



Job Description

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties or responsibilities that are required of the employee for this job.

Job title	Senior Engineer
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GENERAL PURPOSE

Under general direction, assumes responsibility for planning, organizing, and executing complex capital engineering infrastructure improvement, maintenance, and construction projects and programs; plans, leads, organizes, and reviews the work of professional and technical staff engaged in engineering activities; administers the design and preparation of major engineering and construction programs; and performs related duties, as assigned.

DISTINGUISHING CHARACTERISTICS

This is the advanced-level classification in the professional registered engineering series responsible for exercising independent judgment in managing engineering projects and programs, with accountability and ongoing decision-making responsibilities associated with the work. Incumbents are responsible for planning, leading, organizing, reviewing, and evaluating the work of assigned staff, administering consultant contracts, and providing professional-level support to higher-level engineering management in a variety of areas. Performance of the work requires the use of independence, initiative, and discretion within policy guidelines.

This class is distinguished from the Principal Engineer in that the latter is the highest-level professional engineering class responsible for managing an assigned engineering function or program area, with full supervisory-level responsibility for planning, organizing, supervising, reviewing, and evaluating the work of assigned staff.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from assigned supervisory or management personnel. Exercises technical and functional supervision over lower-level staff, interns, and consultants.

TYPICAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this position.

- Plans, leads, organizes, and reviews the work of professional and technical staff in the conduct of complex planning and engineering capital construction programs and projects.
- Performs complex engineering and assists with the administration of the design and preparation of major capital projects utilizing consulting engineering firms or in-house staff; prepares costs estimates; establishes the scope, schedule, and budget for design projects; negotiates and manages consultant contracts; reviews drawings and specifications for compliance with District standards; interprets specifications and District policies and initiates or reviews change orders; prepares periodic project-status reports; seals final plans.
- Monitors, coordinates, evaluates, and provides quality assurance to the development review process for development projects within the District's service areas; reviews and approves developer plans, hydraulic calculations and analyses, and current planning for complex development projects involving water, sewer, and reclaimed water design conditioning consistent with District systems and Master Plan.
- Coordinates water, recycled water, and sewer utility engineering and planning activities with other departments and outside agencies; revises design and construction standards to improve methods, procedures, and practices; revises and approves construction documents; meets with developers and their engineers to explain and clarify District criteria.
- Develops and administers complex project budgets; directs the forecast of additional funds needed for staffing, consultants, contractors, equipment, materials, and supplies; directs updates to budget status; discusses project expenses with consultants; reviews and signs invoices.
- Prepares correspondence on technical engineering issues; makes authoritative interpretations of applicable laws, regulations, policies, and design standards.
- Initiates or attends meetings with management to understand their goals for current and future programs or projects; ensures management goals are being met on projects and determines best methods to meet or exceed project goals; leads stakeholder meetings to disseminate information and receive feedback on project operations.
- Assesses and evaluates alternative water supply and sewer collection options for the District and determines effective courses of action; performs complex engineering calculations and designs.
- Observes and complies with all District and mandated safety rules, regulations and protocols.
- Performs related duties as assigned.

REQUIRED QUALIFICATIONS

Knowledge of:

- Principles of providing functional direction and training.
- Principles and practices of leadership.
- Organization and management practices as applied to the development, analysis, and evaluation of programs, policies, and operational needs of the assigned area of responsibility.
- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly.
- Principles and practices of project management including resource and budget management.
- Theory, principles, and practices of engineering design and construction.
- Techniques and equipment used in design, construction, and maintenance of various public works projects.
- Principles, modern techniques, and equipment used in the design, construction, and maintenance of water and wastewater utilities projects.
- Hydraulic system analysis applicable to engineering including hydraulic calculations.
- Concepts of physics as they relate to engineering.
- Civil, mechanical, electrical, chemical, structural and instrumentation design concepts and principles specific to water and wastewater facilities.
- Land surveying principles.
- Physical design, economic, environmental, and/or social concepts which impact the planning process.
- Methods used in developing information for Master Plan modifications.
- Application of land use (development patterns and processes) concepts and implementation of zoning and other municipal ordinances.
- Public utility governance, oversight, regulations, and land development and zoning requirements.
- Advanced mathematical principles.
- Principles and practices of technical report and business correspondence preparation.
- Federal, state, and local laws, codes, and regulations in assigned areas of responsibility.
- District and mandated safety rules, regulations, and protocols.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.

Eastern Municipal Water District

Job Title: Senior Engineer

Last Update: May 2023

- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

Ability to:

- Plan, assign, and coordinate the work of project staff.
- Oversee and manage the work of project consultants.
- Prepare, administer, and monitor complex project budgets.
- Perform project management tasks for complex engineering projects.
- Prepare and review engineering studies of large projects; evaluate alternatives, make sound recommendations, and prepare effective technical reports.
- Interpret and explain design criteria, policies, ordinances, and procedures.
- Negotiate various scopes of work and contracts including planning studies, and project design, construction, and maintenance contracts.
- Evaluate potential construction and operational risks, materials, and project costs, and provide recommendations for mitigation measures.
- Actively handle multiple tasks and manage time-sensitive and politically sensitive projects; manage multiple concurrent projects.
- Prepare and deliver presentations to management, stakeholders, governing boards, and the general public.
- Effectively represent the department and the District in meetings with governmental agencies; community groups; various business, professional, and regulatory organizations; and in meetings with individuals.
- Prepare clear, concise, and accurate reports, drawings, maps, notes, correspondence, and other written materials.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies, and procedures, and standards relevant to work performed.
- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Experience:

Any combination of experience and education that provides the required knowledge and abilities is qualifying, along with the specific licenses/certifications as outlined below:

- Eight (8) years of progressively responsible professional engineering experience, preferably in a public utilities environment, or three (3) years of experience as an Associate Engineer II with the District.

Education:

- Equivalent to a bachelor's degree from an accredited college or university with major course work in civil, chemical, mechanical, structural, electrical engineering or related engineering discipline.

Licenses/Certifications:

- A valid certificate of registration as a Professional Engineer in Civil, Chemical, Mechanical, Structural, or Electrical Engineering issued by the State of California.
- A valid California driver's license and the ability to maintain insurability under the District's Vehicle Insurance Policy.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle and visit various District sites; vision to read printed materials and a computer screen; hearing and speech to communicate in person and over the telephone; ability to stand and walk between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects up to 25 pounds.

WORK ENVIRONMENT

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

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances.

Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

Eastern Municipal Water District
Job Title: Senior Engineer
Last Update: May 2023

This job description has been reviewed and approved by all levels of management in cooperation with the union (if applicable):

Approved by:	<i>Board of Directors</i>
Date adopted:	<i>March 29, 2020</i>
Date modified:	<i>May 9, 2023</i>
FLSA determination:	<i>Exempt</i>

Job Description Acknowledgment

I have received, reviewed, and fully understand the job description for Senior Engineer. I further understand that I am responsible for the satisfactory execution of the essential functions described therein, under any and all conditions as described.

Employee Name (print): _____ *Date:* _____

Employee Number: _____

Employee Signature: _____