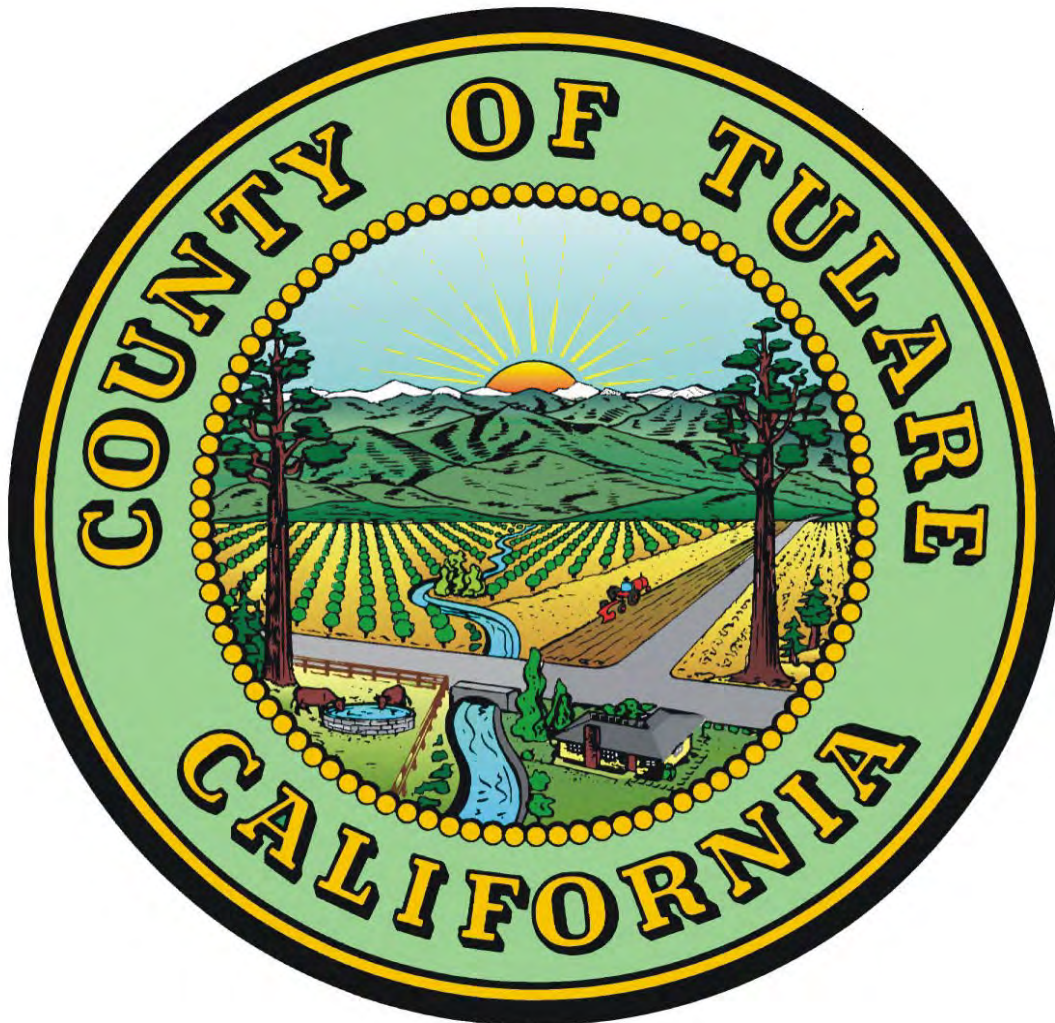


County of Tulare

Traver Wastewater Treatment Facility Sewer System Management Plan (SSMP)



by

Tulare County Resource Management Agency
5961 South Mooney Boulevard
Visalia, CA 93277
June 2010

TABLE OF CONTENTS

LIST OF FIGURES AND TABLES.....	iv
INTRODUCTION	
Regulatory Requirement.....	v
CHAPTER 1 – COLLECTION SYSTEM	
1.1 Description.....	1
1.2 Wastewater Collections	1
CHAPTER 2 – SSMP FUNDAMENTALS	
2.1 Goals	5
2.2 Organization	5
2.3 Legal Authority.....	9
CHAPTER 3 – SCHEDULE OF REQUIREMENTS .	
3.1 Time Table Development.....	13
CHAPTER 4 – OPERATION AND MAINTENANCE PROGRAM	
4.1 Sanitary Sewer System Map Maintenance	14
4.2 Routine Preventive Operation and Maintenance Activities	16
4.3 Rehabilitation and Replacement.....	16
4.4 Staff Training	17
4.5 Equipment and Replacement Parts Inventory	17
CHAPTER 5 – OVERFLOW EMERGENCY RESPONSE PLAN	
5.1 Notification Procedures and Appropriate Overflow Response.....	18
CHAPTER 6 – FATS, OIL AND GREASE PROGRAM (FOG)	
6.1 Self Assessment.....	19
6.2 Legal Authority.....	19
CHAPTER 7 – DESIGN AND CONSTRUCTION STANDARDS	
7.1 Standards for Installation, Rehabilitation and Repair	20
7.2 Standards for Inspection and Testing	20
CHAPTER 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN	
8.1 System Evaluation.....	21
8.2 Capacity Assurance Plan.....	21
CHAPTER 9 – MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS	
9.1 Effectiveness of SSMP	22
9.2 Performance Measures	22
9.3 Performance Monitoring and Program Changes	22

TABLE OF CONTENTS

CHAPTER 10 – SSMP PROGRAM AUDITS

10.1 Regulatory Requirement.....	23
10.2 Audits.....	23

CHAPTER 11 – COMMUNICATION PROGRAM

11.1 Communication with the Public.....	24
11.2 Communication with the Collection System.....	24

CHAPTER 12 – SSMP CERTIFICATION

12.1 Compliance Certification.....	24
------------------------------------	----

APPENDICES

A. Acronyms/Abbreviations	25
B. Tulare County Ordinance No. 2925 (Uncodified)	26
C. Tulare County Ordinance Code Part VIII, Chapter 3 (Codified)	92

LIST OF FIGURES AND TABLES

FIGURES

1-1	Traver WWTF Location Map	2
1-2	Traver Zone of Benefit Boundary Map.....	3
1-3	Traver WWTF Flow Schematic	4
2-1	Organizational Chart for Sewer Overflow Response	8
4-1	Traver Sanitary Sewer System Map.....	15

TABLES

2-1	Implementation Responsibilities	9
3-1	Completion Date Requirement.....	13

TRAVER WASTEWATER TREATMENT FACILITY (WWTF) SANITARY SEWER MANAGEMENT PLAN (SSMP)

INTRODUCTION

Regulatory Requirement

On May 2, 2006, the California State Water Resources Control Board (SWRCB) adopted Statewide General Waste Discharge Requirements (WDRs), No. 2006-003, for all Sanitary Sewer Collection Systems. These WDRs are the regulatory mechanism for all federal and state agencies, municipalities, counties, districts and other public entities that own or operate sanitary sewer collection systems, more than one mile in length, and convey untreated, or partially treated, wastewater to a publicly owned treatment facility within the State of California. This regulatory measure was developed to reduce the number and frequencies of sanitary sewer overflows (SSOs), as well as decrease the risk to human health and the surrounding environment, if an overflow occurs.

Each collection system operator is required to develop and implement a facility specific Sanitary Sewer Management Plan (SSMP) which must include applicable elements that provide proper and cost effective management, operation and maintenance of collection systems. It must also include a spill response plan that establishes standard procedures for immediate response to an SSO to minimize water quality impacts and potential nuisance conditions.

Tulare County is required to comply with the WDR as it owns and operates four (4) wastewater treatment facilities and five (5) sewer lift stations more than one mile in length that convey untreated wastewater to a publicly owned treatment facility. Tulare County has submitted a Notice of Intent to the State for coverage under the WDR and is currently utilizing the statewide electronic reporting system for SSOs.

The Sanitary Sewer Order gives enrollees a time table to develop and implement each task of their SSMP. On April 8, 2008, Resolution Number 2008-0198, certified that Tulare County's SSMP addressed their collection systems management goals and organizational structure, meeting the May 2, 2008, Sanitary Sewer Order mandate.

By February 2, 2010, this plan is required to contain the following sections:

- Legal Authority
- Operations and Maintenance Program
- Overflow Emergency Response Program
- Fats, Oil and Grease Program

This document satisfies this requirement.

By August 2, 2010, the plan will include the following sections and be complete:

- System Evaluation and Capacity Assurance Plan
- Monitoring and Program Modifications
- Program Audits
- Communication Program
- Final SSMP Certification

CHAPTER 1 - COLLECTION SYSTEM

1.1 DESCRIPTION

Tulare County's Traver Wastewater Treatment Facility (WWTF) serves 178 residential users, 4 churches, 2 commercial facilities and 2 small schools. It is located at 36550 Road 44, .5 miles south of Avenue 368, in Traver, California and includes 2.6 miles of gravity sewer line, .03 miles of force main, and .05 miles of laterals. The main lines are constructed of polyvinyl chloride.

The WWTF's discharge is regulated by Waste Discharge Requirement (WDRs) Order No. 88-098, which regulates a maximum discharge of 0.572 million gallons per day of domestic wastewater from an aerated pond and facultative pond (both lined with soil cement) to two evaporation/percolation ponds. Current average dry weather flow is 42,161 gallons per day. Only a small section of each of the two evaporation/percolation ponds is utilized for effluent disposal. The WWTF headworks consist of a magnetic flow meter, a channel-mounted raw sewage grinder and a bypass bar screen. A backup generator powers the WWTF and associated lift stations in the event of a power outage.

1.2 WASTEWATER COLLECTIONS

The County of Tulare contracts with Water Dynamics, Inc. to oversee the operations and maintenance of the Traver WWTF. All services provided are under the supervision of a State Certified WWTF Operator, Grade I, II and V. A computerized maintenance program schedules preventative maintenance work orders, organizes area maintenance activities and records historical data about the system. Water Dynamics, Inc. responds to all sewage spills, seven (7) days a week, 24 hours a day with assistance from Tulare County personnel. This program meets the requirements of the WDR.

FIGURE 1-1
TRAVER WASTEWATER TREATMENT FACILITY LOCATION MAP

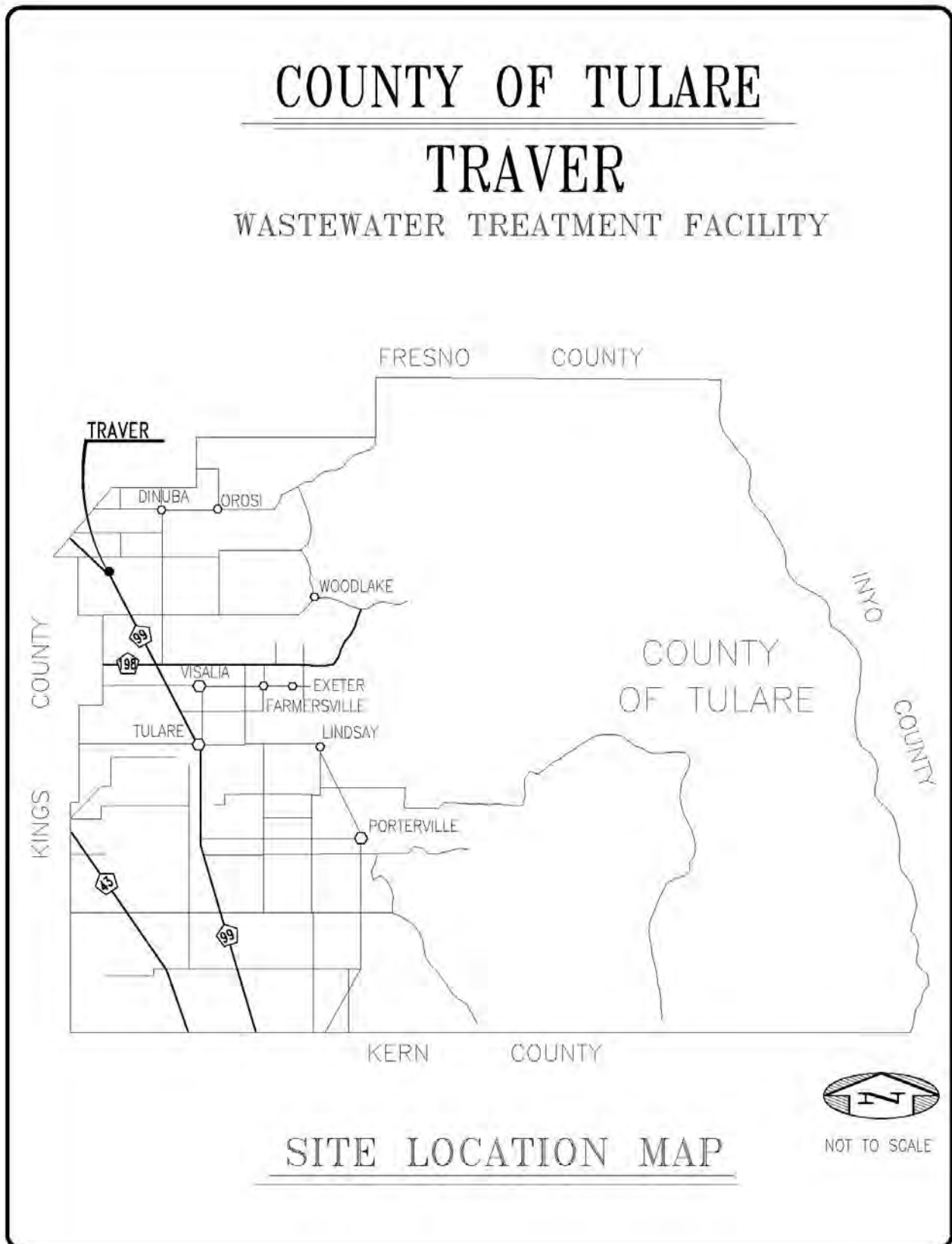


FIGURE 1-2
TRAVER ZONE OF BENEFIT BOUNDARY MAP

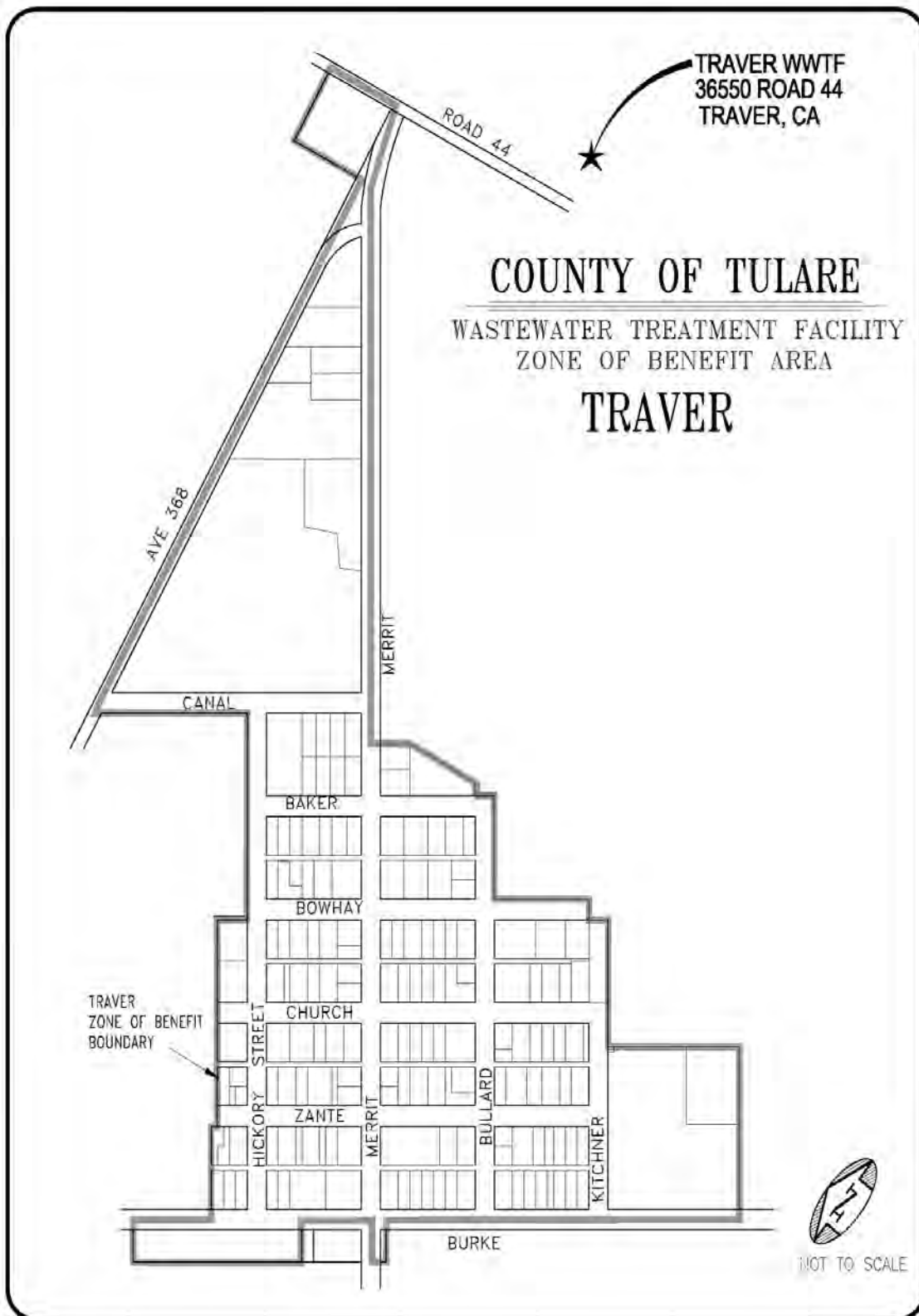
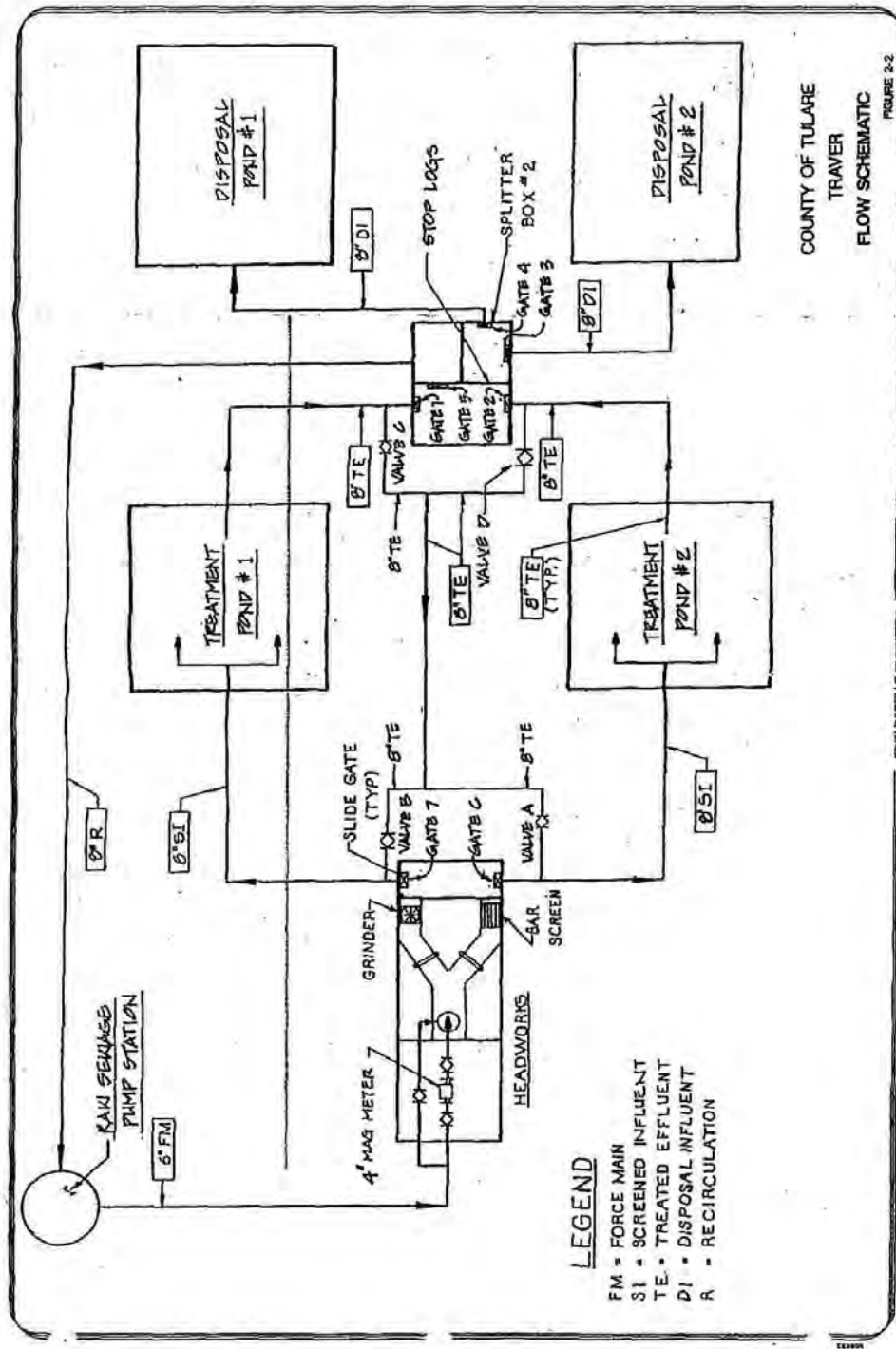


FIGURE 1-3
TRAVER WASTE WATER FLOW SCHEMATIC



CHAPTER 2 - SSMP ELEMENTS

2.1 2.1 GOALS

The WDR requires the collection system agency to develop goals to properly manage, operate and maintain all parts of its wastewater collection system to reduce and prevent SSOs, as well as mitigate any SSOs that occur. The following goals have been established for this collection system:

- Maintain the wastewater facilities using trained staff and contractors who possess adequate knowledge, skill and abilities to properly manage, operate and maintain all parts of the wastewater collection system.
- Provide reliable and uninterrupted services 99% of the time.
- Minimize the frequency of sanitary sewer overflows to one (1), or less, per year.
- Take all feasible steps to contain and mitigate the impacts of an SSO, utilizing safe, practical, proven and effective methods.

