	
GEO-3. No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months (October 15th to May 1st).	The Applicant	During construction	Tulare County Resource Management Agency	
GEO-4. Erosion protection shall be provided on all cut-and-fill slopes. Revegetation shall be facilitated by mulching, hydroseeding, or other methods and shall be initiated as soon as possible after completion of grading and prior to the onset of the rainy season.	The Applicant	During construction	Tulare County Resource Management Agency	
HAZ-1. The following best management practices (BMPs) shall be added to the Project site SWPPP to reduce the impacts from routine use, transport, and disposal of hazardous materials from construction: • Hazardous materials such as fuels and solvents used on the construction sites shall be stored in covered containers and protected from rainfall, runoff, vandalism, and accidental release to the environment. • All stored fuels and solvents shall be contained in an area of impervious surface with containment capacity equal to the volume of materials	The Applicant	During construction	Tulare County Resource Management Agency	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
stored. • A stockpile of spill cleanup materials shall be readily available at all construction sites. Employees shall be trained in spill prevention and cleanup, and individuals shall be designated as responsible for prevention and cleanup activities. • Equipment shall be properly maintained in designated areas with runoff and erosion control measures to minimize accidental release of pollutants.				
HAZ-2. Access into and out of the Project shall be maintained at all times during construction. The Fire Department and other emergency vehicles must be able to enter and exit the Proposed Project for the duration of construction.	The Applicant	During construction	Tulare County Resource Management Agency	
HAZ-3. During construction, staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a fire break.	The Applicant	During construction	Tulare County Resource Management Agency	
HAZ-4. Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment,	The Applicant	During construction	Tulare County Resource Management Agency	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
and chainsaws.				
HAZ-5. The onsite water storage tank will be sized and sited to provide adequate fire flow at the appropriate pressure to serve the entire project at full build-out plus the five homes that are not part of the project. Calculation of the exact size and location shall be performed by a licensed civil engineer to meet the requirements of the California Building Code. The size and location shall be included in the site plan for approval during the Building Permit process.	The Applicant	Prior to construction	Tulare County Resource Management Agency	
HYD-1. Implement erosion control mitigation measures described in the Geology and Soils section of this IS/MND (Mitigation Measures GEO 1-4).	The Applicant	During construction	Tulare County Resource Management Agency	
HYD-2. Implementation of the hazardous materials BMPs identified in the Hazardous Materials section of this IS/MND (Mitigation Measure HAZ 1).	The Applicant	During construction	Tulare County Resource Management Agency	