



7500 Schmidt Lane  
El Cerrito, CA 94530  
(510) 524-4668

Approved By: District Manager  
Date: 5/15/2019

## **JOB DESCRIPTION**

### **SENIOR ENGINEER**

#### **DEFINITION**

Under general supervision of the District Manager, the Senior Engineer is registered as a Professional Civil Engineer in the State of California and provides professional engineering work in the planning, design, investigation and construction of collection system projects. The Senior Engineer has supervisory responsibility and performs other duties as assigned. The position requires a valid Class C California Driver's License.

#### **SUPERVISION EXERCISED**

Directly supervises Engineering staff. Carries supervisory responsibilities in accordance with the District's policies, procedures, and applicable laws. Responsibilities include interviewing, hiring and training employee, planning, assigning and directing work, appraising performance, rewarding and disciplining employees, addressing complaints and resolving problems.

#### **IMPORTANT AND ESSENTIAL DUTIES**

- Plan, organize, direct and manage the engineering, design, and inspection services of the District.
- Perform a variety of engineering duties using computer and non-computer based techniques as required.
- Design and details structures, pipelines, site improvements and other facilities, formulate instructions for drafting and review of finished drawings for accuracy and conformance with design requirements.
- Prepare specifications, prepare plans, and calculates cost estimates for District projects.
- Review TV inspections of sewers to determine structural integrity and recommend repair or replacement priority.
- Maintain the computerized system model of the District sewer system.
- Produce maps and reports from the District's computerized mapping/database system.
- Update databases and maps with information from Contra Costa County and gathered in the field.
- Maintain the District's Engineering and Maintenance management information system.
- Annually collect information to calculate and prepare the Sewer Service Charges for the Contra Costa County Tax Roll.
- Prepare clear and concise technical reports.
- Inspect sewer collection line for stoppages or damage and maintain sewage pump stations.
- Understand and interpret sewer system maps.
- Ascend/descend steep, uneven and narrow surfaces and continuously move and position self in and around sewer systems.
- Work within District safety guidelines.

#### **OTHER JOB RELATED DUTIES**

- Respond to questions from the public; set up traffic safety devices at work sites.
- Enforce District policies and appropriate state and federal laws, codes and regulations.
- Perform plan and shop drawing reviews to ensure contractor compliance with District specifications.
- Analyze design data submitted to the District by others as a condition of permitting.
- Establish positive working relationships with the District management and staff, other agencies and the public.
- Operate and maintain a PC based computer system and networking
- Perform other related duties as required.

#### **JOB RELATED AND ESSENTIAL QUALIFICATIONS**

##### **Knowledge of:**

- Safe work practices, occupational hazards and standard safety procedures.
- Operating characteristics of tools and equipment used in collection system maintenance and repair.
- Methods, principles, practices and materials used in collection system maintenance and repair.

- Microsoft WORD, EXCEL, ACCESS, AutoCAD MAP and other PC based software as required.

**Skill to:**

- Operate a motor vehicle safely.
- Communicate clearly and concisely, both orally and in writing.
- Operate and maintain a PC based computer system and networking

**Ability to:**

- Deal tactfully with the public and others in providing information, answering questions and providing customer service.
- Read and interpret maps and drawings.
- Read, understand, and follow posted work rules and procedures; understand and follow written and verbal instructions.
- Communicate clearly and concisely, both orally and in writing.
- Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

**EXPERIENCE AND EDUCATION GUIDELINES**

*Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

**Experience:** Civil engineering with ten (10) years' experience, preferably with a hydraulics or sanitary emphasis.

**Education:** Equivalent to a bachelor's degree from an accredited college or university.

**Licenses and Certifications:** Registered as a Professional Civil Engineer in the State of California. Valid California class "C" driver's license and compliance with Stege driving standards. Continued maintenance of the valid Class C California Driver's License, compliance with established District vehicle operation standards and the ability to be insured for the operation of a vehicle / District vehicle in accordance with the terms and conditions of the District's insurance program, are conditions of continuing employment.

**PHYSICAL DEMANDS / WORK ENVIRONMENT**

The physical demands and work environment described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to move about, position self at varying heights, and remain stationary in office and field; operate and use equipment; ascend/descend ladders; observe and detect conditions; communicate and exchange information; stand on paved streets or inclines, sit, walk, squat, reach, and twist; use hands to finger, handle or feel; reach with hands and arms; climb or balance; stoop, kneel, crouch or crawl; and talk or hear. The employee must occasionally move and position objects, such as manhole covers, weighing up to 150 pounds. Incumbents must ascend/descend ladders and work at heights. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, and ability to adjust focus.

Additionally, the employee is frequently exposed to outside weather conditions. The employee is occasionally exposed to confined spaces; fumes and airborne pathogens; toxic or caustic chemicals; extreme cold; extreme heat; and risk of electrical shock or mechanical hazards. Employees in this classification may perform duties that involve a potential risk of exposure to blood borne pathogens. In addition, employees are occasionally exposed to power and noise producing tools and equipment, drive motorized vehicles and work in heavy traffic conditions. The noise level in the work environment can be loud.