2.2 ORGANIZATION

The County of Tulare has defined the following roles and responsibilities during a SSO event to comply with the SSMP requirements. Figure 2-1 identifies the line of authority for the implementation of the SSMP. Table 2-1 identifies the person/agency responsible and their role for the specific measure in the SSMP.

Tulare County Board of Supervisors

Establishes County Ordinances, delegates responsibility, provides resources, and authorizes outside contractors to perform services.

Tulare County Administrative Officer

Oversees all County divisions, establishes policy, plans strategy, leads staff, allocates resources, delegates responsibility and, when necessary, authorizes outside contractors to perform services and serves as the Public Information Officer (PIO). Provides informational updates to the Board of Supervisors.

Tulare County Public Information Officer

Spokesperson for Tulare County. Provides information to the media and the general public, as required.

Resource Management Director (RMA) Director

Establish policy, plans strategy, leads staff, allocates resources, delegates responsibility, authorizes outside contractors to perform services, when applicable, and serves as the public information officer, when necessary.

RMA Assistant Director, Public Works

Lead Legally Responsible Official (LRO) for the implementation and administration of the County's SSMP. Ensures that reporting guidelines are followed and updated. Reports spills on the California Integrated Water Quality Systems (CIWQS) website. Works as needed on implementing applicable permits, laws, regulations, capital projects and provides support to all parts of the operation. Provides informational updates to the RMA Director, as required.

RMA Solid Waste Manager (Utilities)

Alternate LRO. Works as needed on implementing applicable permits, laws, regulations, capital projects and development of the SSMP. Establishes and implements the operating budget, as well as oversees the contract with Water Dynamics, Inc.

RMA Engineering Technician IV

Oversees field operations and maintenance activities, provides relevant information to agency management. Assists in emergency response and SSO investigations.

RMA Solid Waste Staff Service Analysts

Works as needed on implementing applicable permits, laws, regulations, capital projects and provides administrative support to all parts of the operation. Assists in monthly SSO reporting and works in conjunction with the Engineering Technician IV to provide information to the Solid Waste/Utilities Manager, as required.

RMA Solid Waste Field Staff (Utilities)

Provides preventative maintenance and minor repairs. Assists in emergency response and investigations.

RMA Transportation and Operations Supervisor

Oversees field operations and collaborates with the RMA Assistant Director, Public Works, if an SSO occurs.

RMA Road Department

Provides construction equipment and assists in emergency response to an SSO. Responsible for housing and transporting emergency backup generators as required.

Tulare County Health and Human Services Agency (HHSA) - Director

Establishes policy, plans strategy, leads staff, delegates responsibility, and serves as the Public Information Officer (PIO), when necessary. Oversees the Director of Health. Provides informational updates to the County Administrative Officer, as required, and to the Board of Supervisors, if requested.

Tulare County HHSA - Director of Health

Oversees Environmental Health. Establishes policy, plans strategy, leads staff, delegates responsibility and reports to the HHSA Director.

Tulare County HHSA - Public Health Officer

Provides public health information and/or requirements to the Tulare County Public Information Officer for distribution to the general public, as required. Reports to HHSA Director of Health.

Tulare County HHSA - Environmental Health

Participates in mitigating an SSO and reports to HHSA, Director of Health.

Tulare County Sheriff's Office (TCSO)

Reports an SSO after hours and is responsible for evacuations, if required.

Tulare County Fire Department (TCFD)

Assists TCSO with notification and evacuations, when required.

Visalia Fire Department – Hazardous Material (Hazmat) Team

Responds to SSO Hazmat incidents, when required.

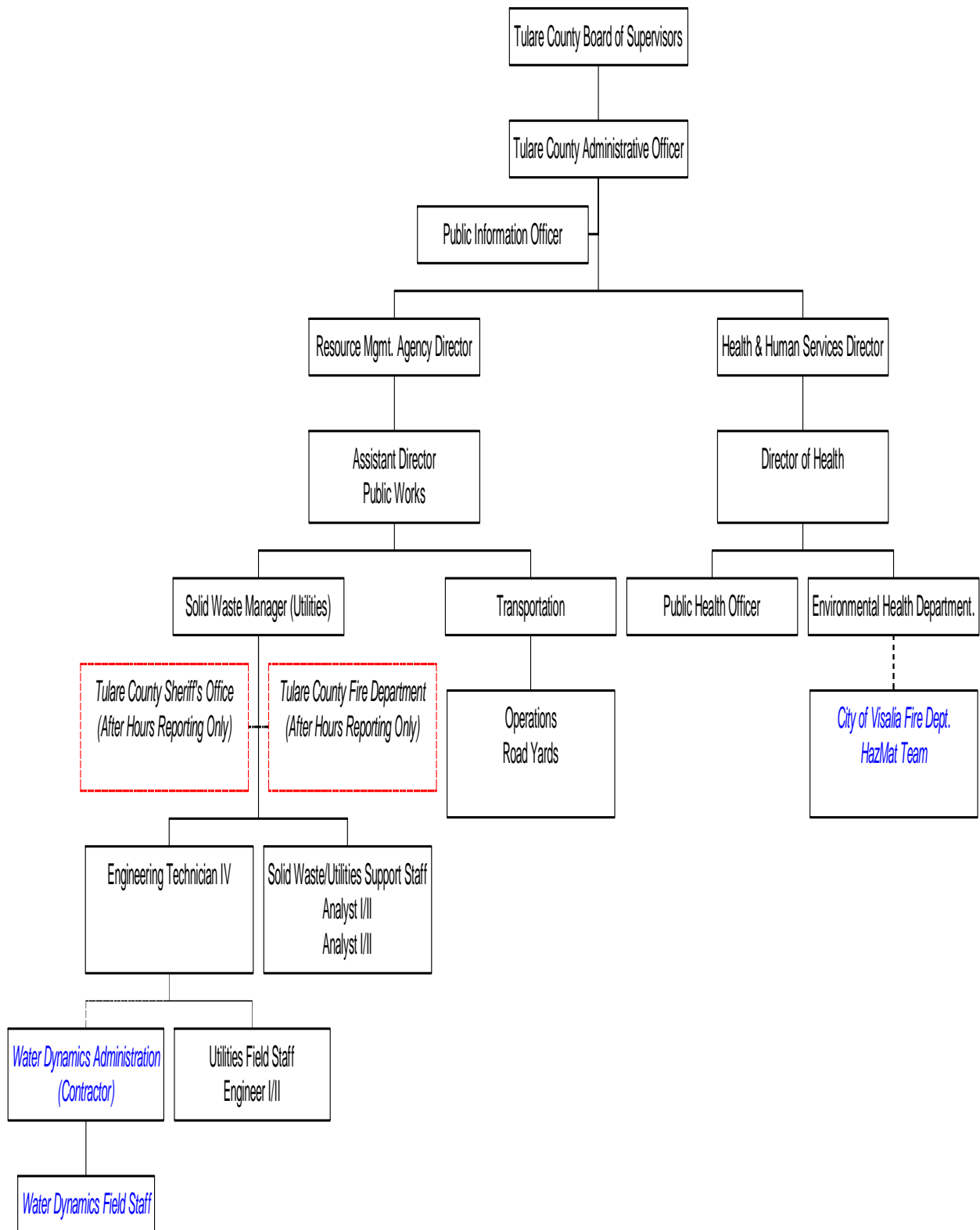
Water Dynamics, Inc. - Administration

Wastewater Collection Operator. Manages field operations and maintenance activities, provides relevant information to the RMA management. Implements contingency plans, leads emergency response and investigates an SSO in conjunction with County personnel.

Water Dynamics, Inc. - Field Staff

Wastewater Collection Operator. Provides maintenance and repairs. Assists in emergency response and investigations.

**FIGURE 2-1
ORGANIZATIONAL CHART FOR SEWER OVERFLOW RESPONSE**



**TABLE 2-1
IMPLEMENTATION RESPONSIBILITIES**

SSMP MEASURE	RESPONSIBLE PERSON	ROLE
GOALS		
Implementation and management of the SSMP	RMA Assistant Director, Public Works RMA SW Manager (Utilities)	Provides oversight of the SSMP
Ensure the collection system is maintained and operated to reduce or eliminate SSOs	RMA SW Manager (Utilities) RMA Engineering Technician IV Water Dynamics, Inc.	Oversight of all aspects of the collection system
ORGANIZATION		
Chain of Command	RMA Assistant Director, Public Works RMA SW Manager (Utilities)	Determines the chain of command for responding to SSO
Organizational Chart	RMA SW Manager (Utilities) RMA SW Staff Service Analysts	Keeps organizational chart up to date
SOP for SSO Reporting Guidelines	RMA SW Manger (Utilities) RMA SW Staff Service Analysts	Keeps reporting guidelines up to date to ensure compliance with the WDR
SSO Response	Water Dynamics, Inc. RMA SW Field Staff HHSA-Environmental Health RMA Transportation/Operations RMA Road Yard Operations Tulare County Sheriff's Office Tulare County Fire Department City of Visalia Fire Department, HazMat Team	Responds to sewage spills 7 days/week, 24 hours/day
SSO Reporting	RMA Assistant Director, Public Works (LRO) RMA SW Manager (Asst. LRO) RMA SW Staff Service Analysts	Ensures reporting guidelines are followed and updated
	RMA Assistant Director, Public Works	Reports spills on CIWQS (LRO Lead)
	RMA SW Manager (Utilities)	Reports spills on CIWQS (LRO Alternate)
SSMP	RMA SW Manager (Utilities) RMA Engineering Technician IV RMA SW Staff Service Analysts	Manages and updates the SSMP

2.3 LEGAL AUTHORITY

The County of Tulare must demonstrate, through collection system use ordinances, resolutions, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- Prevent illicit discharges into its sanitary sewer system, including infiltration and inflow from satellite collections systems and laterals, storm water and unauthorized debris.
- Require that sewers and connections be properly designed and constructed.
- Ensure access for maintenance, inspection and repairs to publicly owned portions of laterals.
- Limit the discharge of Fat, Oil and Grease (FOG) and other debris that may cause blockages.
- Enforce violations of its sewer ordinances.

Supporting documentation for this element is included in Appendix B and C, which includes the following referenced documents in their entirety. Portions of these documents are discussed in the following sub-sections as they pertain to each requirement.

Prevention of Illicit Discharges

All measures prohibiting illicit discharges are included in:

- Tulare County Ordinance 2925 (Sewer Improvements Standards Ordinance, uncodified), as follows:

Section 8, Regulation of Wastewater Discharges, subsections

- A. Prohibitions on Discharges
- B. Prohibition on Storm Drainage and Groundwater
- C. Prohibition on Unpolluted Water
- D. Limitation on Point of Discharge
- E. Holding Tank Waste
- F. Limitations on Wastewater Content
- J. Preliminary Treatment of Wastes
- K. Maintenance of Pretreatment Facilities
- L. Federal Pretreatment Standards and

- Ordinance Code of Tulare County (codified) as follows:
8-03-1040 Compliance with Standards.

Require Proper Design and Construction of Sewers and Connections and Ensure Access for Maintenance, Inspection and Repairs to publicly owned portions of laterals.

Regulations pertaining to the design, construction and inspection of private sewer systems, building sewers and connections and ensuring access for maintenance, inspection and repairs to publicly owned portion of laterals are included in:

- Tulare County Ordinance 2925 (Sewer Improvement Standards Ordinance, uncodified), as follows:

Section 6, Private Sewage Disposal, subsections

- C. Permit Required (Private)
- D. Design Requirements

Section 7, Public Sewer Connections Design, subsections

- A. Installation and/or Connection of Lateral Sewers
- B. Design Considerations
- C. Main Line Construction
- D. Separate Sewers
- E. Sewer Too Low
- F. Connection to Public Sewer

Section 9, Permits and Fees, subsections

- A. Permit Required
- B. Application for Service
- C. Compliance with Permit
- D. Agreement
- E. All Work to be Inspected
- G. Notification

Appendix A, Sanitary Sewer Construction and

- Ordinance Code of Tulare County (codified) as follows:
8-03-1040 Compliance with Standards.

Limit the Discharge of Fats, Oil and Grease and Other Debris That May Cause Blockages

For the protection of the public sewage system from liquid wastes containing grease in excessive amounts, flammable wastes, sand and other harmful ingredients, traps are required on discharges from service stations, restaurants, automotive repair garages and dry cleaning establishments. These regulations are described in:

- Tulare County Ordinance 2925 (Sewer Improvement Standards Ordinance, uncoded), as follows:

Section 8, Regulation of Wastewater Discharges, subsections

- G. Traps Required
- H. Construction of Traps
- I. Maintenance of Traps and

- Ordinance Code of Tulare County (codified) as follows:
8-03-1040 Compliance with Standards

Enforce Violations of Its Sewer Ordinances

Tulare County's Resource Management Agency Director and/or the public entity delegated to the administration and enforcement authority through:

- Tulare County Ordinance 2925 (Sewer Improvement Standards Ordinance, uncoded) as follows:

Section 11, Administration and Enforcement

- A. Administration
- B. Notice and Correction
- C. Appeals
- D. Relief on Own Motion
- E. Injunction
- F. Damage to Facilities
- G. Falsifying of Information

Section 13, Violation: Penalty and

- Ordinance Code of Tulare County (codified) as follows:
 - General Provisions 125 Violations
 - 8-03-1015.1 Administration and Enforcement
 - 8-03-1040 Compliance with Standards
 - 8-03-1200.1 Violation: Penalty
 - 8-03-1205.1 Other Violation: Penalty

CHAPTER 3 - SCHEDULE OF REQUIREMENTS

3.1 TIME TABLE DEVELOPMENT

The statewide general Waste Discharge Requirements (WDR's), No. 2006-003, gives enrollees a time table to develop and implement their SSMP. The time schedule for Tulare County to develop a SSMP, for each of their wastewater treatment plants and lift stations, is presented below.

TABLE 3-1
COMPLETION DATE REQUIREMENTS

TASK	REQUIRED COMPLETION DATE
SSMP Development Plan and Schedule	May 2, 2008
Goals	May 2, 2008
Organization	May 2, 2008
Legal Authority	February 2, 2010
Operations and Maintenance Program	February 2, 2010
Overflow Emergency Response Program	February 2, 2010
Fats, Oil and Grease Program	February 2, 2010
Design and Construction Standards	August 2, 2010
Monitoring and Program Modifications	August 2, 2010
Program Audits	August 2, 2010
Communication Program	August 2, 2010
Final SSMP Certification	August 2, 2010

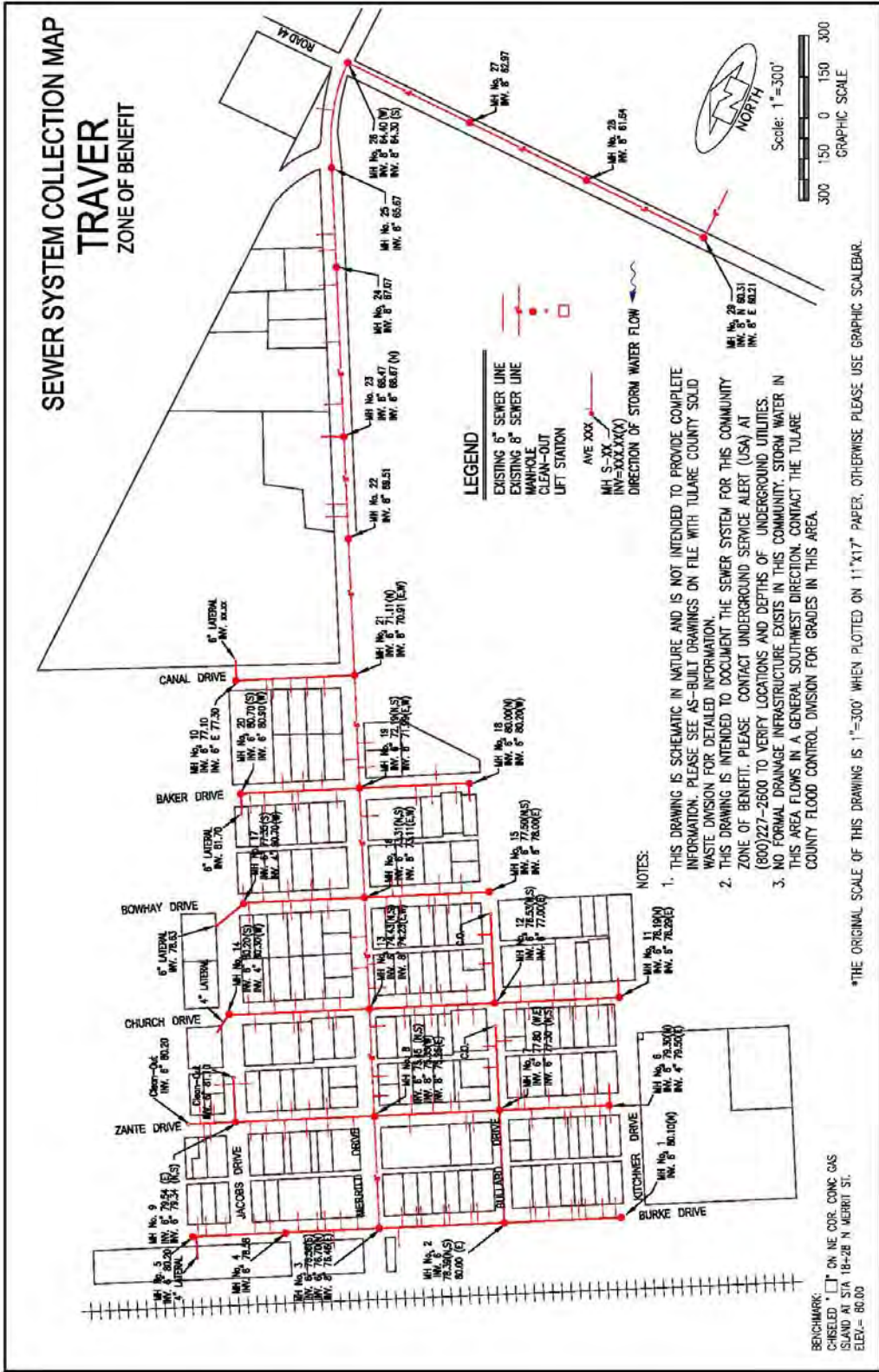
CHAPTER 4 – OPERATION AND MAINTENANCE PROGRAM

4.1 SANITARY SEWER SYSTEM MAP

The County utilizes AutoCAD (Computer Aided Drafting) to maintain an up-to-date map of its wastewater collection system facilities. The computerized map indicates pipe size and locations, gravity line segments, manholes, pump station locations, force mains and sewer laterals. To speed emergency response and ensure overflow sewage does not enter the nearest creek or river, the map also indicates the directional flow of storm water (Fig. 4-1).

There are very few changes in the number of lateral connections to the Traver system as the area is very rural and experiences limited growth. As a result, the collection system map is updated approximately every five (5) years. The master map is kept electronically, as well as physically, in the RMA Administration Building, Solid Waste Division, and can be used as a checklist for distributing updated map sets, when necessary.

**FIGURE 4-1
TRAVER SANITARY SEWER SYSTEM**



*THE ORIGINAL SCALE OF THIS DRAWING IS 1"=300' WHEN PLOTTED ON 11"x17" PAPER, OTHERWISE PLEASE USE GRAPHIC SCALEBAR.

4.2 ROUTINE PREVENTATIVE OPERATION AND MAINTENANCE ACTIVITIES

Water Dynamics, Inc., 4644 West Jennifer, Suite 108, Fresno, CA, is tasked with the operation and maintenance of this facility, through a yearly purchase agreement with Tulare County. This agreement entrusts Water Dynamics, Inc., with routine maintenance duties, such as weekly site visits, headworks and lift station wash downs, weed abatement, required water sampling, lab analysis, flow meter calibration, adequate freeboard and monthly reporting. Water Dynamics, Inc., is also tasked with ensuring all site specific Waste Discharge Order requirements are met. Their preventive maintenance includes a software system which schedules and tracks the cleaning and maintenance of the collection system. This type of tracking allows known problem areas to be targeted for additional cleaning and/or maintenance, as required. In addition, the software system contains pictures of the wastewater equipment and web links to manufacturers of the sewer system parts. This program allows a detailed, up-to-date log of all cleaning, maintenance, repairs and equipment to be recorded and maintained.

4.3 REHABILITATION AND REPLACEMENT

To ensure that the existing infrastructure is maintained and replaced, major repairs are authorized through Tulare County Board Agreement Number 22795 with Water Dynamics, Inc. Sewer infrastructure rehabilitation and replacement projects are identified through an ongoing condition assessment program by Water Dynamics, Inc. Condition assessments include visual inspections, flushing/cleaning, manhole and Closed Circuit Television (CCTV) inspections. Prioritization of preventive and reactive maintenance activities occur through verbal communication as well as work orders. Data on stoppages and other operational problems are collected in field logs and entered into a computer based information system which is reviewed regularly by system managers for prioritization. As these tasks are performed each item is ranked and placed on a list for repair and/or further assessment for rehabilitation or replacement. Short and long term rehabilitation and replacement needs are identified. Short term rehabilitation projects occur within two (2) years and long term projects within five (5) years. Capital Improvement Projects are also identified in this analysis and provided to Tulare County Solid Waste on a regular basis. At present, there are no significant defects identified in the Traver collection system which could result in an SSO.

The Traver WWTF is not a self sufficient facility. As a result, the County provides monies for the additional operational and maintenance costs. As rehabilitation or replacement projects are required, the Solid Waste Division looks to the Tulare County Capital Improvement Program (CIP) which is proactive by design, but allows for reactive responses when needed. It is designed to be fluid and flexible in nature allowing it the ability to respond to fast changing economic, operational and physical conditions as they arise.

4.4 STAFF TRAINING

Water Dynamics, Inc. must provide training, on a regular basis, to staff in collection system operations, maintenance and monitoring. Currently, Water Dynamics, Inc. provides on-going, in-house technical, job skills and safety training for its staff. In addition, Water Dynamics treatment plant operators are certified from grade levels I through V in collection system maintenance. Tulare County has not encountered a situation or non-compliance event that would indicate that the contractor's employees are not appropriately trained.

County utility staff has been trained in Hazardous Waste Operations, Emergency Response Training, Fundamentals of Pumps and Motors, Source Water Protection, First Aid and CPR through in-house, as well as special classes and seminars. County Road Yard and the Tulare County Sheriffs Office staff receive ongoing training in emergency response and safety practices in-house and through special classes and seminars.

