

**ASSOCIATE ENGINEER**

**DEFINITION**

Plans, organizes, administers and directs the maintenance, repair, installation and upgrading of the District's wastewater collection system infrastructure; provides highly technical professional assistance to the General Manager; performs the full range of civil engineering and office work of a routine to complex nature, including development review, design, management, upgrading and/or inspection of physical facilities; provides engineering services to District staff, including field operations and maintenance personnel; performs related duties as assigned.

**SUPERVISION RECEIVED AND EXERCISED**

General direction is given by the General Manager. Coordinates and directs the work of the Engineering Technician. Provides project direction to contractors and consultants.

**CLASS CHARACTERISTICS**

The Associate Engineer participates in all District construction, maintenance, repair, installation and upgrade activities. Responsibilities include coordinating the activities of the department with those of other departments. The incumbent is accountable for accomplishing departmental planning and operational goals and objectives and for furthering District goals and objectives within policy and procedural guidelines.

**EXAMPLES OF ESSENTIAL DUTIES** (Illustrative only)

- Reviews, examines, and evaluates master plans and improvement plans for sewer system compliance with District standards and codes, including field investigation, flow monitoring etc., as needed.
- Prepares and reviews agreements, maps, legal descriptions, correspondence, and plans and specifications for a variety of projects.
- Researches, prepares, and recommends financing sources for various improvements.
- Researches, reviews, analyzes and makes recommendations concerning engineering, operations, and control aspects of major land development proposals, including environmental and other documentation.
- Designs, prepares, and reviews drawings and engineering specifications for routine to complex capital improvement projects and other wastewater collection and disposal construction projects.
- Prepares requests for proposal; conducts contract bid openings for a variety of projects, including review and approval of bid documentation; administers applicable ordinances relating to project requirements.
- Performs more complex construction inspections to confirm contractual compliance with engineering and construction standards. Conducts inspections of construction and repair of public and private collection system components and District facilities for compliance with the District Code, Alameda County building regulations, the Uniform Plumbing Code and other regulations.
- Assists Collection System staff in solving complex operation and maintenance problems.

- Investigates consumer complaints and recommends solutions; arranges for advance public notice of shutdowns in non-emergency situations; maintains effective public relations; explains codes and regulations to residents.
- In charge of professional civil engineering work, with the ability and requirements to sign and seal same.
- Directs and actively participates in record keeping activities and preparation of a variety of periodic and special reports, including Collection System Monthly Report to the Board of Directors.
- Assists in the development and administration of the annual budget.
- Plans, coordinates, directs, reviews and evaluates the activities and performance of assigned staff.

## **QUALIFICATIONS**

### **Knowledge of:**

- Principles and practices of civil engineering design and construction.
- Wastewater principals and management, including applicable codes and safe work practices related to the construction, operation and maintenance of collection system facilities.
- Local, State and Federal laws, rules and regulations relating to environmental water quality standards and issues.
- Principles and practices of contract administration and project management and evaluation.
- Construction materials, methods, materials testing and equipment.
- Computer user applications as applied to the solution of engineering problems, such as Geographical Information Systems, AutoCAD, Asset Management Software, Hydraulic Modeling and Database Management with Reporting.
- General principles and equipment used in hydrology, hydraulics, flow monitoring and flood control.
- Safety equipment and procedures.
- Engineering mathematics.
- Basic physics and chemistry related to wastewater systems and treatment.
- Basic supervisory principles and practices.
- Techniques for providing a high level of customer service to the public and District staff, in person and over the telephone.

### **Skill in:**

- Performing detailed and complex engineering analysis of designs, specifications and plans for utilities systems and components, including maps, drawings and layouts.
- Developing engineering requests for proposal and cost estimates.
- Administering contracts and agreements for wastewater collections and disposal projects.
- Applying engineering principles and techniques to the solution of simple to complex civil engineering problems.
- Learning District permit processes and calculations of permit fees.
- Exercising sound judgment within established policy and procedural guidelines.

- Establishing and maintaining effective working relationships with the public, engineering firms, contractors, developers, manufacturers, county and state governmental staff, and other outside agencies.
- Preparing clear, concise and accurate reports and correspondence.
- Planning, assigning, directing and reviewing the work of assigned staff.

### **Education and Experience**

Equivalent to graduation from a four-year college or university with major course work in civil engineering or a closely related field and five years of experience in the engineering design and project administration for wastewater utilities or related facilities.

### **Licenses and Certifications**

Possession of a Professional Engineer's registration from the State of California is required. Must possess a valid California class C driver's license and have a satisfactory driving record.

### **Interpersonal Effectiveness:**

Ability to work effectively in a team-based organization focused on continuous improvement; establish and maintain a positive customer service attitude and effective working relationships with customers; demonstration of strong two-way communication skills, including the ability to listen, explain, and facilitate; ability to ask for input; offer help without being asked; accept suggestions; work with others to solve problems; and provide recognition and encouragement.

### **Other Requirements:**

Willingness and ability to work scheduled and emergency overtime; and attend meetings, workshops, and seminars during work and non-work hours as assigned.

### **Physical Requirements:**

Be able to possess mobility and physical stamina to inspect various collection system and pumping station sites; work on uneven terrain; vision to read printed materials and a computer screen and hearing and speech to communicate in person, and over the telephone; sit and stand for long periods of time, bend, stoop, pull, stretch and reach; and strength and stamina to safely lift and carry up to 50 pounds.

### **Work Environment:**

Works indoors, using computer monitor, works around others, works alone, works with others. The work requires outside exposure to all weather conditions with, dust, noise, some potentially hazardous materials and electrical or heavy equipment.