4.5 EQUIPMENT AND REPLACEMENT PARTS INVENTORY

Water Dynamics, Inc., as well as Tulare County, has compiled a small inventory of parts and equipment to support an effective response to emergency conditions and to ensure uninterrupted service. Inventory items include components that present the highest risk of failure, such as valves and pumps. Tulare County provides any necessary generators, as well as staff and equipment, to build emergency spill containment berms, if required.

CHAPTER 5 – OVERFLOW EMERGENCY RESPONSE PLAN

5.1 NOTIFICATION PROCEDURES AND APPROPRIATE OVERFLOW RESPONSE

In the event of a Sanitary Sewer Overflow (SSO) it is important to protect public health, limit the severity of damage and liability and protect the environment. The County is responsible for notifying residents and property owners that could be impacted by an SSO. In addition, the County is responsible to report an overflow to appropriate regulatory agencies, such as the Office of Emergency Services, Environmental Health, State and Regional Water Quality Control Boards and the Public Health Officer. The County's Sewer Emergency Response Plan is intended to provide staff with emergency response procedures for a SSO and is in compliance with the SSMP Overflow Emergency Response Plan requirements which are:

- Provide proper notification so that primary responders and regulatory agencies are informed of all SSO's in a timely manner.
- Ensure appropriate response to all overflows.
- Ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Board, Office of Emergency Services and water suppliers) of all SSO's that potentially affect public health or reach waters of the State.
- Ensure appropriate staff are aware of the Emergency Response Plan and are appropriately trained.
- Address emergency operations, such as traffic and crowd control, as well as other necessary response activities.
- Ensure that all reasonable steps are taken to contain and prevent wastewater from entering waters of the United States and to minimize, or correct, any adverse impact of overflows if they occur.

CHAPTER 6 – FATS, OIL AND GREASE (FOG) PROGRAM

6.1 SELF ASSESSMENT

The Traver WWTF is a very small waste water treatment facility that has never experienced an overflow as a result of fats, oil or grease. The Traver area is a low density, rural area and contains minimal commercial, food services, institutional and/or industrial connections. As a result, a FOG program is not warranted at this time.

6.2 LEGAL AUTHORITY

Tulare County Ordinance 2925 (Sewer Improvement Standards Ordinance, uncodified), Section 8, Regulation of Wastewater Discharges, subsections G, H, and I, protect the public sewer system from liquid wastes containing grease in excessive amounts. Traps are required on discharges from service stations, restaurants, automotive repair garages and dry cleaning establishments.

CHAPTER 7 – DESIGN AND CONSTRUCTION STANDARDS

7.1 STANDARDS FOR INSTALLATION, REHABILITATION AND REPAIR

Many sanitary sewer overflows and operating problems can be attributed to poor design or improper construction. To minimize system deficiencies, Tulare County Ordinance 2925 (Sewer Improvement Standards Ordinance, uncodified) provides design and construction standards with specifications for the installation of new sewer systems, as well as for the rehabilitation and repair of existing sewer systems. Design criteria includes specifications such as pipe material, minimum pipe sizes, minimum cover, strength, slope trench, backfill, and structure standards.

7.2 STANDARDS FOR INSPECTION AND TESTING

Inspection and testing standards for new sewers, pump stations and other appurtenances are also included in Tulare County Ordinance 2925 (Sewer Improvement Standards Ordinance, uncodified) which can be accessed in Appendix A.

CHAPTER 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

8.1 SYSTEM EVALUATION

Tulare County has taken steps, such as design criteria, evaluation and flow monitoring measures to ensure adequate capacity for dry and wet weather peak flow conditions.

8.2 CAPACITY ASSURANCE PLAN

Tulare County monitors flow data in relation to the sewer treatment plan capacity. This system is not experiencing any SSO's as a result of hydraulic deficiency or any other capacity-related issues. Due to the extreme rural location and small population, new residential connections are at a zero growth rate. No future capacity issues are expected however, future capacity enhancement measures will be addressed as described in Chapter 4.3 Rehabilitation and Replacement when necessary.

CHAPTER 9 – MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

9.1 SSMP EFFECTIVENESS

This section of the SSMP outlines the process that the County will follow to evaluate the effectiveness of the SSMP and to identify updates that may be required for a successful program.

9.2 PERFORMANCE MEASURES

The County shall:

- Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities.
- Monitor the implementation and, where appropriate, review the effectiveness of each element of the SSMP.
- Review and evaluate the effectiveness of the preventative maintenance program.
- Record and review the number and cause of SSO's i.e., roots, grease, pipe failure, capacity, pump station failures, etc., for a 12 month period.
- Record and review the number and cause of system failures for a 12 month period.
- Record and review the volume of spilled sewage discharged into surface water during a 12 month period.
- Identify SSO trends, including: frequency, location and volume.

9.2.1 PERFORMANCE MONITORING AND PROGRAM CHANGES

The County will evaluate the performance of its wastewater collection system using the performance measures identified above. Based on the evaluation, data will be updated and necessary changes made to the SSMP. The effectiveness of the SSMP will be tracked through an annual audit and the results will be reported in a summary document.

CHAPTER 10 – SSMP AUDITS

10.1 REGULATORY REQUIREMENT

RWQCB Requirement

Each wastewater collection system agency shall conduct an annual audit of their SSMP which includes any deficiencies and steps to correct them (appropriate to the size of the system and the number of overflows) and submit a report of such audit to Regional Water Board by March 15 of the year following the calendar year for which the analysis applies.

GWDR Requirement

As part of the SSMP, the County will conduct periodic internal audits, appropriate to the size of the system and the number of SSO's. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP as well as the County's compliance with SSMP requirements, including identification of any deficiencies in the SSMP and steps to correct them.

10.2 AUDITS

This requirement is waived for the Delft Colony collection system as it services a population of 10,000 or less. However, to ensure that any plan deficiencies are identified and corrected, the County will audit compliance with the provisions of the SSMP, as necessary.

CHAPTER 11 – COMMUNICATION PROGRAMS

11.1 COMMUNICATION WITH THE PUBLIC

The Tulare County Board of Supervisors announced the development of the SSMP at a public meeting held on April 8, 2008. This allowed consumers the opportunity to provide input during the development and implementation of the SSMP.

11.2 COMMUNICATION WITH THE COLLECTION SYSTEM

The satellite systems are in contact with the treatment facilities on a monthly basis.

CHAPTER 12 – SSMP CERTIFICATION

12.1 COMPLIANCE CERTIFICATION

The completed SSMP must be presented to the sewer facilities governing board for approval at a public meeting. Once approved by the County of Tulare's Board of Supervisors, sitting as the governing board for CSA No. 1 and No. 2, the systems LRO must complete the certification process in the online SSO database questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
P.O. Box 100
Sacramento, CA 95812

The SSMP must be updated every five (5) years and must include any significant program changes. Re-certification by the systems governing board is required when significant updates to the SSMP are made. To complete the re-certification process, the Enrollee shall enter the data in the online SSO database and mail the form to the SWRCB, as described above.

APPENDIX A

ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
AutoCAD	Computer Aided Design or Computer Aided Drafting
CAO	County Administrative Officer
CCTV	Closed Circuit Television
CIP	Capital Improvement Plan
CIWQS	California Integrated Water Quality Systems
ERP	Emergency Response Plan
FOG	Fats, Oil and Grease
GIS	Geographical Information System
HAZMAT	Hazardous Material
HHSA	Health and Human Services Agency (County of Tulare)
LRO	Legally Responsible Official
O&M	Operation and Maintenance
PIO	Public Information Officer
PVC	Polyvinyl Chloride
RMA	Resource Management Agency (County of Tulare)
RWQCB	Regional Water Quality Control Board
SMP	Standard Maintenance Procedure
SOP	Standard Operating Procedure
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SW	Solid Waste (County of Tulare)
SWRCB	State Water Resources Control Board
TCFD	Tulare County Fire Department
TCSO	Tulare County Sheriffs Office
WDR	Waste Discharge Requirements
WWTF	Waste Water Treatment Facility

**APPENDIX B
TULARE COUNTY ORDINANCE NO. 2925
SEWER IMPROVEMENT STANDARDS ORDINANCE (Uncodified)**

ORDINANCE NO. 2925

AN UNCODIFIED ORDINANCE PERTAINING TO SEWERAGE SERVICE PROVIDED WITHIN CERTAIN ZONES OF BENEFIT IN COUNTY SERVICE AREA NO. 1 AND WITHIN COUNTY SERVICE AREA NO. 2 OF THE COUNTY OF TULARE; SETTING FORTH AND PROVIDING FOR ESTABLISHMENT OF RULES AND REGULATIONS FOR SEWER SERVICE AND CONNECTIONS; PROVIDING FOR MEANS OF COLLECTION OF CHARGES AND FOR PENALTIES AND ENFORCEMENT MEASURES IN CASE OF NONPAYMENT OF CHARGES OR FOR CERTAIN VIOLATIONS AND PROVIDING FOR APPEALS IN CERTAIN CIRCUMSTANCES.

THE BOARD OF SUPERVISORS OF THE COUNTY OF TULARE ORDAINS AS FOLLOWS:

SECTION 1. SHORT TITLE: This Ordinance shall be known as the "Sewer Improvement Standards Ordinance."

SECTION 2. CONFLICTS: All ordinances, resolutions, legislative actions, rules and regulations of the County or its designated operating agent shall prevail over less restrictive provisions set out in this Ordinance. The provisions in this Ordinance shall prevail over less restrictive ordinances, resolutions, legislative actions, rules and regulations of the County or its designated operating agent.

SECTION 3. DEFINITION OF TERMS:

- (a) For the purposes of this Ordinance, the following terms, words and phrases shall have the following meanings:
 - (1) ACCEPTABLE PRIVATE SEWAGE DISPOSAL SYSTEM. Adequate earth-covered underground septic tanks, leach lines and wells, and/or combinations thereof; not including privies, privy vaults, cesspools, or similar devices.
 - (2) APPLICANT. The person making application for a permit for a sewer or plumbing installation, who shall be the owner of premises to be served by the sewer for which a permit is requested, or his authorized agent.
 - (3) BOARD. The Board of Supervisors of the County of Tulare.
 - (4) BOD₅ (BIOCHEMICAL OXYGEN DEMAND). The quantity of oxygen utilized in the biochemical oxidation of organic

matter under standard laboratory procedure in five (5) days at 20°C, expressed in milligrams per liter.

- (5) **BUILDING.** A structure used for any purpose which contains a fixture, plumbing system or other sanitary facility of any type.
- (6) **BUILDING DRAIN.** That part of the lowest horizontal piping of a drainage system, which receives the discharge from waste and other drainage pipes inside the walls of the building, and conveys it to the sewer.
- (7) **CESSPOOL.** An excavation in the ground which receives the discharge of a drainage system, or part thereof, so designed and constructed as to retain the organic matter and solids discharging therein, but permitting the liquids to seep through the bottom and sides.
- (8) **CLEAN WATER GRANT PROGRAM REGULATIONS.** The regulations set forth in the California Code of Regulations, Title 23, Chapter 3, Subchapter 7 as amended from time-to-time.
- (9) **COMMERCIAL DISCHARGER.** Any discharger not specifically defined as a residential, industrial, or institutional discharger.
- (10) **COMPATIBLE POLLUTANT.** Biochemical oxygen demand, suspended solids, settleable solids, pH and fecal coliform bacteria; pollutants identified in the Zone of Benefit Waste Discharge Requirements.
- (11) **CONNECTION.** The physical attachment of a building to a public sewer by a lateral sewer.
- (12) **CONTAMINATION.** An impairment of the quality of the Waters of the State by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease or which constitutes a violation of law. Contamination shall include any equivalent effect

resulting from the disposal of wastewater, whether or not Waters of the State are affected.

- (13) **CONTRACTOR.** An individual, firm, corporation, partnership or association duly licensed by the State of California to perform the type of work to be done under a permit.
- (14) **COUNTY.** The County of Tulare, a political subdivision of the State of California.
- (15) **DELFT COLONY.** The Delft Colony Zone of Benefit of the County Service Area No. 1.
- (16) **DISCHARGER.** Any person who discharges or causes the discharge of sewage or wastewater to a public sewer.
- (17) **DISSOLVED SOLIDS.** The solid matter in solution in wastewater as determined by evaporation of a sample from which all suspended matter has been removed by filtration, in accord with the procedures in Standard Methods.
- (18) **DWELLING UNIT.** Building or portion of a building arranged, intended or designed to be occupied by not more than one family and having facilities for sleeping, eating, cooking and sanitary purposes.
- (19) **ENGINEER.** A civil engineer, registered in the State of California.
- (20) **EFFLUENT.** Wastewater or other liquid, partially or completely treated, or in its natural state, or any portion thereof flowing out of a reservoir, basin, treatment plant or industrial treatment plant.
- (21) **FEDERAL ACT.** The Federal Water Pollution Control Act, PL92-500, and any amendments thereto; as well as any guidelines, limitations, and standards promulgated by the Environmental Protection Agency pursuant to the Act.
- (22) **FIXTURE.** Lavatory, tub, shower, water closet, garbage disposal or other facility connected by a drain to the public sewer.

- (23) **HOLDING TANK WASTE.** Any waste from holding tanks such as chemical toilets, campers, trailers, septic tanks, and vacuum pump tank trucks.
- (24) **INCOMPATIBLE POLLUTANT.** Any pollutant which is not compatible pollutant as defined in this Ordinance. The pretreatment standard for incompatible pollutants introduced into a public sewer by a major contributing industry not subject to Section 307(c) of the Federal Act shall be, for sources within the corresponding industrial or commercial category, as established by this Ordinance and not less than that established by a promulgated effluent limitations guideline defining best practicable control technology currently available.
- (25) **INDUSTRIAL DISCHARGER.** Any nongovernmental discharger to a public sewer, as identified in the Standard Industrial Classification Manual, 1972, Office of Management and Budget, as amended and supplemented, under the following divisions:
- (1) Division A. Agriculture, Forestry and Fishing
 - (2) Division B. Mining
 - (3) Division D. Manufacturing
 - (4) Division E. Transportation, Communications, Electric, Gas and Sanitary Services
- A discharger in the Divisions listed may be excluded if it is determined that it will introduce primarily segregated domestic wastes or wastes from sanitary conveniences.
- (26) **INDUSTRIAL WASTE.** The waterborne waste and wastewater from any producing, manufacturing, or processing operation of whatever nature, including institutional and commercial operations where water is used for laundering, vehicle cleaning, or the removal of significant

quantities of wastes of non-human origin, as distinct from sanitary sewage.

- (27) **INSTITUTIONAL DISCHARGER.** Any public or non-profit school, church, hospital, lodge, club, fire department, library, memorial building or other public or non-profit activity.
- (28) **LINDCOVE.** The Lindcove Zone of Benefit of the County Service Area No. 1.
- (29) **NUISANCE.** Anything which is injurious to health or is offensive to the senses or an obstruction to the free use of property so as to interfere with a person's comfort or enjoyment of life or property, or which affects at the same time an entire community or neighborhood or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
- (30) **OUTSIDE SEWER.** A sanitary sewer, beyond the limits of a Zone of Benefit or County Service Area No. 2, not subject to control and/or owned by the County.
- (31) **PEAK FLOW RATE.** Shall mean the annually determined highest flow rate of sewage or industrial waste discharged to a public sewer over a period of at least 15 minutes at any time during the preceding 12-month period.
- (32) **PERMIT.** Any written authorization required pursuant to this or any other regulation of the County for the installation of any portion of the sewage system.
- (33) **PERSON.** An individual, firm, company, partnership, association, organization, the United States of America, the State of California, a political subdivision, governmental agency or other public or municipal corporation.
- (34) **pH.** The logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

- (35) **PLUMBING FIXTURES.** Receptacles that receive liquid, water, or wastewater and discharge them into a drainage system.
- (36) **PLUMBING SYSTEM.** The distributing pipes for the water supply; the fixtures and fixture traps; the soil, waste, and vent pipes; the building drain and building sewer, and the stormwater drainage pipes; with their devices, appurtenances, and connections within and adjacent to the building.
- (37) **POLLUTION.** An alteration of the quality of the Waters of the State by waste to a degree which unreasonably affects such waters for beneficial use or for facilities which serve such beneficial uses. Pollution may include contamination.
- (38) **PREMISES.** A parcel of real property, or portion thereof, including any improvements thereon, which is determined by the County to be a single unit for purposes of receiving, using and paying for sewage disposal service. In making this determination, the County shall take into consideration such factors as whether the unit could reasonably be subdivided, number and location of sewers and whether the unit is being used for a single activity and if not, the principal need for sewage disposal services.
- (39) **PRETREATMENT FACILITY.** Any works or device for the treatment or flow limitation of sewage or industrial waste, prior to discharge into a public sewer.
- (40) **PRIVATE SEWER.** A sewer serving an independent sewage disposal system not connected to a public sewer.
- (41) **PUBLIC SEWER.** A sewer owned, controlled or operated by the County or its designated agent.
 - (a) "Available" public sewer is hereby defined as:
 - (1) Within 100 feet of the nearest property line, for residential or commercial premises requiring a

- water service of not more than 3/4 inch pipe.
- (2) Within 150 feet of the nearest premise property, for multiple-family dwelling units, or for commercial enterprises, requiring water service not larger than one inch pipe.
 - (3) Within 300 feet of the nearest premise property line, for residential, institutional, commercial, or industrial enterprises requiring water service not larger than two inch pipe.
 - (4) Within 600 feet of the nearest premise property line, for all enterprises and subdivisions requiring 4-inch or larger water services.
- (42) **RECEIVING WATER QUALITY REQUIREMENTS.**
Requirements for a treatment facility effluent and/or the waters to which such effluent is discharged, established by law or by State or Federal regulatory agencies, for the protection of receiving water quality.
- (43) **RESIDENTIAL DISCHARGER.** Any discharger whose premises are used solely for residential purposes.
- (44) **SANITARY SEWAGE.** Any and all waste substances, liquids or solids associated with human habitation, excluding storm, surface and groundwaters and industrial wastes.
- (45) **SANITARY SEWER.** A sewer which carries only sanitary or sanitary and industrial wastewaters and to which storm, surface and groundwaters are not intentionally admitted.
- (46) **SEPTIC TANK.** A watertight receptacle which receives the discharge of a plumbing system or part thereof, designed and constructed so as to retain solids, digest organic matter during a period of detention, and allow the liquids to discharge into the soil outside of the tank through a system of open joint piping or through a seepage pit.

- (47) SEVILLE. The Seville Zone of Benefit of the County Service Area No. 1.
- (48) SEWAGE (WASTEWATER). A combination of the water-carried wastes from residences, commercial buildings, institutions, and industrial establishments, together with such ground, surface, and storm waters as may be present.
- (49) SEWAGE SYSTEM. All facilities for collecting, pumping, treating and disposing of sewage.
- (50) SEWAGE TREATMENT PLANT. A specific facility for the reduction of organic wastes and disposal of effluent known also as the Water Pollution Control Facility and/or the Wastewater Treatment Facility.
- (51) SEWER. A pipe or conduit for holding and carrying sewage, including manholes and all other appurtenant facilities which are necessary or convenient to the holding or carrying of sewage. Particular sewers are defined as follows:
 - (a) "Lateral sewer" is that portion of the sewer which is within the public right-of-way from the house sewer to the main sewer;
 - (b) "Building sewer" is that portion of the sewer from the lateral sewer to its connection to the building drain;
 - (c) "Main sewer" is a public sewer in a public right-of-way or easement to which lateral sewer connections from private properties are or may be connected for the disposal of domestic or industrial waste;
 - (d) "Trunk sewer" is a public sewer in a public right-of-way or easement receiving the discharge from one or more main sewers and conveying said sewage to another trunk sewer or to an interceptor sewer; and
 - (e) "Interceptor sewer" is a public sewer in a public right-of-way or easement receiving the discharges from

main or trunk sewers and conveying said sewage to the sewage treatment plant.

- (52) SEWERAGE. A system of sewers and related facilities.
- (53) SEWER SERVICE CHARGE. A charge established to obtain equitable payment from all dischargers for the cost of construction, operation and maintenance of the sewage treatment facilities.
- (54) SEWER FEE ORDINANCE: Uncodified County of Tulare Ordinance entitled the "Sewer Fee Ordinance" as such may be adopted and amended from time to time.
- (55) SHALL. A mandatory term.
- (56) SLUG. Any discharge of water, sewage, or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than three (3) times the average twenty-four (24) hour concentration of flows.
- (57) STANDARD METHODS. Procedures described in the latest edition of "Standard Methods for the Examination of Water and Wastewater" as published by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation. Elements of wastewater strength shall be measured by Standard Methods unless otherwise expressly stated.
- (58) STREET. A public highway, road, street, avenue, alleyway, public place, easement or right-of-way for vehicle or pedestrian use.
- (59) STORM DRAIN. A pipe or conduit which carries storm and surface waters and drainage, but excludes sanitary sewage and industrial wastes, other than unpolluted cooling water.
- (60) SUSPENDED SOLIDS. Solids that either float on the surface of or are in suspension in, water, sewage, or other liquids, and which are removable by laboratory filtering.

- (61) **TONYVILLE.** The Tonyville Zone of Benefit of the County Service Area No. 1.
- (62) **TOOLEVILLE.** The Tooleville Zone of Benefit of the County Service Area No. 1.
- (63) **TRAP.** Any facility designed, constructed and operated for the purpose of removing and retaining dangerous, deleterious or prohibited constituents from wastewater by differential gravity separation before discharge to the public sewer.
- (64) **TRAVER.** The Traver Zone of Benefit of the County Service Area No. 1.
- (65) **UNPOLLUTED WATER.** Water to which no constituent has been added, either intentionally or accidentally, which would render such water unacceptable to the agency having jurisdiction thereof for disposal to storm or natural drainages or directly to surface waters.
- (66) **UNSANITARY.** Contrary to those principles which are known to promote and safeguard health.
- (67) **WASTE.** Includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation of whatever nature.
- (68) **WASTEWATER (SEWAGE).** See definition of sewage.
- (69) **WASTEWATER CONSTITUENTS AND CHARACTERISTICS.** The individual chemical, physical, bacteriological and radiological parameters, including volume and flow rate, and such other parameters that serve to define, classify or measure the contents, quantity and strength of wastewater.
- (70) **WATERCOURSE.** A channel in which a flow of water occurs either continuously or intermittently.

(71) **WATERS OF THE STATE.** Any water, surface or underground, including saline waters, within the boundaries of the State.

(72) **YETTEM.** The Yettem Zone of Benefit of the County Service Area No. 1.

(73) **ZONE OF BENEFIT.** A Zone of Benefit as established by the Board of Supervisors of the County of Tulare within the County Service Area No. 1.

(b) Any words, phrases or terms not defined above shall be defined as set forth in the most recent "Glossary, Water and Wastewater Control Engineering" proposed by the Joint Committee representing the American Public Health Association, American Society of Civil Engineers, American Water Works Association and Water Pollution Control Federation.

SECTION 4. GENERAL PROVISIONS:

(a) **RULES AND REGULATIONS.** The following rules and regulations, including those set out in the Appendix A and Plates No. 1 through 8 attached hereto, concerning sewerage and connection to, construction of and use of the sewerage systems of the County are hereby adopted, and all work in respect thereto shall be performed as herein required except as otherwise required under Section 2.

(b) **PURPOSE.** This Ordinance is intended to provide rules and regulations for the use of the sewerage systems and for connection to existing sewage facilities, or those hereafter installed, owned, controlled, and maintained by the County of Tulare within the areas set out in Section 8104 of the Ordinance Code of the County of Tulare, as adopted and amended from time to time. This Ordinance shall not apply retroactively and in the event of an alteration or repair hereafter made, it shall apply only to the new materials and methods used therein.

SECTION 5. PRIVATE SEWAGE DISPOSAL SYSTEMS: CONTINUATION OF USE:

- (a) Whether or not public sewers exist or are installed in public easements or rights-of-way abutting developed properties within the area described in Section 8104 of the Ordinance Code of the County of Tulare, existing acceptable private sewage disposal systems may continue to be maintained and used by the property owners for service of the existing dwellings and structures only as hereinafter allowed. A minimum acceptable private sewage disposal system is an adequate earth-covered underground septic tank with leach lines. Determination of the acceptability of and/or design of, a private system will be the responsibility of the County Department of Health Services.
- (b) Private Sewage Disposal System may only be continued in use under the following conditions and restrictions:
 - (1) Dwellings or structures connected to or utilizing private sewage disposal systems shall, immediately upon inclusion into one of the areas described in Section 8104 of the Ordinance Code of the County of Tulare, be connected to an available public sewage system or to a private sewage disposal system complying with the provisions of this ordinance.
 - (2) Whenever State or County health authorities or the County declare an individual private disposal system or systems in the area to be a health hazard or to be creating a public nuisance, the use of such system or systems, shall be discontinued within the period of time specified by the County and connection(s) to a public sewer made forthwith.
 - (3) Where sewer mains are installed, for the public welfare and at public expense, the Board of Supervisors may require abutting property owners to connect thereto within a period of time as specified by said Board.

- (4) At such time as a building with a private sewage disposal system is connected to the public sewer system, the existing concrete septic tank shall be filled with earth, sand, or concrete in accordance with the latest adopted edition of the Uniform Plumbing Code.

SECTION 6. PRIVATE SEWAGE DISPOSAL:

- (a) **PROHIBITION OF NEW SYSTEMS OR CONNECTIONS.** No new private sewage disposal systems shall be constructed within the areas of the County described in Section 8104 of the Ordinance Code of the County of Tulare, and no new dwellings or structures shall be connected to existing private systems except as hereinafter excepted.
- (b) **SEWER NOT AVAILABLE.** Where a public sewer is not available, or where it is not practical to connect to a public sewer, the building drain shall be connected to a private sewage disposal system complying with the provisions of this Ordinance and all other applicable County or State Standards.
- (c) **PERMIT REQUIRED.** Before commencement of construction of a private sewage disposal system, the Owner shall first obtain a written permit from the County. The application for such permit shall be made on a form furnished by the County, which the applicant shall supplement by any plans, specifications, and other information deemed necessary by the County. A permit and inspection fee shall be paid to the County at the time application is filed, in accordance with the provisions of the County permit system and as provided in the Sewer Fee Ordinance.
- (d) **DESIGN REQUIREMENTS.** The type, capacities, location and layout of a private sewage disposal system shall comply with recommendations of the Department of Health Services of the State of California and the Health Officer of Tulare County. No permit shall be issued for any private sewage disposal system requiring subsurface soil absorption capacity where the

characteristics of the property do not indicate sufficient soil absorption qualities. No septic tank, anaerobic tank or chemical process shall be permitted to discharge to any public sewer.

- (e) **COST OF MAINTENANCE BY OWNER.** The owner shall operate and maintain private sewage disposal facilities in a sanitary manner at all times, at no expense to the County.
- (f) **ADDITIONAL REQUIREMENTS.** No statement contained in this Section shall be construed to interfere with any additional or stricter requirements that may be imposed by any law, Ordinance, rule or regulation imposed by the County or the County's designated agent and administered by the County Health Officer or County Building Inspector.

SECTION 7. PUBLIC SEWER CONNECTION DESIGN AND CONSTRUCTION:

A. INSTALLATION AND/OR CONNECTION OF LATERAL SEWERS.

- (1) All connections to main and trunk sewers, known as lateral sewers shall be installed by or under the supervision of a contractor who is licensed in the State of California to do said work. This installation will terminate at the property line (easement or street right-of-way), line and grade of said termination will be determined by the County as will procedures for requesting such installations;
- (2) The property owner or his agent shall apply to the Planning and Development Department and Public Works Department for permission of the County to connect to the sewage collection system and said owner or agent must comply with the other provisions of this Section. The contractor to install the connection must be licensed by the State of California to do this type of work and shall be able to supply the Public Works Department with a performance bond in favor of the County guaranteeing the contractor's work for a minimum of one (1) year. The Contractor will also be required to furnish the County with a Certificate of

Insurance which will hold harmless the County per Section 9(K) of this Ordinance; and

- (3) All costs and expenses incident to the installation and connection of a lateral sewer shall be borne by the property owner except where otherwise provided in this Ordinance.
- (4) The contractor shall not proceed with the placement of a lateral sewer until such time as the line and grade has been determined from existing sewer center.
- (5) All connections to the County sewer shall be inspected by a representative of the County. The applicant for sewage service shall request inspections which must be scheduled a minimum of two working days ahead of any connection.
- (6) For design or construction criteria not covered herein the applicant shall consult the County for specific requirements.

B. DESIGN CONSIDERATIONS.

- (1) Standard plans and profiles shall be prepared by a Civil Engineer, registered in the State of California, and submitted to the Public Works Department for checking and approval before any public sewer connection installation is authorized for construction either in public streets, alleys or easements.
- (2) Main Line Sewers:
 - (a) Horizontal Location - In general, main line sewers shall be located off the paved roadway surfaces, however should this be impractical, main line sewers shall be located a minimum of five (5) feet off of the centerline of existing streets. The standard minimum centerline distance between the main line sewer and other utilities is 5 feet with an acceptable minimum clear distance of 3 feet except for water mains as stated herein.

- (b) Depths - The minimum cover to the top of any main sewer line is 4 feet. However, in some cases, if the existing sewer outlets are too shallow to obtain such a depth, a shallower depth with acceptable concrete encasement, may be approved by the County Public Works Director. The County Public Works Director may require greater depths where it is necessary to extend the main line sewers to serve other areas; and
- (c) Requirements for Depth of Flow (D) versus diameter of Pipe (d) for main sewers:

<u>d</u>	<u>Maximum D/d</u>
6" to 18"	0.50
21" and over	0.67

- (d) Grades - Minimum design grades for various pipe sizes are listed below:
- 6" Pipe at s = .007 feet per foot
 - 8" Pipe at s = .004 feet per foot
 - 10" Pipe at s = .0028 feet per foot
 - 12" Pipe at s = .0022 feet per foot
 - 15" Pipe at s = .0016 feet per foot
- (e) Velocity - shall not be less than 2 feet per second, unless otherwise approved by the County Public Works Director. Maximum slope shall not exceed 2 percent unless otherwise approved by the County Public Works Director.
- (f) Minimum Pipe Size for a main sewer pipeline shall be 6 inches in diameter.
- (g) All sanitary sewer and water main construction shall meet the separation standards of the "California Waterworks Standards" contained in Section 6403, Title 22, of the California Administrative Code.

(3) Structures:

- (a) Location - Manholes shall be required to be constructed at changes in pipe slope, direction, size, type of pipe material, at junction of laterals, termination of sewers and at special locations as determined by the County Public Works Director; and
- (b) Spacing - The maximum allowable distance between manholes for pipe sizes of 6" to 15" in diameter shall be 400 feet. The maximum allowable distance between manholes for pipe sizes of 15" to 18" in diameter, shall be 500 feet. For pipe sizes in excess of 18" in diameter, the maximum spacing of manholes shall be 600 feet, unless otherwise determined by the County Public Works Director; and
- (c) Grades - The drop across a manhole shall be computed by the following formula:
$$\text{Drop in feet} = 2(S_1 + S_2) + (D_2 - D_1)/2 = \text{for sizes up to and including 12 inches.}$$

Where S_2 equals the invert slope leaving the manhole, S_1 equals the invert slope entering the manhole, D_2 equals diameter of inlet pipe where 4 feet is the diameter of the structures. (All dimensions are in feet and slopes are in feet/foot.)

For sizes over 12", approval of drop across manhole must be obtained from the County Public Works Director.

A minimum drop of 0.10 foot and a maximum of 0.50 foot shall be used on a pipe alignment straight-through structures. For a 90 degree bend through the structures, a minimum of 0.10 foot and a maximum of 0.40 foot shall be used.

(4) Laterals and House Connections

- (a) Sewer connections shall be constructed in a practical alignment and at a uniform slope of not less than one-fourth (1/4) of an inch per foot toward the main line sewer.
- (b) The connection shall be constructed on an unyielding foundation, with joints closely and accurately fitted true to line, and on a straight grade from the bend joining the main sewer to their upper ends, unless otherwise approved by the County Public Works Director. House connections shall not be constructed on a slope greater than 45 degrees from a horizontal line unless required or approved by the County Public Works Director. Connections shall be joined to wye branch fittings at the sewer main by the use of eighth bends positioned to obtain the appropriate lateral slope. A connection to a County Sewer shall be constructed to a depth of not less than four (4) feet below the elevation of the ground at the property line unless otherwise approved by the County Public Works Director. All connections shall be installed in accordance with the provisions of this Ordinance.
- (c) Commercially manufactured wyes and tees shall be installed at such locations required by the County Public Works Director. Where conditions are such

///
///
///
///
///
///
///

that the connecting pipe cannot be adequately supported on undisturbed earth or tamped backfill, the pipe shall be encased in concrete or supported on a concrete cradle as directed by the County. All fittings or laterals that are to be left unconnected shall be plugged with a suitably sized vitrified clay or neoprene stopper. The wye branches, unless otherwise specified, will be inclined upward at an angle not greater than 45 degrees from a horizontal line. No wye branch shall be placed closer than 5 feet to the centerline of any structure. The use of double wyes will not be permitted; and

- (d) Every connection and building sewer shall be served by a cleanout located adjacent to the property line. The cleanouts shall be extended to within six (6) inches of finish grade and shall be furnished with a watertight frame and cover.
 - (e) All connections to a County Sewer shall be inspected by a County representative. The applicant for sewage service shall request an inspection to be scheduled a minimum of two working days ahead of connection.
 - (f) The contractor shall not proceed with placement of the laterals and House Sewer connection until such time as the grade and line of the lateral has been staked at sewer center and property line.
 - (g) Connections including lateral sewers and wyes shall be maintained by the owner of the property receiving sewer services.
- (5) Special Conditions.
- (a) Jacking or Machine Boring - When it is necessary to construct a sewer beneath railroad tracks, across

State or federal highways, across selected County roads, or beneath a large obstruction, where tunneling is not feasible, machine boring is required.

- (b) Water Well Protection - Whenever a sewer passes within a 50 foot radius of a water well, it is necessary to use ductile iron or approved PVC pipe with impervious joints for that length of sewer which is within the 50-foot radius of the water well.

(6) Additional Considerations:

For design criteria not covered herein, the applicant shall contact the County Public Works Department for specific requirements.

C. MAIN LINE CONSTRUCTION.

- (1) The specifications contained in Appendix "A" shall apply to any sewer construction proposed within the areas described in Section 8104 of the Ordinance Code of the County of Tulare, as that Section is amended from time to time. In situations where conflicts arise between the construction specifications as noted herein and those noted in the "Improvement Standards of the County of Tulare," the most restrictive specifications shall apply;
- (2) All construction of sewer mains and appurtenances shall be performed by a contractor who is licensed in the State of California to do said work. The Contractor shall supply the County with a performance bond in favor of the County guaranteeing their work for a minimum of one (1) year. The contractor or owner will also be required to furnish the County with a Certificate of Insurance which will hold harmless the County per Section 9(J) and 9(K) of this Ordinance for the Contractor's activities; and
- (3) All costs and expenses incident to the construction of sewer mains and appurtenances shall be borne by the property

owner, unless otherwise approved by the County. Title to the installed facilities shall be conveyed to the County following the acceptance of said facilities.

- (4) For the construction of an extension to a County Sewer, the applicant shall obtain and grant to the County, an easement or right-of-way, a minimum of 30 feet in width to allow for construction and maintenance of the sewer.
- (5) Construction of a County sewer shall not proceed until such time as the grade and line of the sewer has been staked by a Registered Civil Engineer or licensed land surveyor.
- (6) The contractor shall comply with all applicable State or County Ordinances, Regulations and Standards relative to the construction of the work.
- (7) Plan Checking, Approvals and Fees - Prior to the construction of any sewer facilities, to become the property of the County, complete construction drawings for the work shall be prepared, stamped and signed by a Registered Civil Engineer and submitted to the County Public Works Director for approval.

Approval by the County Public Works Director for proposed sewer facilities to become the property of the County, shall apply only to general design concepts with respect to the Countys' master planned capacity, maintenance procedures and types of materials. In Addition, approvals may be required on proposed extensions to existing County facilities, from State or Federal agencies who previously provided funding for construction and/or from regional wastewater treatment districts or municipalities contracted by the County for sewage treatment in lieu of County facilities and as such having a vested interest in the existing facilities. Approvals given by the County, and if applicable, local, State and

Federal Agencies, will signify satisfactory compliance with requirements leading to the issuance of a permit for construction, but will not guarantee the absence of errors and omissions. When plan checking is necessary by the County, a plan check deposit in the amount established by the Sewer Fee Ordinance shall be deposited with the County. After approval of the plans and prior to the beginning of construction, a deposit in the amount established by the Sewer Fee Ordinance for County inspection of work shall be deposited with the County. At the completion of the work, actual costs incurred by the County in plan checking and inspection of the work shall be computed at which time the applicant may be required to pay additional monies, if necessary.

- D. **SEPARATE SEWERS.** Every building under separate ownership must be separately connected to the sanitary sewage system. No two adjacent building sites under separate ownership or on separate lots which abut the same street shall be permitted to join in the use of the same connection. Where any buildings are sold so that there are two or more ownerships, service to all units shall be discontinued until separate services have been installed.
- E. **SEWER TOO LOW.** In any building in which any portion of the building drain or building sewer is too low to permit gravity flow to the public sewer, sewage drained by such building drain or sewer shall be lifted by artificial means, approved by the County, and discharged to the public sewer at the expense of the owner.
- F. **CONNECTION TO PUBLIC SEWER.** The applicant for a sewer connection shall notify the County when the building sewer is ready for inspection and connection to the public sewer.

SECTION 8. REGULATION OF WASTEWATER DISCHARGES:

- A. **PROHIBITION ON DISCHARGES.** No person shall discharge to a public sewer, wastes which cause, threaten to cause, or are

capable of causing either alone or by interaction with other substances:

- (1) A fire or explosion;
- (2) Obstruction of flow in a sewer system or damage to the collection system or to the wastewater treatment or disposal facilities;
- (3) Danger to life or safety of personnel;
- (4) A nuisance, or prevention of the effective maintenance or operation of the sewer system, through having a strong, obnoxious, unpleasant odor;
- (5) Air pollution by the release of toxic or malodorous gases or malodorous gas-producing substances;
- (6) Interference with the wastewater treatment process;
- (7) The County's effluent, or any other product of the treatment process such as residues, sludges, or scum, to be unsuitable for reclamation and/or reuse;
- (8) A detrimental environmental impact or a nuisance in the waters of the State or a condition unacceptable to any public agency having regulatory jurisdiction over the agency; discoloration or any other condition in the quality of a County treatment facility effluent in such a manner that receiving water quality requirements established by law cannot be met;
- (9) Conditions at or near a County treatment facility which violate any statute or any rule, regulation, or Ordinance of any public agency or State or Federal regulatory body; and
- (10) Quantities or rates of flow which overload the collection or treatment facilities or cause excessive collection or treatment costs.

B. PROHIBITION ON STORM DRAINAGE AND GROUNDWATER.
Storm water, groundwater, rain water, water well development water, street drainage, subsurface drainage, irrigation drainage, or

yard drainage shall not be discharged through direct or indirect connections to a public sewer. The County may approve the discharge of such water only when, in the sole opinion of the County, no reasonable alternative method of disposal is available, and may require cessation of such discharge if an alternative method of disposal is found to exist. If a permit is granted for the discharge of such water into a public sewer, the discharger shall pay the applicable user charges and fees and meet such other conditions as may be required by the County.

- C. **PROHIBITION ON UNPOLLUTED WATER.** Unpolluted water, including, but not limited to, cooling water, process water or blowdown from cooling towers or evaporative coolers shall not be discharged through direct or indirect connection to a public sewer. The County may approve the discharge of such water only when no reasonable alternative method of disposal is available, and may require cessation of such discharge if an alternative method of disposal is found to exist. If a permit is granted for the discharge of such water into a public sewer, the discharger shall pay the applicable charges and fees and shall meet such other conditions as may be required by the County. All installations of air conditioning systems require the issuance of a permit therefor by the County and the payment of customary building and/or plumbing permit fees to the County prior to commencement of installation. All new installations of evaporative coolers shall be furnished with a circulating pump and be drained to yard areas, seepage wells or leaching devices, or storm drains. All new installations of industrial, commercial or residential air conditioning units, shall have cooling water discharge recirculated or used for irrigation purposes or disposed of through a private dry well or public storm drains by permission of the County, or shall be of such type as not to require cooling water discharge. In no case shall discharge be permitted to be connected to the public sewer

system, except that condensation only from recirculation units or from heat pump units or bleed-off water from cooling towers may be discharged to the public sewer system.

D. **LIMITATIONS ON POINT OF DISCHARGE.** No person shall discharge any substance directly into a manhole or other opening in a public sewer other than through an approved connection, unless upon written application by the discharger and payment of the applicable charges and fees, the County issues a permit for such direct discharges.

E. **HOLDING TANK WASTE.** There shall be no discharge of holding tank waste into a community sewer.

F. **LIMITATIONS ON WASTEWATER CONTENT.**

(1) No person shall discharge wastewater containing in excess of:

- (a) 0.1 mg/l arsenic
- 0.2 mg/l cadmium
- 2.0 mg/l copper
- 1.0 mg/l cyanide
- 0.05 mg/l lead
- 0.01 mg/l mercury
- 1.0 mg/l nickel
- 0.2 mg/l silver
- 0.5 mg/l total chromium
- 3.0 mg/l zinc;

(2) No person shall discharge any wastewater:

- (a) Having a temperature higher than 150°F (65°C);
- (b) Containing more than 200 mg/l of oil or grease of animal or vegetable origin;
- (c) Containing any gasoline, benzene, naphtha, fuel oil or other inflammable or explosive liquid, solid or gas;
- (d) Containing any garbage that has not been properly shredded;
- (e) Containing any ashes, sand, mud straw, shavings, metal, glass, rags, feathers, tar wood, or any other solid or viscous substance capable of causing

obstructions to the flow in sewers or other interference with the proper operation of the sewage system;

- (3) No person shall discharge the following waters or wastes:
- (a) Any waters or wastes having a pH lower than 6.0 or higher than 9.0 or having any other corrosive characteristics capable of causing damage or hazard to structures, equipment or personnel operating the sewage system;
 - (b) Any waters or wastes containing toxic or poisonous substances in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals or create any hazard in the receiving waters of the sewage treatment facility;
 - (c) Any noxious or malodorous gas or substance capable of creating a public nuisance;
 - (d) Waters or waste which, when blended with the remaining flow, will cause an excess of the following constituent levels in the discharge from a Sewage Treatment Facility;
 - (i) Chlorides - 150 mg/l
 - (ii) Dissolved solids - 600 mg/l
 - (iii) Elemental Boron - 2.0 mg/l
 - (iv) Sodium ratio - 70%
 - (v) pH, outside limits - 6.5 - 8.5 pH units;
 - (e) Containing in excess of 0.02 mg/l total identifiable chlorinated hydrocarbons;
 - (f) Which exerts an excess of 1.0 mg/l phenolic compounds;
 - (g) Which exerts an excessive chemical oxygen demand or chlorine demand to such a degree that the total wastewater received at a sewage treatment plant

exceeds treatable limits, as established by the County, for such wastewater;

- (h) Which will produce discoloration of a sewage treatment plant effluent; and
- (i) With a volume of flow or concentration of wastes constituting "slugs" as defined in this Ordinance.

- G. **TRAPS REQUIRED.** Grease, oil and sand traps shall be provided as required by the County Public Works Department and/or Environmental Health Department, for the protection of the public sewage system from liquid wastes containing grease in excessive amounts, any flammable wastes, sand and other harmful ingredients; except that such traps shall not be required for buildings used solely for residential purposes. Such traps shall be required on discharges from all service stations, restaurants, automotive repair garages, and dry cleaning establishments. All traps shall be of a type and capacity approved by the County Public Works Department and shall be so located as to be readily and easily accessible for cleaning and inspection.
- H. **CONSTRUCTION OF TRAPS.** Grease and oil traps shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be of substantial construction, watertight, and equipped with easily removable covers which when bolted in place, shall be gastight and watertight.
- I. **MAINTENANCE OF TRAPS.** All grease, oil and sand traps shall be maintained by the owner, at his sole expense, in continuously efficient operation at all times.
- J. **PRELIMINARY TREATMENT OF WASTES.** Discharge into the County sewer of any waters or wastes having (a) a 5-day Biochemical Oxygen Demand greater than 300 milligrams per liter, or (b) containing more than 250 milligrams per liter of suspended solids, or (c) having an average daily flow greater than 0.01 MGD,

shall be subject to the review and approval of the County Public Works Department. When necessary, in the opinion of the County Public Works Department, the discharger shall provide, at his expense, such preliminary treatment as may be necessary to (a) reduce the BOD discharge to 300 mg/l and suspended solids to 250 mg/l, or (b) reduce objectionable characteristics or constituents to within the maximum limits provided herein, or (c) control the quantities and rates of discharge of such water or wastes. Plans, specifications, and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for approval of the County Public Works Department and no construction of such facilities shall be commenced until said approval is obtained in writing. Material which will readily settle, such as sand, glass, metal filings, and diatomaceous earth, for example, or floatable material which is readily removable shall be removed from the wastewater prior to discharge to the public sewer. The review and approval of such plans and/or proposed operation procedures will in no way relieve the discharger from the responsibility of modifying the facility as necessary to produce an effluent acceptable to the County under the provisions of this Ordinance. Any subsequent changes in the pretreatment facilities or method of operation shall be reported in writing to and be approved by the County Public Works Director.

- K. **MAINTENANCE OF PRETREATMENT FACILITIES.** When preliminary treatment facilities are provided for any waters or wastes, they shall be continuously maintained in satisfactory and effective operation by the owner at his expense.
- L. **FEDERAL PRETREATMENT STANDARDS.** In any instance, effluent regulations promulgated by a State or Federal Agency, shall apply where those regulations are more stringent than those in this Ordinance. Dischargers classified in industrial categories subject to effluent regulations issued under Federal guidelines,

which are discharging incompatible pollutants to publicly owned treatment works, are required to adopt the best practical and acceptable control technology currently available.

SECTION 9. PERMITS AND FEES:

- A. **PERMIT REQUIRED.** No unauthorized person shall uncover, make any connections or opening into, use, alter or disturb any public sewer or appurtenance or perform any work on any facility within the area described in Section 8104 of the Ordinance Code of the County of Tulare and under the jurisdiction of the County without first obtaining a written permit(s) from the County, and all other permits required by other Local, State or Federal Agencies having jurisdiction over the work.
- B. **APPLICATION FOR SERVICE** Any person, legally entitled to apply for and receive service, shall make such application on forms provided by the County Public Works Department or the County's designated agent for that purpose. Such application shall be accompanied by the applicable fee established by the Sewer Fee Ordinance. The application shall include a description of the character of the work proposed to be done and the location, ownership, occupancy and use of the premises in connection therewith. The County Public Works Department may require plans, specifications or drawings and such other information deemed necessary. If the County Public Works Department determines that the plans, specifications, drawings, descriptions or information furnished by the applicant are in compliance with the Ordinances, rules and regulations of said County, the service applied for shall be approved upon payment of any additional fees established by the Sewer Fee Ordinance and compliance with subsection (K) hereof. If, after nine months following the issuance of said permit, the applicant has not completed the connection(s) applied for, the County Public Works Department may request a schedule indicating the proposed completion date of said

connection(s). Unless construction is completed within one (1) year of the issuance of the permit such permit shall expire. The applicant may request an extension, with said extension to be considered by the Board and if granted, so indicated by resolution of the Board. As a condition of the extension, the applicant shall be required to pay any difference between the current connection fee and that which was previously paid. If a permit expires after one year without an extension having been requested or if a connection(s) has not been completed within one (1) year from the date of any extension of the permit, the permit shall be automatically revoked and the connection fee forfeited. Upon expiration or revocation of such a permit, the applicant must reapply if service is desired.

- C. **COMPLIANCE WITH PERMIT.** After approval of the application, no change shall be made in the location of the sewer, the grade, materials or other details from those described in the permit or as shown on the plans and specifications for which the permit was issued, except with written approval from the County Public Works Director.
- D. **AGREEMENT.** The applicant's signature on an application shall constitute an agreement to comply with all of the provisions, terms and requirements of this and other applicable Ordinances, rules and regulations of the County, and with the plans and specifications filed with the application, unless otherwise approved by the County Public Works Director. Such agreement shall be binding upon the applicant and may be only altered upon a written request for the alteration from the applicant approved in writing by the County Public Works Department.
- F. **ALL WORK TO BE INSPECTED.** All sewer construction work, lateral sewers, plumbing and drainage systems shall be inspected by an inspector acting for the County to insure compliance with all requirements of the County. No sewer shall be covered at any

point until it has been inspected and passed for acceptance. No sewer shall be connected either directly or indirectly to a public sewer system until the work covered by appropriate permit has been completed, inspected and approved. All sewers shall be cleaned of all debris accumulated from construction operations.

- G. **NOTIFICATION.** It shall be the responsibility of the person constructing the improvements authorized by permit to notify the County Public Works Department that said work is ready for inspection. Such notification shall be given not less than two working days in advance of constructing the sewer to be inspected. It shall be the responsibility of the person constructing the sewer to ensure that the work is ready for inspection by the County before giving the above notifications.
- H. **CONDEMNED WORK.** Upon inspection, any sewer construction that has been condemned, a written notice to that effect shall be given, instructing the property owner, or the agent of such property owner, to repair the sewer or other work authorized by the permit in accordance with the requirements of said permit.
- I. **ALL COSTS PAID BY OWNER.** All costs and expenses incident to the installation and connection of any sewer or other work for which a permit has been issued shall be borne by the applicant. The applicant shall indemnify the County from any loss or damage that may directly or indirectly be occasioned by the work.
- J. **LIABILITY.** The County and its officers, agents and employees shall not be answerable for any liability or injury or death to any person or damage to any property arising during or growing out of the performance of any work by any permittee. The permittee shall be answerable for, and shall indemnify and save the County and its officers, agents and employees harmless from any liability imposed by law upon the County or its officers, agents or employees, including all costs, expenses, fees and interest incurred in defending same or in seeking to enforce this provision.

The permittee shall be solely liable for any defects in the performance of his work or any failure which may develop therein. This obligation will continue beyond the term of the permit as to any act or omission which occurred during this Agreement.

- K. Subject to compliance with all provisions of this Ordinance, the permits required hereunder shall not be issued until the owner files with the Public Works Director a policy of liability insurance, issued by a company duly and legally licensed to transact business in the State of California, covering personal injuries, including wrongful death, and claims for property damage that arise from activities of the owner(s) or his/her agents under such permit. Said insurance shall be in the following amounts:

Comprehensive general liability
insurance in a combined single
limit of not less than \$500,000 on
account of any one occurrence.

Said insurance policy shall be issued at the expense of the owner and maintained by it during the entire term of the permit. Said insurance policy shall name the County and officers, employees, and agents of the County, as additional insureds. Said insurance shall further provide for at least thirty (30) days advance written notice to the County prior to cancellation, material change or nonrenewal of said insurance.

SECTION 10. ABANDONMENT OF SEWER SERVICE:

- A. PURPOSE. The involuntary sewer service abandonment proceedings set forth in this Article are established to provide involuntary methods by which the County can be relieved from the responsibility of providing sewer service to premises having service connections available, but not using the public sewer so that the County will have additional capacity to provide sewer service to new applicants.

B. ABANDONMENT PROCEEDINGS INITIATED BY THE County.

- (1) The County may initiate proceedings to declare a sewer service abandoned on any parcel of property having a service connection available, but failing to use County sewer services or to pay County sewer charges for more than sixty (60) days;
- (2) Proceedings to declare sewer service abandoned shall be initiated by mailing, certified mail, return receipt requested, a Notice of Intent to Declare Sewer Service abandoned to the owner or owners of the parcel of property shown on the last equalized county assessment roll at least fifteen (15) days prior to holding a hearing on the abandonment. The Notice shall contain the date of the hearing and inform the owner or owners of the property of the intent of the County to declare the right to sewer service abandoned. The Notice of Intent to Declare Sewer Service Abandoned shall be recorded on the same day that it is mailed to the owner or owners of the property;
- (3) If the owner or owners pay all back charges, including any vacancy charges, plus an amount set by resolution of the Board to cover the estimated costs of the abandonment proceedings, before the time of the hearing, the County shall abate the abandonment proceedings;
- (4) At the hearing, the Board shall first receive both oral and written evidence from the County staff supporting abandonment of the right to sewer service. The Board shall then give the property owner or owners an opportunity to present evidence in opposition to the proposed Declaration of Abandonment of sewer service;
- (5) Within thirty (30) days after the close of the hearing, the Board shall render its decision on the abandonment, and

mail written notice of its decision to the property owner or owners. The decision of the Board shall be final;

- (6) Not less than ten (10), nor more than fifteen (15) days after mailing the Notice of Decision, the County shall record a Declaration of Abandonment of Sewer Service with the Tulare County Recorder;
- (7) Commencing with the recordation of the Declaration of Abandonment of Sewer Service, the property owner shall no longer be entitled to receive sewer service from the County, and shall no longer be required to pay sewer service or vacancy charges;
- (8) If the property owner wishes to connect or reconnect to a County sewer system after the recordation of the Declaration of Abandonment, he shall first re-qualify for connection to the system, and pay all applicable fees and charges for a new service connection.

SECTION 11. ADMINISTRATION AND ENFORCEMENT:

- A. **ADMINISTRATION.** The Director of the County Public Works Department shall administer and enforce this Ordinance. Where the public sewer is connected to sewage treatment facilities owned and operated by another public agency and where the County has entered into an operation and maintenance agreement delegating enforcement power to such public agency, such public agency is hereby authorized to administer and enforce this Ordinance as to those public sewers connected to its system. For the purposes of administration and enforcement, references to the County Public Works Department include or mean the Director of the Public Works Department of the County and/or the public entity delegated administration and enforcement authority by this provision.
- B. **NOTICE AND CORRECTION.** Any person found to be violating or failing to comply with any provision of this or any other Ordinance,

rule or regulation of the County effecting the matters addressed herein, shall be served by the County with written notice stating the nature of the violation and providing a time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations and come into compliance. All persons shall be held responsible for any and all acts of their agents or employees under the provisions of this Ordinance. Upon being notified by the County of any violation of or non-compliance with this Ordinance, the person or persons having charge of said work or facilities shall correct the same, within the stipulated time limit, at such person or persons' expense.

- C. **APPEALS.** Any sewer user, permit applicant, or permit holder affected by any decision, action, or determination made by the County Public Works Department in interpreting or implementing the provisions of this Ordinance or as to any permit issued hereunder by the County, may file with the Board a written appeal pursuant to Section 115 of the Tulare County Ordinance Code. The County Public Works Department's decision, action, or determination shall remain in effect during the appeal process.
- D. **RELIEF ON OWN MOTION.** The Board, may on its own motion or by request of the County Public Works Department, find that, by reason of special circumstances, any provision of this Ordinance should be suspended or modified as applied to a particular premise.
- E. **INJUNCTION.** Whenever a sewer service connection(s) is in violation of the provisions of this Ordinance or otherwise causes or threatens to cause a condition or contamination, pollution or nuisance, the County may petition the Superior Court for the issuance of a preliminary or permanent injunction or both, as may be appropriate, in restraining the continuance of such discharge.

- F. **DAMAGE TO FACILITIES.** When a connection causes an obstruction, damage, or any other impairment to County facilities, the County may assess a charge against the attending party for the work required to clean or repair the facility and add such charge to the regular charges and fees as set forth in the Sewer Fee Ordinance.
- G. **FALSIFYING OF INFORMATION.** Any person who knowingly makes any false statements, representation, record, report plan or other document filed with the County, or who falsifies, tampers with, or, knowingly renders inaccurate any monitoring device or procedure required under this Ordinance, shall be guilty of a violation of this Ordinance.

SECTION 12. SPECIAL REGULATIONS:

- A. **PROTECTION FROM DAMAGE.** No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is a part of the County sewerage system.
- B. **SPECIAL AGREEMENTS.** Special agreements and arrangements between the County and any person or agencies regarding wastewater treatment and sewerage facilities may be entered into when in the opinion of the Board unusual or extraordinary circumstances compel special terms and conditions.

SECTION 12. ORDINANCE: This Ordinance is adopted pursuant to the California Government Code section 25825.

SECTION 13. VIOLATION: PENALTY: Failure to comply with any other provision of this Ordinance shall be a violation enforceable by the Public Works Director. Such violation shall constitute an infraction punishable under Section 106 of the Ordinance Code of the County of Tulare. Each and every day, or portion thereof, during which any violation of any provision of this ordinance is committed, permitted or continued shall be a separate offense, punishable as provided herein.

SECTION 14. NOT EXCLUSIVE REGULATION: This Chapter is not the exclusive regulation of public health and other nuisances relating to the disposal of sewage or wastewater. It shall supplement and be in addition to the other regulating statutes and ordinances heretofore and hereafter enacted by the State, the County, or any other legal entity or agency having jurisdiction.

SECTION 15. EFFECTIVE DATE: This Ordinance shall take effect thirty (30) days after adoption by the Board of Supervisors of Tulare County. The Clerk of the Board of Supervisors shall publish a summary of this Ordinance and post a certified copy of the full text of the Ordinance at least five (5) days prior to adoption and within fifteen (15) days following adoption. The second posting shall include the names of the members of the Board of Supervisors voting for and against the Ordinance.

THE FOREGOING ORDINANCE was passed and adopted by the Board of Supervisors of the County of Tulare, State of California, on the 14th day

///

///

///

///

///

///

///

///

///

///

///

///

///

///

///

///

///

///

of August, 1990, at a regular meeting of said Board, duly and regularly convened on said day, by the following vote:

AYES:

CLYDE R. GOULD, DISTRICT ONE

JOHN R. CONWAY, DISTRICT TWO

DOLORES E. (LORIE) MANGINE, DISTRICT THREE

LEROY SWINEY, DISTRICT FOUR

NOES:

NONE

ABSENT:

GARY REED, DISTRICT FIVE

CLYDE R. GOULD

Vice Chair, Board of Supervisors
County of Tulare

ATTEST: Ron S. Holden,
County Executive/Clerk
of the Board of Supervisors
of the County of Tulare

By Finde Magasin
Deputy

1JJR24.ORD
IMPROVEMENT STANDARDS ORDINANCE



APPENDIX A
SANITARY SEWER CONSTRUCTION
SECTION A
EARTHWORK

A-01. General. Earthwork shall include all clearing and grubbing, stripping and disposal of weeds, pavement materials, excavation, compaction of required fill materials, excavation and filling around appurtenances, disposing of excess excavated materials and site grading.

A-02. Trench Excavating and Backfilling.

a. Excavation. Excavation for trenches shall include the removal of all material of any nature for the installation of the pipe or appurtenances and shall include the construction of trench shoring and timbering and all necessary installations for dewatering, if necessary.

The Contractor shall familiarize himself with and shall conform to the regulations of the "General Construction Safety Orders" and "Trench Construction Safety Orders" of the State of California, Department of Industrial Relations, Division of Industrial Safety and the Improvement Standards of Tulare County and the Standard Specifications of the State of California, Department of Transportation.

Bell holes shall be excavated in the bottom of the trench, a minimum depth of 3 inches below the bells or couplings for the full length of the trench under ordinary circumstances and if solid rock or other unyielding material is encountered the material shall be removed to a depth of one-fourth the nominal diameter of the pipe below the couplings or bells but not less than 4 inches. If the foundation is soft, spongy, or unstable, the trench shall be excavated to a stable soil or 1 foot below the bells or couplings, whichever is the least, and the excavation backfilled by placing three-quarter inch maximum crushed rock base material to the springline of the pipe. Between bell holes, the entire length of the pipe shall have a uniform bearing upon undisturbed soil.

Excavations for manholes shall be of sufficient width to leave at least six (6) inches in the clear between their outer surfaces and the embankment or timbering which may be used.

b. Minimum Width of Trench. The minimum width of pipe trenches, measured at the crown of the pipe, shall not be less than twelve (12) inches greater than the exterior diameter of the pipe, exclusive of couplings, and the minimum base width of

such trench shall be not less than twelve (12) inches greater than the exterior diameter of the pipe.

c. Maximum Width of Trench. The maximum allowable width of trench for all pipelines measured at the top of the pipe shall be the outside diameter of the pipe plus 16 inches, and such maximum shall be inclusive of all timbers. A trench wider than the outside diameter plus 16 inches may be used without special bedding if the Contractor, at his expense, will furnish pipe of the required strength to carry the additional trench load. Such modifications shall be submitted to the County and approved in writing.

Whenever such maximum allowable width of trench is exceeded for any reason, except as provided for in Plans or Special Conditions, or by the written direction of the County, the County may require, at its discretion, that the Contractor, at his own expense for all labor and materials, cradle the pipe in concrete.

d. Maximum Length of Open Trench. Except as otherwise approved by the County Public Works Director, the trench shall not be open for more than 500 feet in the aggregate including excavation, construction, pipeline, and backfill in any one location. Open trenches at the conclusion of a days work shall be prohibited within public rights of way or easements unless otherwise approved by the County Public Works Director.

e. Bracing Trenches. Where necessary, the sides of the trenches shall be supported with plank sheeting and bracing, and all tunnels shall be timbered wherever the ground will not stand unsupported. In all cases, the sheet piling or timbering shall be redrawn as the work progresses, in such a manner as to prevent as much as possible the caving inward of the sides of the trench.

f. Over Excavation. If any trench be excavated below the bottom grade required, it shall be refilled to grade, at the Contractor's expense for all labor and material, by placing three-quarter inch maximum crushed rock base to the springline of the pipe.

All excavation shall be done in accordance with all laws and ordinances of the County or State, as they may apply.

g. Backfilling Pipe Zone. In all cases, backfilling of the pipe zone must be done by hand. Particular attention is to be given to the underside of the pipe and fittings to provide a firm support along the full length of the pipe. The pipe zone shall be considered to extend 12 inches above the top of the pipe.

The material for backfill shall be free from stone, or lumps or organic

materials and of material exceeding one and one-half (1-1/2) inches in greatest dimension. In all cases of unavailability of suitable native backfill material, the Contractor shall import sand as a substitute. This compaction shall be obtained by means of tamping and shall be backfilled and compacted by the following method, or as provided by the County Public Works Director. Mechanically operated tamping equipment employing the impact principle will not be permitted at locations, where in the opinion of the County Public Works Director, use may cause damage to the pipe below being backfilled.

The backfill material shall be placed in layers not exceeding six (6) inches in thickness, loose measurement, and each layer compacted to a density of ninety (90) percent or more, of maximum by means of hand or pneumatic tampers.

h. Backfill in Road Rights-of-Way. All backfill material, placement thereof, and compaction shall be in accordance with the requirements of the Improvement Standards of Tulare County. In no case, however, will a lesser degree of compaction than hereinabove specified be permitted in the pipe zone.

i. Backfilling Where Not in Road Rights-of-Way. Above the top of the selected backfill to ground surface, the material for backfill shall be free from stones or lumps of material exceeding three (3) inches in greatest dimension. This backfill material shall be compacted to a minimum density of ninety (90) percent in accordance with the modified AASHTO procedure. This compaction may be obtained by means of water settlement or other means depending on the nature of the material. Sandy, granular soils may be compacted by means of water settlement. This area to be backfilled by water settlement shall be diked to suitable intervals so that water will be impounded to sufficient depth so that earth pushed or shoveled into the area will at all times be falling into water and will be completely saturated. Soils not having a sand or granular nature shall be backfilled and compacted by methods other than flooding which will produce the specified density.

A-03. Restoration of Surfaces. The Contractor shall replace all surface material, and shall restore curbs, sidewalks, gutters, fences and other surfaces disturbed, to a condition equal to that before the work began, furnishing all labor and materials incidental thereto.

The Contractor shall furnish all material, labor and equipment to restore all

street pavements to as near their original condition as possible. In all cases, the finished surface shall be free from ridges and depressions. Asphaltic pavements, concrete pavements and pavement base shall be replaced with materials similar to those excavated and equal in thickness to those removed during excavation except where greater thickness is required by the County. All trench resurfacing within road rights of way shall be done in accordance with the Improvement Standards of Tulare County.

All trench resurfacing shall be provided with a sealcoat pursuant to State of California Department of Transportation Standard Specifications. Sealcoat shall cover the entire trench area including an additional width of one foot on either side of the excavated area.

A-04. Cleaning Up. Surplus pipeline material, tools, and temporary structures shall be removed by the Contractor; all dirt, rubbish and excess earth from excavations shall become the property of the Contractor and shall be disposed of in accordance with State of California Department of Transportation Standard Specifications, and the construction site shall be left clean to the satisfaction of the County Public Works Director. This clean-up work shall follow immediately behind the backfilling and adequate facilities for watering shall be provided, all in order to keep down dust and prevent any other nuisance to adjacent residents.

A-05. Dewatering. Provisions shall be made to maintain at all times during construction ample means and devices to remove and properly dispose of all water from any source entering an excavation or other part of work.

A-06. Jetting. Jetting may be permitted under favorable conditions with prior approval of the County Public Works Director.

SECTION B

PIPELINE MATERIALS, FITTINGS, MANHOLES AND INSTALLATION

General. All materials not conforming to the specifications referenced in this Ordinance shall be considered defective and all such materials whether in place or not, shall be rejected and immediately removed from the construction site unless otherwise approved by the County Public Works Director. No rejected material, the defects of which have been subsequently corrected, shall be used unless otherwise approved in writing by the County Works Director.

B-01. Scope of Work. This section includes all labor, material and equipment to lay out, install and test all piping as specified hereinafter and as shown on the construction plans.

B-02. Pipeline Materials. Pipeline materials shall be polyvinyl chloride, vitrified clay or as otherwise allowed by the County Public Works Director.

B-03. Polyvinyl Chloride Pipe. Polyvinyl Chloride pipe and fittings shall conform to the requirements of ASTM Standard D-3034, providing a watertight seal. All pipe and fittings shall be free of injurious cracks, blisters, broken extremities and other imperfections. The Standard Dimension Ratio (SDR) for polyvinyl chloride pipe shall not exceed 26, unless otherwise approved by the County Public Works Director.

B-04. Vitrified Clay Pipe. Vitrified clay pipe and fittings shall be extra strength conforming to the requirements of ASTM Standard C-700 as last revised. All vitrified clay pipe and fittings shall be furnished with mechanical compression joints equal to "Wedge-Lock." The joint on the spigot and bell ends of the pipe shall be factory made of plasticized compound, bonded to the pipe and molded and cured to a uniform hardness and compressibility, to form a tight compression coupling when assembled. Materials for compression joints shall be in accordance with ASTM C-425-82. All pipe and fittings shall be impervious to moisture and free of cracks, checks, blisters, broken extremities and other imperfections.

B-05. Thrust Blocks. Thrust blocks shall be provided at all changes in pipe direction. Thrust blocks shall be constructed of reinforced Class B concrete placed against undisturbed soil as specified in the Improvement Standards of Tulare County.

B-06. Manholes and Appurtenances. Manholes shall be constructed of precast reinforced concrete sections. Dimensions and details of manholes and appurtenances shall be shown on the improvement plans and shall be approved by the County prior to installation.

a. Iron Castings. Castings for manhole frames and covers shall be designed for H-20 loading.

All castings for manhole frames and covers, and other purposes must be tough gray iron, free from warps, cracks, holes, swells and cold shuts, and have a workmanlike finish.

All castings shall conform to the requirements of Standard A-48-83 of the

American Society of Testing Materials for Medium Gray Iron Castings. No tension test is required.

Before leaving the foundry, all castings shall be thoroughly cleaned and subjected to a hammer inspection, after which said castings shall be dipped twice in a preparation of asphalt or coal tar and oil applied at a temperature of approximately 300 degrees Fahrenheit, in such a manner as to form a firm and tenacious coating. Seats of frames and bearing faces of covers shall be machined to ensure a smooth and non-rocking bearing between the two castings.

b. Precast Manhole Sections. Precast manhole sections shall conform to the requirements of Standard C-478 of the American Society of Testing Materials.

c. Concrete and Mortar.

1. Class "A" Portland cement shall be used for manhole base construction. Class "A" concrete, 6 sack cement per cubic yard, shall be 1:2:3 mix by weight of cement, sand, and gravel, respectively, with a maximum water content of 6 gallons per sack of cement. Cement used on the work shall be standard brand Portland cement conforming to the Standard Specifications for Portland cement Type I or II, ASTM Designation C-150-85a. Sand and gravel shall be well graded, natural or artificial crushed gravel and washed sand that has clean, hard, strong and durable grains and pieces free from all deleterious matter. Water should be clean, free from injurious amounts of oil, acids, organic matter or injurious substances. No admixtures shall be used without written approval of the County Public Works Director.

2. Where specified, cement mortar shall consist of one (1) part Portland cement and two (2) parts of screened sand, and only enough water shall be added to obtain a workable mix. Mortar shall not be allowed to stand more than thirty (30) minutes after mixing before use.

B-07. Pipe Laying. After the trench for the pipe has been excavated to the proper line and grade in the manner hereinbefore specified, the pipe shall be laid therein in the following manner:

A laser device shall be used for control of alignment and grade of the sewer pipe. When conditions are such that this method is impracticable, such as on short pipe runs, an established method preapproved by the County Public Works Director shall be used to set alignment and grade.

Before lowering and while suspended or standing vertically at trench side, the pipe shall be inspected for defects and vitrified clay pipe shall be rung with a light hammer or other metal object to detect cracks. Any defective, damaged, or unsound pipe shall be rejected. Before any pipe is lowered in place, the trench bottom shall be prepared so that each length of pipe shall have a firm and uniform bearing over the entire length of the barrel and for width equal to one-half the outside diameter of the pipe. All adjustments in line and grade shall be made by scraping away or filling and tamping in under the barrel of the pipe and not wedging or blocking.

The faces of all spigot ends and all shoulders in the hubs or sockets must be true and brought into firm contact, and any lumps or abnormalities on said faces shall be removed before the pipe is lowered into the trench. The pipe shall be laid, without break, up grade from structure to structure and with the socket end up grade. Whenever the work ceases for any reason, the unfinished end of the pipeline shall be securely closed with a tight fitting plug or cover. The interior of each pipe, after being laid, shall be thoroughly cleaned.

During the pipe laying operations, every precaution shall be taken to protect the pipe against the entrance of foreign material. At the close of each day's work, the end of the last laid section of pipe shall be plugged or capped.

B-08. Sewer Structure Installation. Sewer structures shall be constructed of precast reinforced concrete sections. The bases of all such structures are to be formed of concrete and the concrete shall be proportioned as hereinbefore specified. The inside bottom of the manholes shall rise above the footing a distance equal to the diameter of the largest pipe entering or leaving the manhole, and the flow-through channel shall conform to the inverts of the sewer pipes. The surface of the channel shall be troweled to a smooth and even surface. The tops of all manholes located in paved areas shall be set flush with final paving grade. The tops of manholes located in improved but unpaved areas shall be set to be even with finished grade. Tops of manholes located in unimproved areas shall be set to prevent the entry of surface water at 18 inches above

finished grade or as directed by the County Public Works Director. Manholes shafts and grade rings shall be joined with a minimum thickness of one-half inch of cement mortar to form a watertight and smooth joint. Any infiltration of ground water shall be repaired by a method approved by the County Public Works Director.

a. **Precast Manhole Sections.** Precast manhole sections shall be laid concentrically to provide a smooth interior manhole surface. Joints shall be completely filled with mortar to provide smooth and watertight seals.

b. **Future Connections to Structures.** All stub inlets that will be required for all proposed sewer extensions shall be constructed as a part of the sewer structures.

The location, sizes and elevations of these items shall be as determined by the design engineer and approved by the County.

B-09. Connection to Existing Manholes. In necessary locations, the Contractor shall break into existing manhole structures and install the new inlet lines. A break into an existing manhole shall take place under the direct inspection of the County.

New flow-through channels shall be constructed in each manhole base to accommodate the new sewer lines. Smooth transitions shall be installed from the inverts of the newly installed pipes to the existing manhole structures.

Openings in the sides of the manholes shall be sufficient to permit the inserting of the sewer pipes and the forming of arches over the newly installed pipes.

B-10. Separate Wyes. Commercially manufactured wyes shall be installed at the approved locations or at such locations required by the County Public Works Director. All wye and lateral branches not to be joined to house laterals shall be installed with a suitable stopper of the size of the wye branch. The "Y" branches, unless otherwise specified, will be inclined upward at an angle not greater than 45 degrees from a horizontal line. The use of double wyes will not be permitted.

B-11. Markers for Lateral Connections and Wye Branches. All lateral connections and wye branches shall be field marked to facilitate future location. Lateral connections may be field marked by means of a brass tag, one(1) inch minimum diameter, marked with the letter "S," chiseled in the top of existing curbs. All other house laterals and all wye branches shall be field marked by a No. 12 galvanized iron wire, fastened to a brick placed at the upper end of the lateral or inlet of wye branch and extending vertically to within 6 inches of the surface. A No. 28 gauge copper, brass, aluminum, or galvanized

iron tag 1-1/2" x 3" stamped with the letters "sewer" in letters 5/8" high shall be attached to the surface end of the wire.

B-12. Locator Tape. Following backfill and compaction of the pipe zone, corrosion resistant metal tape marked "CAUTION - SEWER LINE BURIED BELOW" shall be laid in the complete pipeline alignment including the house laterals. The tape shall be run continuous and, at the tape ends or intersections of the pipeline alignment, the tape shall be coupled together with metal staples provided by the manufacturer. The joint shall then be taped with an approved, nylon-reinforced tape to a distance of two (2) inches each side of the splice. The tape shall be two (2) inch green in color with black lettering and shall be as manufactured by Griffolyn Co., Inc., Line Guard, Co., Inc., or equal. At manholes the tape shall be run vertically along the manhole to within six (6) inches of the ground in paved areas and to the ground surface in unpaved areas.

B-13. Tests for Leakage. Tests for leakage due to internal pressure and due to infiltration shall be in accordance with the following specifications.

a. Leakage Due to Internal Pressure. In sections of line where significant groundwater is not present above the average pipe invert, the County Public Works Director shall stipulate the pipeline sections to be tested. If the selected sections meet the leakage requirements, no additional tests will be required. If the selected sections do not meet the leakage requirements, the County Public Works Director may stipulate additional sections for water testing until reasonable assurance is established that the completed pipelines meet the requirements. Where required, water pressure tests shall be conducted as follows:

The pipeline between manholes in the sections to be tested shall be filled with water and the ends of the line plugged with a plumber's plug. Sufficient time shall be permitted to elapse between the filling and testing of the line to permit absorption of water by the pipe walls. A hose shall connect the plug in the upper manhole with a 12" diameter standpipe. The standpipe shall be filled to a level not less than four feet nor more than 20 feet above the level of the sewer in the upper manhole and positioned to permit the addition of one additional gallon of water. One gallon of water shall be added and the time required for the water level to return to the mark measured. The time so measured shall not be less than that computed by the following formula which provides for a maximum allowable leakage of 300 gallons/dia.-inch/mile/day.

$$\text{Minimum Time (Minutes)} = \frac{25,344}{\text{Diameter (Inches)} \times \text{Test Length (Feet)}}$$

If the leakage is greater than allowed, the pipe shall be repaired by the Contractor at his expense until the joints shall hold satisfactorily under this test.

b. Leakage Due To Internal Pressure (Alternate Air Pressure Method). The Contractor may elect to utilize the following air pressure test in lieu of the water test specified above. The length to be tested will be selected by the County Public Works Director.

The Contractor shall plug the ends of the sewer lines being tested with plugs and brace the ends of the pipe where needed. It is recommended that the Contractor conduct an initial air test of the sewer main after installation and backfill and consolidation of the trench, and prior to installation of the house laterals. Such preliminary tests shall not constitute the final test. The final leakage test shall be conducted in the following manner:

Pressurize the test section to 3.5 psi and hold above 3.0 psi for not less than five minutes. Add air if necessary to keep the pressure above 3.0 psi. At the end of this five-minute saturation period, note the pressure (must be 3.0 psi min.) and begin the timed period. If the pressure drops 0.5 psi in less than the time given in the following table, the section of pipe shall not have passed the test.

Lateral Size	Minimum Time in Seconds
8	245
11	306

When the prevailing groundwater is above the sewer being tested, air pressure shall be increased 0.43 psi for each foot the water table is above the flow line of the sewer.

If the time for pressure to drop 0.5 psi is 125 percent or less, of the time given in the table, the line shall immediately be repressurized to 3.0 psi and the test repeated.

If the test is not passed, the leak shall be found and repaired to the satisfaction of the County Public Works Director.

The pressure gauge used shall be supplied by the Contractor, and shall have minimum divisions of 0.10 psi, and shall have an accuracy of 0.04 psi. Accuracy

and calibration of the gauge shall be certified by a reliable testing firm at six-month intervals or when requested by the County Public Works Director. In addition, the County Public Works Director may compare the Contractor's gauge with a County owned gauge at any time.

c. Manholes.

Manholes shall be watertight. All leaks shall be repaired as determined by the County Public Works Director. Testing may be required by the County Public Works Director if in the County Public Works Director's opinion the manhole watertightness is in question.

The manhole, if tested, shall be filled with water to an elevation one foot below the start of the cone section, but to a maximum depth of 20 feet. The water shall stand in the manhole for a minimum of one hour to allow the concrete to reach maximum absorption. After one hour, the manhole shall be refilled to the original depth and the drop in water surface shall be recorded after a period of two minutes for each foot of water depth. The maximum allowable drop in water surface for the period of testing, shall be 1/2 inch for each 15 minutes of testing. Repairs shall be made as directed by the County Public Works Director whenever leakage exceeds the limits as indicated herein.

B-14. Deflection Test of PVC Sewer Lines. PVC sewer pipe, which is designated as flexible in nature, shall be tested for excessive deflection. This test shall be performed after backfilling and compaction, but prior to the placement of aggregate base or asphalt-concrete surfacing, and prior to television inspection as specified herein.

The Contractor shall demonstrate that the maximum pipe deflection does not exceed 5 percent by pulling a properly sized rigid ball or a mandrel through the main line pipe. A "rubber flush ball" does not meet this requirement for deflection testing.

Failure of the deflection test shall be grounds for rejection of the section tested, until correction of the reason for the failure and successful retesting of the section.

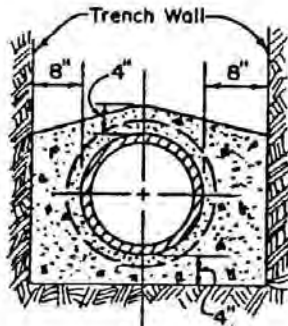
B-15. Television Inspection of Interior of Installed Pipe. The Contractor shall furnish closed circuit television equipment for an interior inspection of the newly installed sewer mains. The television check of the sewer mains shall be made after leakage and deflection tests have been performed and prior to the placing of street aggregate base or asphalt paving. Any broken pipe, separation of joints, or any pipe exceeding the permitted tolerances for line and grade shall be replaced or repaired.

Any pipe repaired or replaced as a result of television inspection shall be retested for leakage and deflection. A tape cassette of the television inspection (1/2 inch wide tape) shall be provided the County at no additional cost to the County. The Contractor shall be responsible for all costs associated with furnishing the television inspection and making final repairs to the sewer mains.

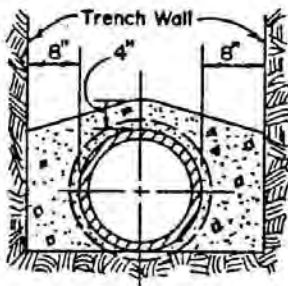
B-16. As-Built Plans. The Contractor shall have on the project site at all times, an up-to-date record of the work being performed. At the completion of any construction, installation, modification, addition or deletion of any sewer facility, the Contractor shall furnish the County with a reproducible, "Mylar" or better, copy of the As-Built Construction Drawings.

1jjr39.APX

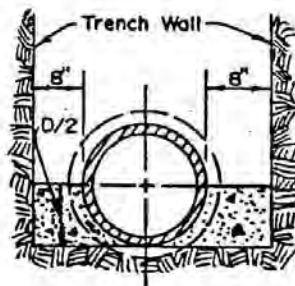
CONCRETE QUANTITIES



**No. 1
CONCRETE
ENCASEMENT**



**No. 2
CONCRETE
ENCASEMENT**



**CONCRETE
CRADLE**

PIPELINE SIZE-in.	Cubic Feet Conc. per L. F.		
I.D.	Concrete Cradle	No. 1	No. 2
6	0.48	2.27	1.61
8	0.62	2.68	1.96
10	0.78	3.13	2.35
12	0.94	3.57	2.73
15	1.24	4.36	3.43
18	1.58	5.28	4.22
21	1.89	6.06	4.92
24	2.24	6.97	5.72
27	2.62	7.95	6.59
30	2.97	8.82	7.38
33	3.36	9.80	8.26
36	3.54	10.63	9.01

NOTES:

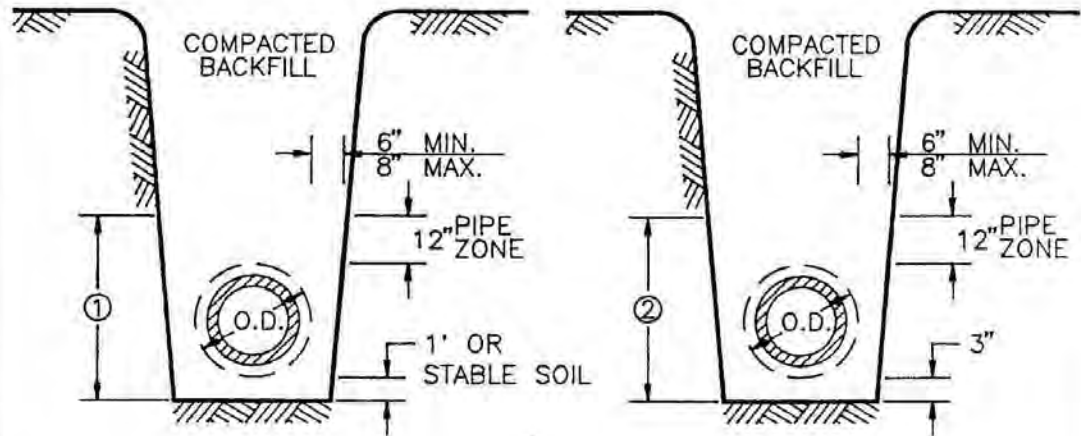
1. Concrete quantities are based on the use of Extra-Strength V.C.P. & on the maximum allowable trench widths as indicated in the specifications.
2. Cradle or Encasement will be Class "A" P.C.C.

STANDARD CONCRETE CRADLE & ENCASEMENT

PLATE NO. 1

BEDDING FOR UNSTABLE SOIL

STANDARD BEDDING

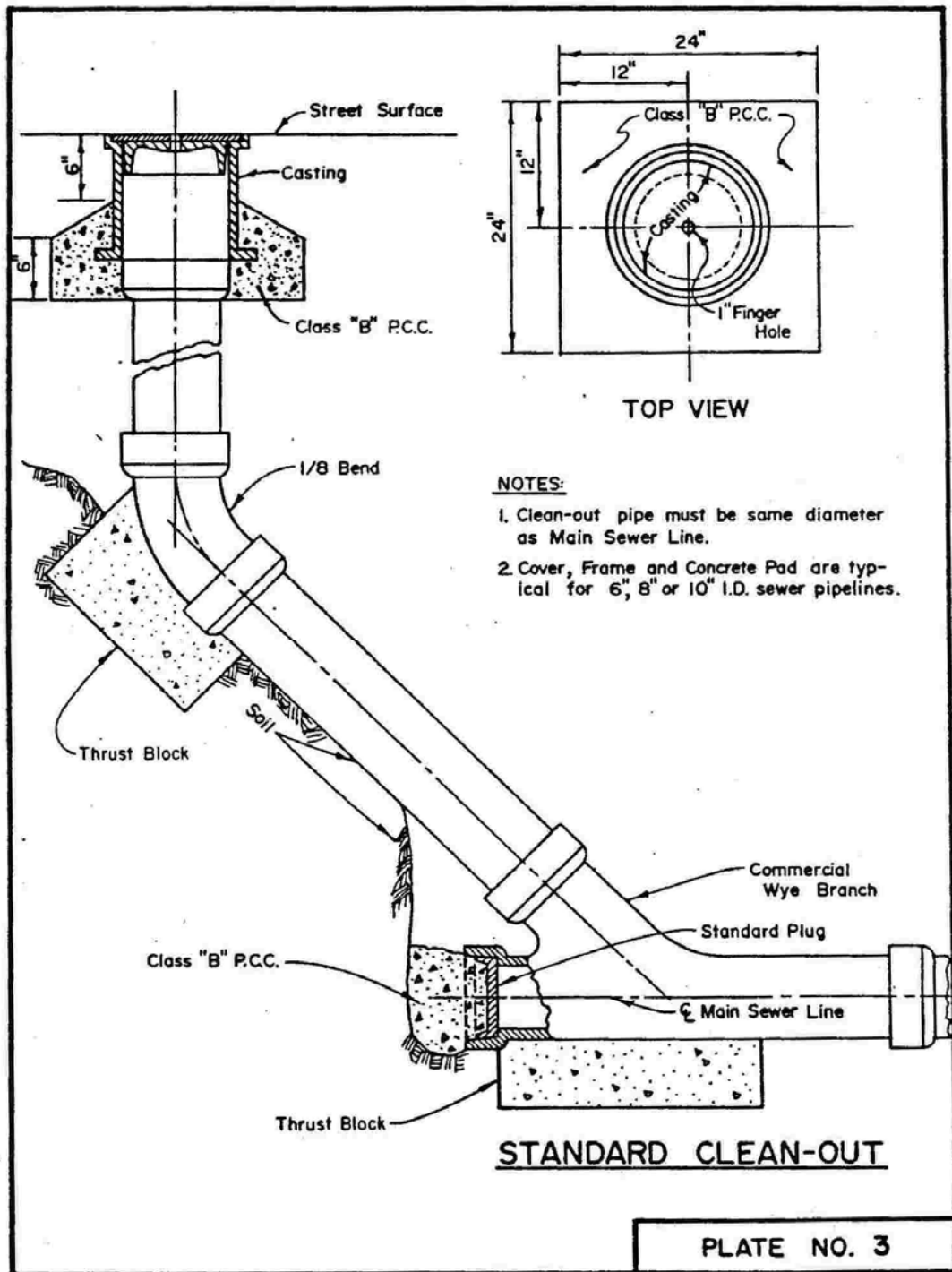


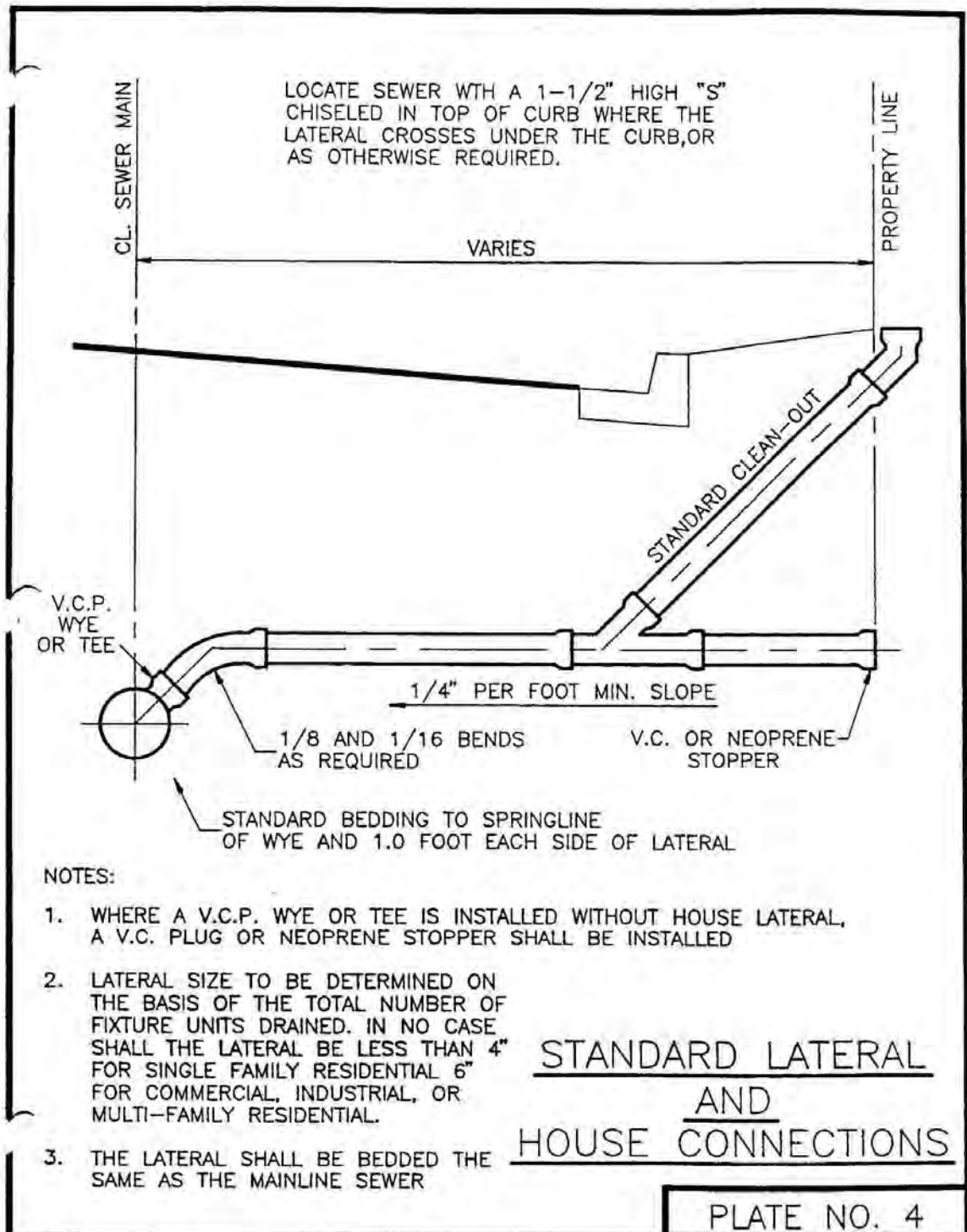
NOTES:

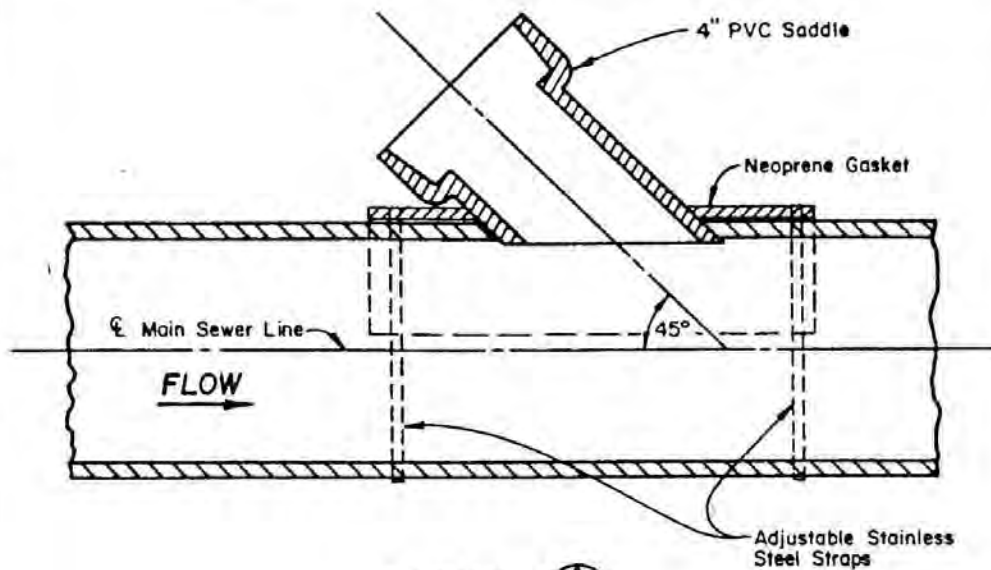
- ① 3/4" MAXIMUM CLASS 2 AGGREGATE BASE
- ② SAND SHALL BE MINIMUM S.E. 30 RATED.
3. AT EACH JOINT IN THE PIPE, THE BEDDING SHALL BE RECESSED IN SUCH A MANNER AS TO RELIEVE THE BELL OF THE PIPE OF ALL LOAD AND TO ENSURE CONTINUOUS BEARING ALONG THE PIPE BARREL.
4. THE PIPE SHALL BE CENTERED WITHIN THE TRENCH.

PIPE BEDDING DETAIL

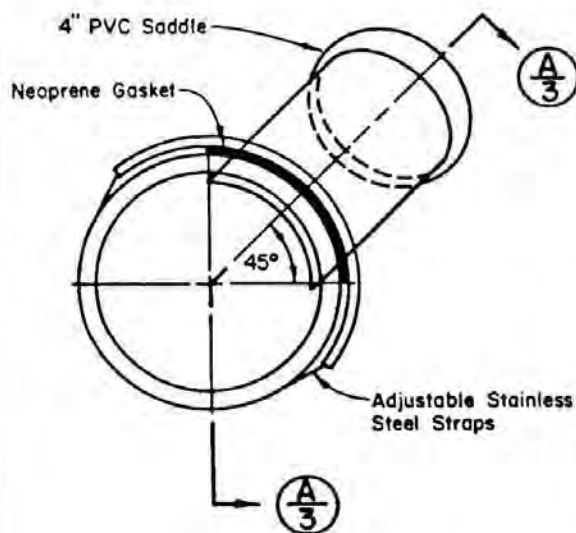
PLATE NO. 2







SECTION $\frac{A}{3}$



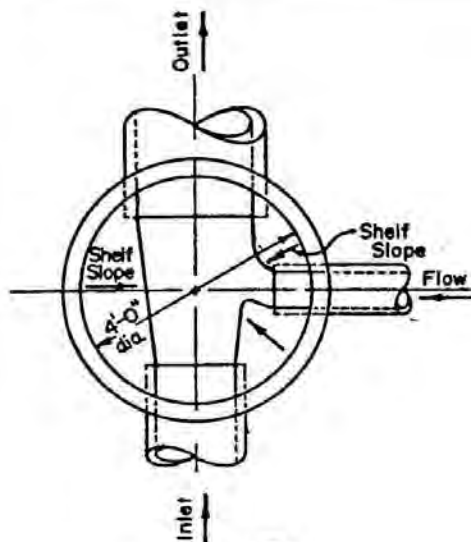
END VIEW

NOTES:

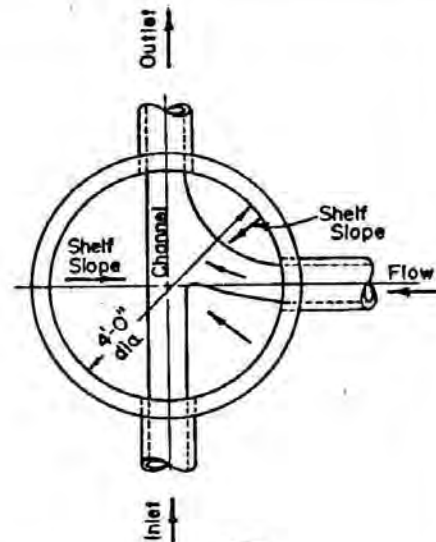
1. Saddle connections shall not be made to sewers larger than 24" in diameter.
2. Saddle connection shall be encased with Class "A" concrete after the connection is approved by the Engineer. The Bell on the Collar Tee Saddle shall not be encased in concrete.
3. Saddle connections to sewers 8" in diameter or larger shall be done by Core Drilling.
4. All clay chips, dirt, epoxy, mortar and concrete shall be kept out of the Sewer Saddle.

STANDARD
SADDLE

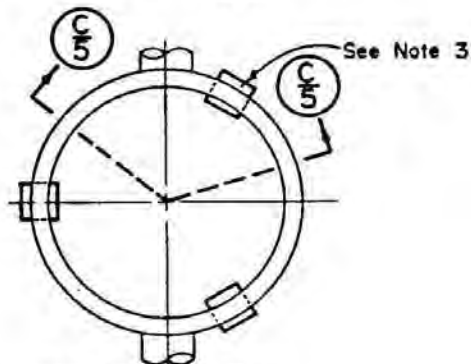
PLATE NO. 5



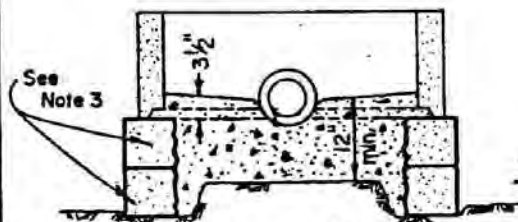
SECTION $\frac{B-1}{5}$



SECTION $\frac{B-2}{5}$



MANHOLE RING
SUPPORT DETAIL



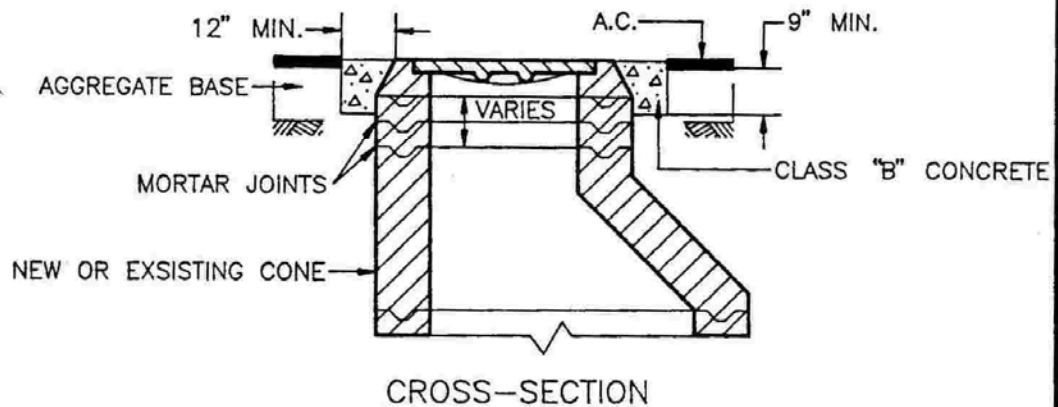
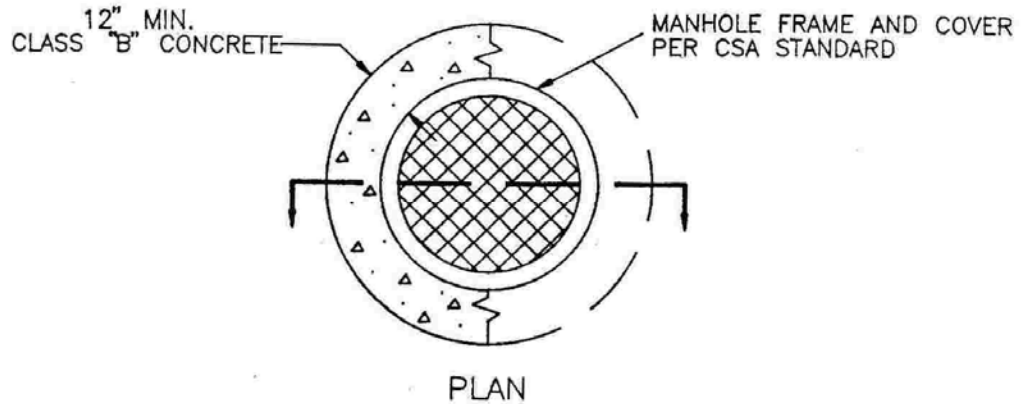
SECTION $\frac{C}{5}$

NOTES:

1. Where incoming and outgoing sewers in manhole vary in size, extend lower halves of pipelines 8" beyond inside of wall and shape transition channel between pipes.
2. Where incoming and outgoing sewers in manhole are of the same diameter, the top half only of pipe shall be removed between the walls and the broken edges shall be plastered smooth with cement mortar.
3. The initial manhole barrel section shall be supported on 8X8X8 cement mortar blocks set on suitable undisturbed native soil prior to the placement of the manhole base material.

**SANITARY SEWER MANHOLE
DETAIL SHEET NO. 2**

PLATE NO. 7



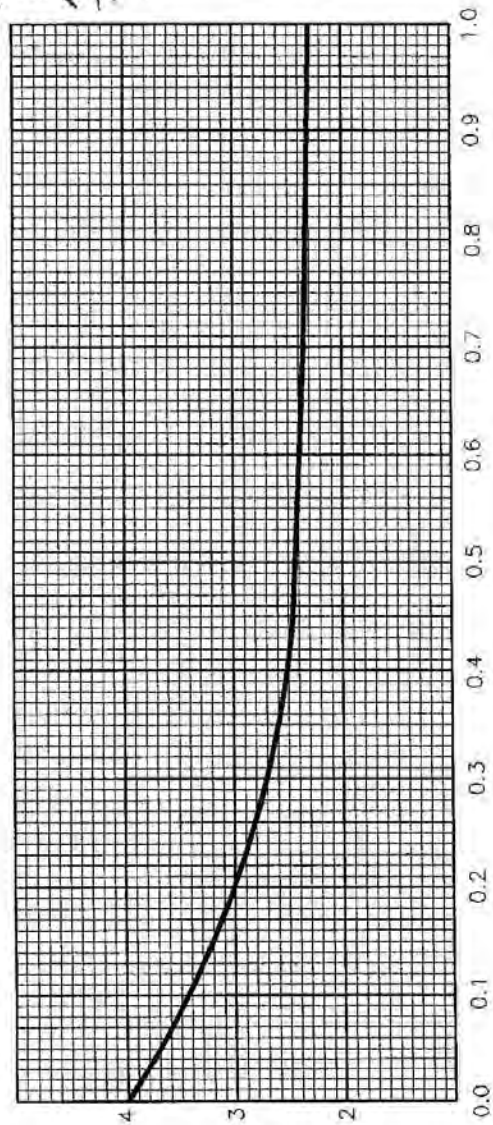
NOTES:

1. ALL AGGREGATE BASE REMOVED SHALL BE REPLACED WITH CLASS "B" CONCRETE
2. CONCRETE MAY BE CIRCULAR OR SQUARE IN SHAPE WITH A MINIMUM OF 12" BETWEEN EDGE OF CONCRETE AND LIP OF MANHOLE FRAME.
3. MANHOLE MAY BE ADJUSTED TO GRADE USING BRICK AND MORTAR OR PRECAST RINGS.

STANDARD FOR MANHOLE
ADJUSTMENTS TO GRADE

PLATE NO. 8

*Revised
8/2/91
No. 2
Teller
County*

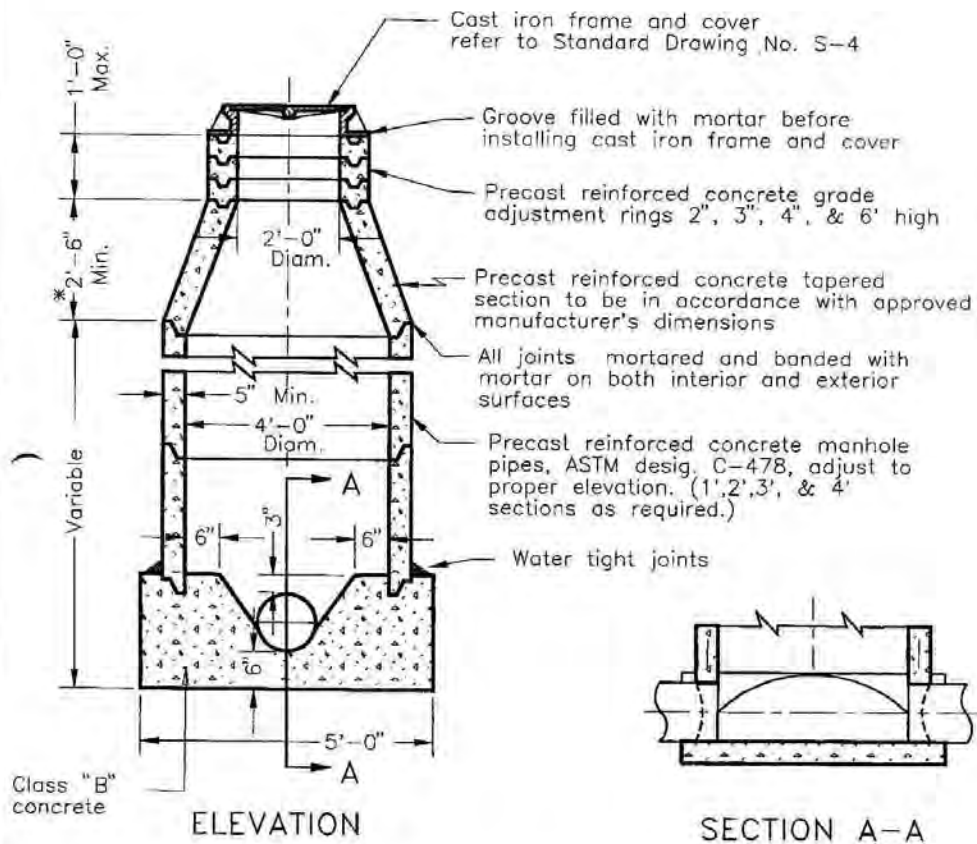


AVERAGE FLOW, M.G.D.

Note: Peaking Factor includes an allowance for infiltration/inflow

PEAKING FACTOR

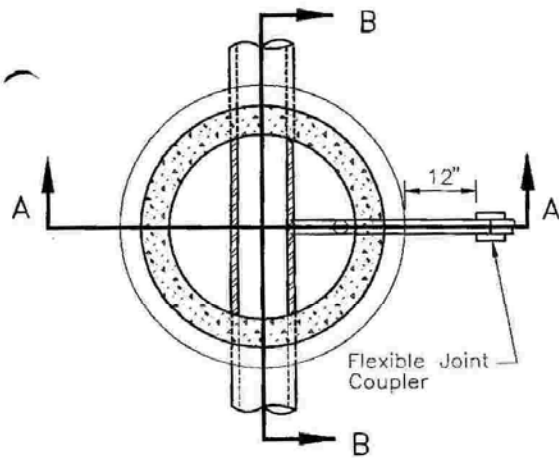
Revised _____ By _____		<h2 style="text-align: center;">SANITARY SEWER PEAKING FACTORS</h2> <p style="text-align: center;">COUNTY OF SAN JOAQUIN DEPARTMENT OF PUBLIC WORKS</p>	Approved by _____ Director of Public Works
Drawn by JLD			Date <u>SEPT. 1991</u>
Checked by _____			Drawing No. <u>S - 1</u>
Scale: NONE			



Revised	By
Drawn by	
Checked by	
Scale	NONE

STANDARD SANITARY SEWER MANHOLE

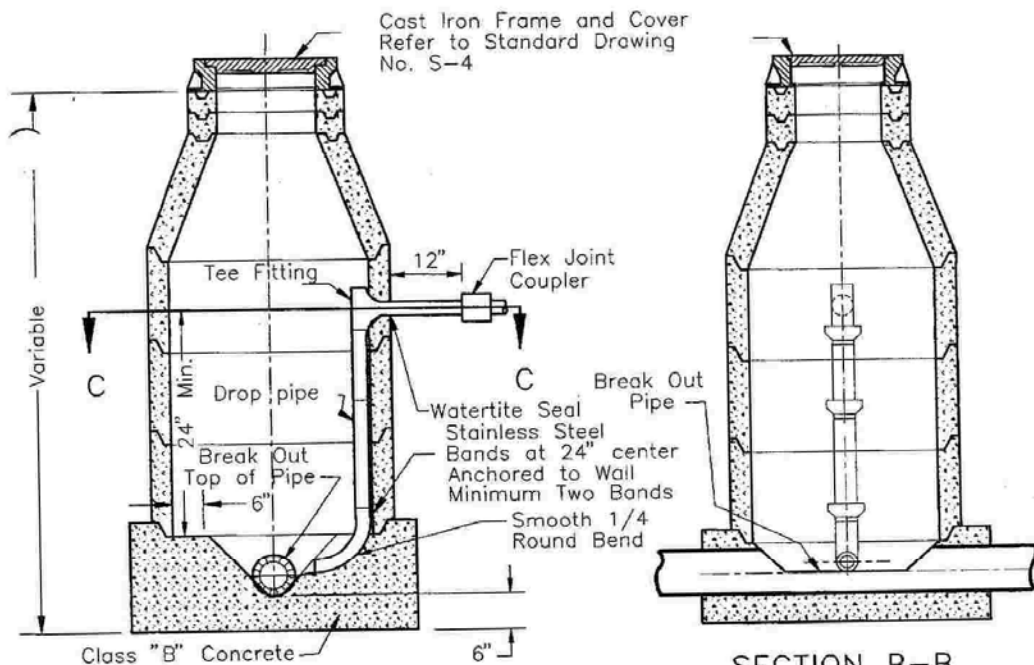
Approved by
Director of Public Works
Date SEPT. 1991
Drawing No. S - 2



SECTION C-C

NOTES:

1. Drop manhole shall be used where the difference in invert elevations of the manhole exceeds 24".
2. Refer to Standard Drawing No. S-2 for additional notes.
3. Drop pipe may be either P.B.S., P.V.C., V.C.P.



SECTION A-A

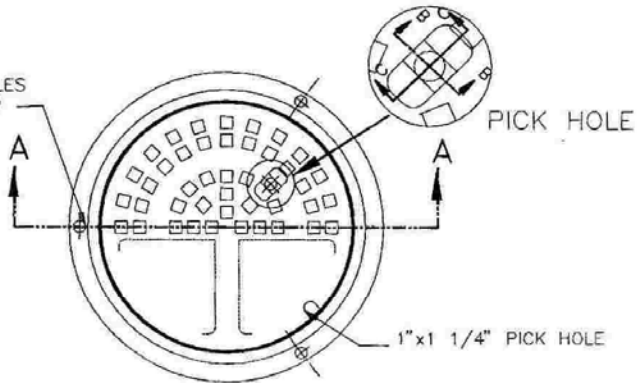
SECTION B-B

Revised	By
Drawn by	
Checked by	
Scale	NONE

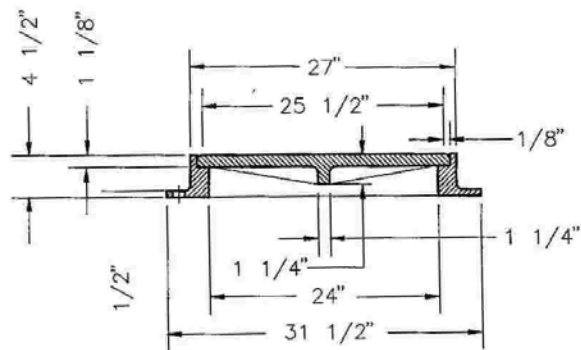
STANDARD SANITARY
SEWER DROP MANHOLE

Approved by
Director of Public Works
Date
SEPT. 1991
Drawing No.
S - 3

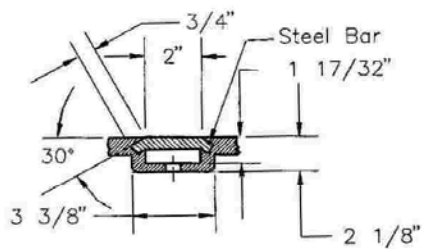
1 1/2" D- 3 HOLES
EQUALLY SPACED



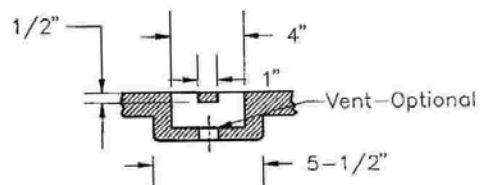
PLAN VIEW



SECTION A-A



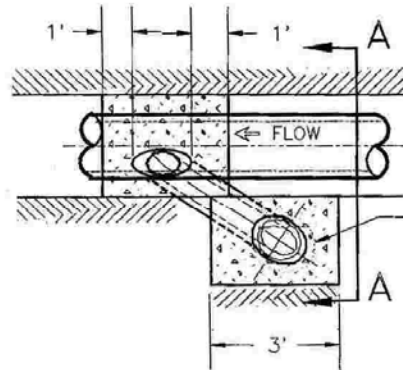
SECTION B-B



SECTION C-C

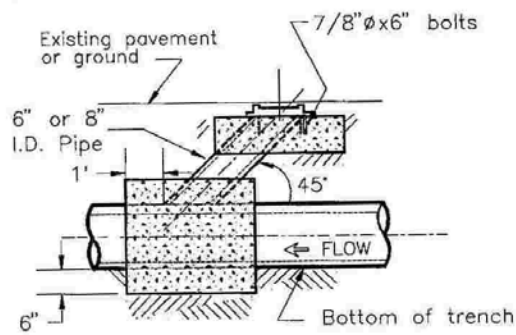
NOTE: Frame and Cover shall be
machined to assure interchangeability
and a close, quiet fit.

Revised	By	<h2 style="text-align: center;">FRAME & COVER (MANHOLE)</h2>	Approved by	
			Director of Public Works	
Drawn by			Date	SEPT. 1991
Checked by			Drawing No.	S - 4
Scale	NONE			

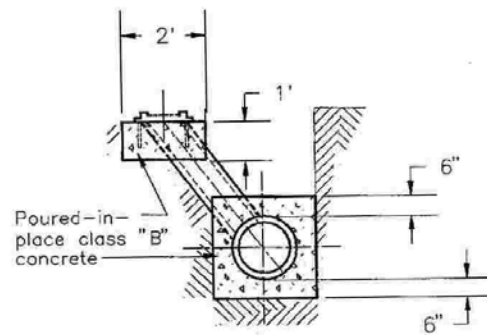


Cast Iron Frame and Cover
refer to Standard Drawing No. S-6

PLAN



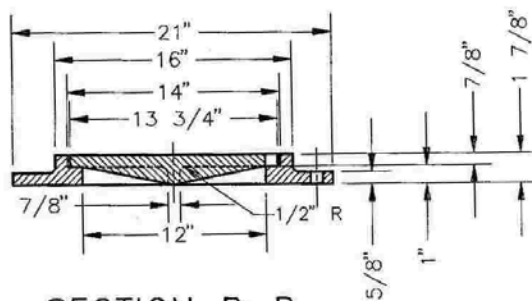
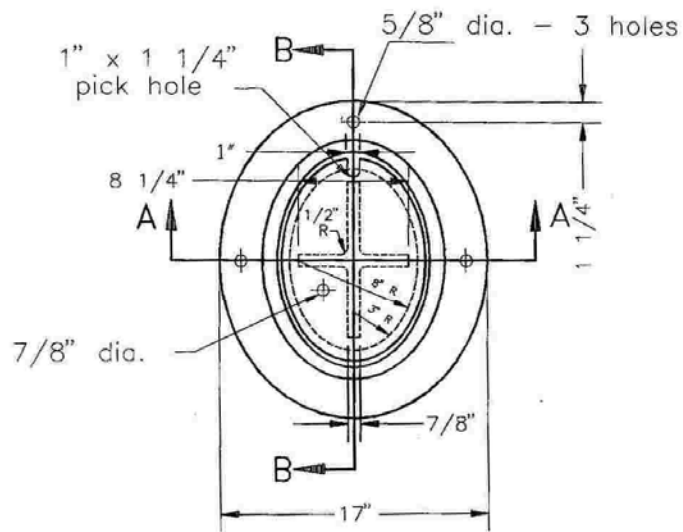
Elevation



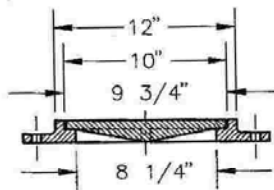
Section A-A

TYPICAL CLEANOUT INSTALLATION

Revised	By	SEWER CLEANOUT	Approved by
			Director of Public Works
Drawn by			Date
Checked by			SEPT. 1991
Scale	NONE		Drawing No. S - 5

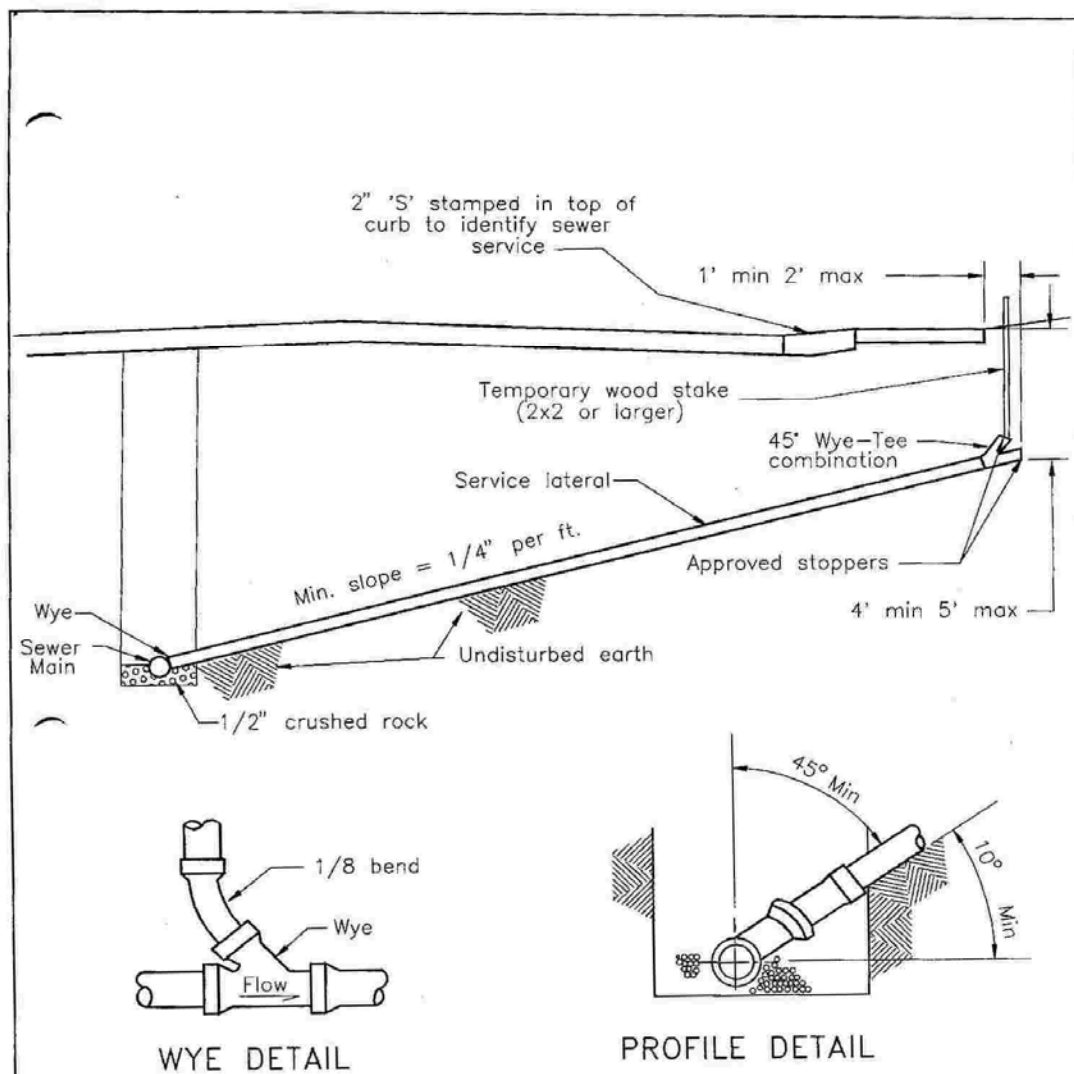


SECTION B-B



SECTION A-A

Revised	By	<p align="center">FRAME & COVER (SANITARY SEWER CLEANOUT)</p>	Approved by
			Director of Public Works
Drawn by			Date
Checked by			SEPT. 1991
Scale	NONE		Drawing No. S - 6

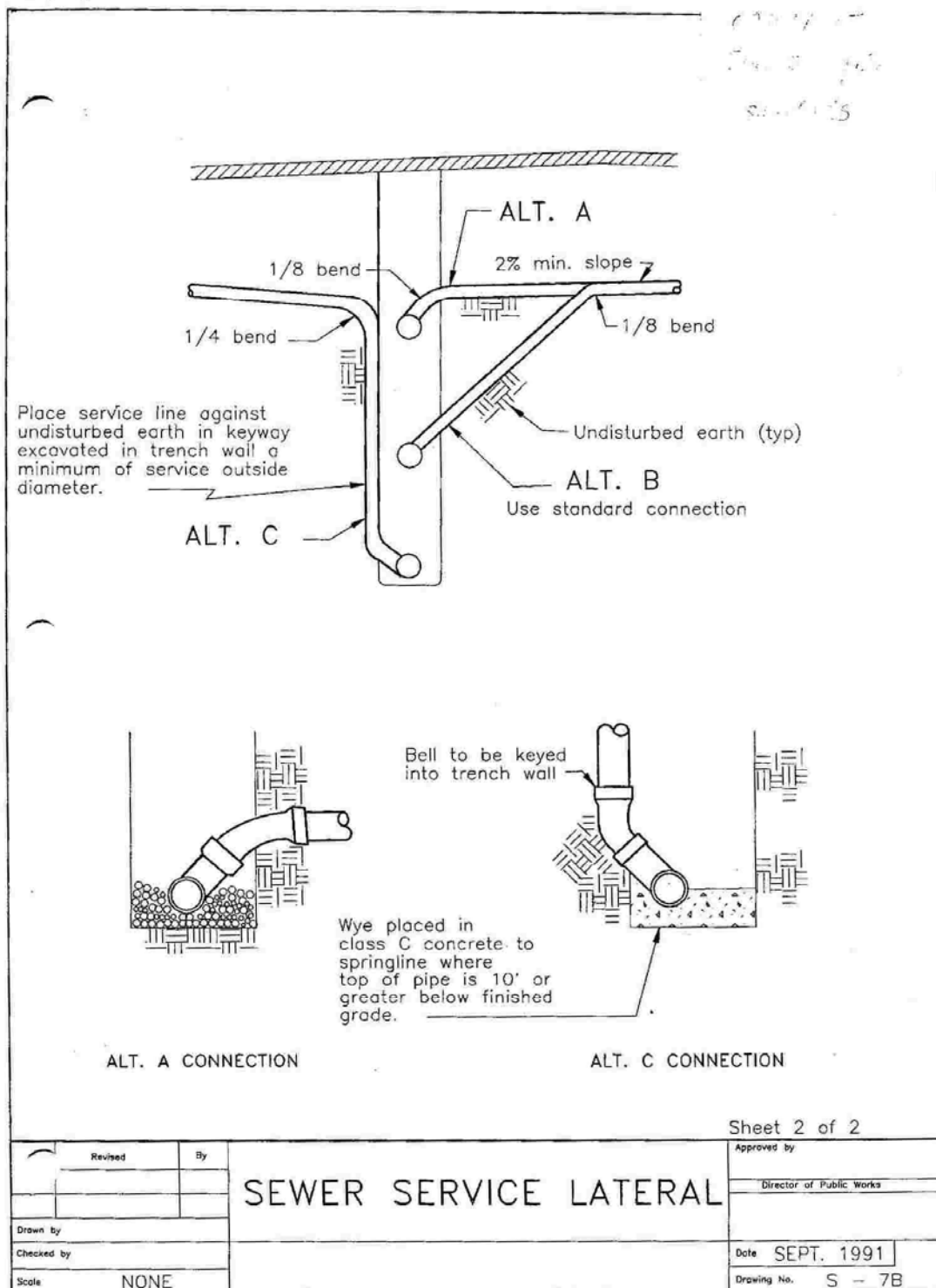


NOTES:

1. All services shall be 4" inside diameter or as shown on plan.
2. Contractor shall use the most appropriate type connection (alternates on sht. 2) for the particular situation.
3. See standard plan for required cleanouts & boxes.

Sheet 1 of 2

Revised	By	SEWER SERVICE LATERAL	Approved by	
			Director of Public Works	
Drawn by			Date	SEPT. 1991
Checked by			Drawing No.	S - 7A
Scale	NONE			



Sheet 2 of 2

Revised	By	SEWER SERVICE LATERAL	Approved by
			Director of Public Works
Drawn by			Date SEPT. 1991
Checked by			Drawing No. S - 7B
Scale	NONE		

APPENDIX C

ORDINANCE CODE OF TULARE COUNTY GENERAL PROVISIONS

THE BOARD OF SUPERVISORS OF THE COUNTY OF TULARE DO ORDAIN AS FOLLOWS:

100 TITLE:

The title of this Code is the "Ordinance Code of Tulare County."

125 VIOLATIONS:

Violations of certain provisions of this Code are stated to be either a misdemeanor or an infraction. Unless punishment is otherwise expressly provided in this Code, a violation of this Code shall be punishable as follows:

(a) Pursuant to Government Code section 25132, every person convicted of an infraction shall be punished upon a first conviction by a fine not exceeding One Hundred Dollars (\$100) and for a second conviction of the same provision within a period of one year by a fine not exceeding Two Hundred Dollars (\$200) and for a third or any subsequent conviction of the same provision within a period of one year by a fine not exceeding Five Hundred Dollars (\$500). For purposes of this subsection, a bail forfeiture shall be deemed to be a conviction of the offense charged.

(b) Every person convicted of a misdemeanor shall be punished by a fine of not more than One Thousand Dollars (\$1,000) or by imprisonment in the County jail for not more than six (6) months, or by both such fine and imprisonment.

CHAPTER 3. SEWER SERVICE

ARTICLE 1. GENERAL PROVISIONS

8-03-1000 LEGISLATIVE AUTHORIZATION:

Pursuant to the authority granted it by section 25825, of the Government Code of the State of California, the Board of Supervisors does enact this Chapter.

8-03-1005 PURPOSES:

It is the purpose of this Chapter to protect the health, safety and welfare of the residents of the County of Tulare through the prevention of public health and other nuisances related to Sewage and Wastewater disposal within certain areas of the County of Tulare and to protect the lands, fields, buildings, homes and roads in the County from such nuisance. It shall be construed liberally to that end.

8-03-1010 NOT EXCLUSIVE REGULATION:

This Chapter is not the exclusive regulation of public health and other nuisances relating to the disposal of sewage or wastewater. It shall supplement and be in addition to the other regulating statutes and ordinances heretofore and hereafter enacted by the State, the County, or any other legal entity or agency having jurisdiction.

8-03-1015 ADMINISTRATION AND ENFORCEMENT:

(a) Except as otherwise provided, this Chapter shall be administered and enforced by the Public Works Director or his deputy.

(b) The Public Works Director, when he has probable cause to believe that a violation exists, as defined by Section [8-03-1030](#) of this Chapter, may enter, inspect and investigate any property located within the County.

8-03-1020 APPLICATION:

This Chapter applies to all land owned by any individual or individual firm, partnership, joint venture, association, corporation, estate or trust within the areas of the Delft Colony, Seville, Tooleville, Tonyville,

Traver and Yettem Zones of Benefit of County Service Area No. 1 and within the area of the County Service Area No. 2 (commonly known as "Wells Tract"). In addition, it applies to any land owned by the United States and any agency of the United States, the State of California and any agency of the State, any city, and a public district or political subdivision of the State of California within such areas insofar as it is legally possible to enforce this Chapter, or any portion thereof, against such entities.

8-03-1025 DEFINITIONS:

For the purposes of this Chapter, the following words and phrases shall have the following meaning:

- (a) "Board" or "Board of Supervisors" means the Board of Supervisors of the County of Tulare.
- (b) "Building" means any structure used for any purpose which contain a fixture, plumbing system or sanitary facility of any type.
- (c) "County" means the County of Tulare or the unincorporated territory within the County of Tulare.
- (d) "Delft Colony" means the Delft Colony Zone of Benefit of the County Service Area No. 1 as established by the Board of Supervisors of County of Tulare.
- (e) "Dwelling Unit" means any structure, house or unit or portion thereof arranged or intended to be occupied by not more than one family and having facilities for sleeping, eating, cooking and/or sanitary purposes.
- (f) "Lindcove" means the Lindcove Zone of Benefit of the County Service Area No. 1 as established by the Board of Supervisors of the County of Tulare.
- (g) "Seville" means the Seville Zone of Benefit of the County Service Area No. 1 as established by the Board of Supervisors of the County of Tulare.
- (h) "Tonyville" means the Tonyville Zone of Benefit of the County Service Area No. 1 as established by the Board of Supervisors of the County of Tulare.
- (i) "Tooleville" means the Tooleville Zone of Benefit of the County Service Area No. 1 as established by the Board of Supervisors of the County of Tulare.
- (j) "Traver" means the Traver Zone of Benefit of the County Service Area No. 1 as established by the Board of Supervisors of the County of Tulare.
- (k) "Yettem" means the Yettem Zone of Benefit of the County Service Area No. 1 as established with the County of Tulare.
- (l) "House" means a detached single family dwelling.
- (m) "Person" means any individual, firm, company, partnership, association, organization, the United States of America, the State of California, a political subdivision, governmental agency or other public or municipal corporation.
- (n) "Owners of improved real property" means and includes persons who are recorded on the books of the County Clerk/Recorder/Assessor and County Tax Collector as the owners of lots or parcels of land that are improved by buildings that would be subject to service by Public Sewage System under the provisions of this ordinance.
- (o) "Parcel" means the division of land described as a parcel on the County tax rolls for property tax purposes. However, if such division of land is further divided into legal lots of record, each such lot shall be a separate parcel within this definition.
- (p) "Sewage Works" includes sewage treatment plants, intercepting and collecting sewers, outfall sewers, force mains, pumping stations, ejector stations, and all other appurtenances necessary, useful, or convenient, for the collection, treatment, purification, or disposal of sewage, and necessary lands, right-of-way, or other property.
- (q) "Public Sewage System" means the County of Tulare sewage works installed within the areas described in section [8-03-1020](#).
- (r) "Sewage" (Wastewater) means a combination of the water carried wastes from residential, commercial institutional and industrial buildings, together with such ground, surface and storm waters as may be present.
- (s) "Wastes" includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing manufacturing or processing operation of whatever nature.
- (t) "Wastewater" (Sewage) means the same as "sewage."
- (u) "Sewer Fee Ordinance" means the uncoded County of Tulare Ordinance of that title as adopted and amended from time to time by the Board of Supervisors.
- (v) "Sewer Improvement Standards Ordinance" means uncoded County of Tulare Ordinance of that title as adopted and amended from time to time by the Board of Supervisors.

8-03-1030 PROHIBITIONS AND REQUIREMENTS:

Unless otherwise allowed under the Sewer Improvements Standards Ordinance, the maintenance or use of cesspools, septic tanks, or other private means of sewage disposal within the areas described in section [8-03-1020](#) on parcels adjacent to or abutting streets or roads in which a public sewage system is installed is a public nuisance and is hereby prohibited.

8-03-1035 CONNECTION WITH SEWAGE SYSTEM:

All buildings, houses, and dwelling units within the areas described in section [8-03-1020](#) shall be connected to the public sewage system within such areas within one hundred and twenty (120) days of the Board of Supervisor's acceptance of the Notice of Completion for the public sewage system within the specific Zone of Benefit in County Service Area No. 1 or in county Service Area No. 2 unless the period of time to connect is extended by resolution or other official order of the Board of Supervisors or unless otherwise allowed by the Sewer Improvements Standards Ordinance.

8-03-1040 COMPLIANCE WITH STANDARDS:

In addition to the requirements of sections [8-03-1030](#) and [8-03-1035](#), all owners of property and/or their agents, lessees, successors in interest, assigns and authorized or unauthorized users of property within the areas described in section [8-03-1020](#) shall comply with the Sewer Improvement Standards Ordinance.

8-03-1045 VACANCY:

During the period of any vacancy service under the Sewer Fee Standards Ordinance, habitation of buildings by human beings shall constitute a public nuisance and is hereby prohibited.

ARTICLE 3. PERMITS AND FEES.

8-03-1095 PERMITS:

No person shall uncover, make any connection with or opening into, use, alter, or disturb any public sewage system within the areas described in section [8-03-1020](#) except under written permit issued by the County of Tulare or the County's designated operator of the public sewage system. Any person required to obtain such a permit shall make application in accordance and be bound by the Sewer Improvement Standards Ordinance which Ordinance includes regulations and limitations on discharge in accordance with state and federal environmental control laws.

8-03-1100 FEES:

From time to time, the Board of Supervisors shall establish by Ordinance under Government Code section 25825 and Health and Safety Code section 5470 et seq. fees for the issuance of permits under section [8-03-1095](#) and the Sewer Improvements Standards Ordinance of Tulare County. The Ordinance setting such fees shall be known as the Sewer Fee Ordinance and may be uncoded.

ARTICLE 5. SEWER SERVICE CHARGES

8-03-1150 SEWER SERVICE CHARGES:

From time to time, the Board of Supervisors shall establish fees or charges for the sewer services provided, including but not limited to connection fees and charges, sewer service rates and charges, stand-by charges, vacancy charges, reestablishment fees and charges, delinquency charges, and such other fees and charges as the Board finds reasonable and necessary to pay the cost of providing such service. Pursuant to Government Code section 25825 and Health and Safety Code section 5471 et seq., such fees and tolls shall be set out in and shall be collectable, including placement of delinquent fees on the tax rolls, as provided in the Sewer Fee Ordinance.

(a) Such public nuisance is not corrected within fifteen (15) days after the Public Works Director or his deputy has notified the property owner of the existence of the public nuisance and there has been no timely request made to the Board of Supervisors for a hearing on the determination of the existence of such public nuisance; or