



Senior Engineer

Department/Division:	Engineering
Reports To:	Director of Engineering
Provides Direction To:	Select Staff
FLSA Exemption Status:	Exempt
Date Prepared:	12/19/2024

GENERAL PURPOSE

Under general direction, plans, organizes, and coordinates the most complex professional field and office civil engineering work related to the planning, design, construction, inspection of District capital improvement project (CIP) infrastructure and/or new development, and diverse and complex engineering assignments. Manages and administers development projects, from the preliminary planning stages through construction and acceptance of developer improvements by the District. Confers with engineers, contractors, and representatives of other agencies regarding facility and infrastructure development; to ensure that all proposed water facilities meet District needs and/or standards; manage assigned projects, review and evaluate drawings and designs; manage and prepare CEQA/NEPA process; issue and renew cost summaries and agreements; review and investigate compliance; update District standard drawings and specifications; prepare compliance and permitting documents; assist in development and maintenance of engineering and GIS data and databases, Water Master Plan, Urban Water Management Plan, and Water Supply Assessments; performs a variety of studies and prepares and presents staff reports; to supervise engineering and technical support staff; and to perform related duties as assigned.

DISTINGUISHING CHARACTERISTICS

This is the journey level classification in the Engineer classification series, which is responsible for planning, organizing, and coordinating the most complex professional field and office civil engineering work. The Senior Engineer is distinguished from the Associate Engineer in the complexity and scope of work.

ESSENTIAL FUNCTIONS

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 the class.

- Maintains capital improvement plan schedule; evaluates plans to ensure they are meeting planned scope of work, schedule and budget; performs field reviews of project activities.
- Administers CIP construction contract activities and construction operations.

- Plan, organize, assign, direct, review, and evaluate the work of assigned staff and provides for their training and professional development.
- Assist in the development and implementation of goals, objectives, policies, procedures and work standards as needed to meet the operational needs of the District.
- Examines public and private engineering plans, subdivision maps, specifications, designs, cost estimates and legal descriptions for a variety of construction and maintenance and/or private development projects to ensure compliance with District standards and specifications.
- Oversees the review, processing, and approval of land development projects and applications, including preparation of engineering conditions of approval, plan checking, preparation of development agreements, computation and collection of fees, and coordination of developer reimbursements.
- Perform studies of technical, environmental and economic feasibility, engineering field studies and related duties pertaining to proposed and existing facilities.
- Oversees and coordinates professional services contracts for engineering services and inspections.
- Oversees construction inspection; reviews and approves inspection reports.
- Works closely with Operations Department to optimize designs that enhance the District's ability to reduce operating and construction costs while maintaining flexibility and reliability.
- Coordinate, review, check, inspect the work of contractors and consultants; act as liaison between contractors/consultants and WVWD staff.
- Identify and participate in District's long- and short-term capital improvement and preventative maintenance activities.
- Performs the more complex engineering design, prepares detailed drawings for construction and maintenance projects, structures and other facilities; instruct other staff in the production of drawings, maps, tables and other documents; review designs for completeness and conformance to established standards.
- Sign and seal technical documents, reports, and plans.
- Coordinate engineering design projects with other departments and agencies.
- Provides engineering expertise, guidance and planning for the District's construction program.
- Prepare and/or review cost estimates, records, files, reports and correspondence.
- Manage, update and maintain District standard drawings, specifications and AutoCAD standards.
- Performs project management and administration of consultant and in-house capital improvement and other special projects; meets and confers with contractors, engineers, developers, architects, a variety of outside agencies, and the general public on development issues and acquiring information; ensures contractor compliance with District standards and specifications, time and budget estimates; analyzes and resolves complex problems that may arise; recommends and approves field changes;
- Assist with construction management and inspections for construction projects performed by outside contractors and District personnel.
- Prepare and maintain records and maps for water atlas, real property, tie-sheets and GIS database.

- Provide technical support for walk-in customers, phone calls, e-mails and other agencies and departments.
- Represent the District with utilities, cities, engineering firms, contractors, developers, and manufacturers, coordinate projects with other agencies.
- May be required to sign and approve engineering studies, construction plans and specifications, and other engineering documents.
- Maintain prompt and regular attendance.
- Performs other related duties, as assigned.

QUALIFICATIONS GUIDELINES

Knowledge of:

- Principles, practices, procedures, and standards of civil engineering design and construction related to District projects and infrastructure development and maintenance;
- Drafting principles, methods, and equipment, including AutoCAD drafting concepts and application, and GIS; sources of engineering information;
- Knowledge of regulatory codes, and manuals related to the areas of work assignments and applicable to utility engineering;
- Principles and practices of capital improvement cost estimation;
- Principles and practices of project management including resource and budget management;
- Field survey methods, procedures, and instruments;
- Statistics and graphic presentation of materials;
- General research and report writing methods;
- Engineering economics and cost estimating;
- Hydraulic principles and operation of computerized hydraulic modeling;
- Plan check methods;
- Construction management and inspection methods;
- Principles of supervision, training and performance evaluation;
- Techniques for providing a high level of customer service to the public and District staff, in person, and over the telephone.

Ability to:

- Read and utilize field survey notes in the preparation of maps and plans;
- Communicate clearly and concisely, both orally and in writing;
- Interpret and analyze technical information and make independent judgments, and implement recommendations through subordinate staff;
- Plan, organize, administer, coordinate, and direct the activities of multiple engineering related functions;

- Select, train and evaluate subordinate technical personnel;
- Exercise tact and deal effectively with co-workers, officials and representatives of other jurisdictions, departments, and the general public;
- Establish and maintain cooperative working relationships with others;
- Organize work and staff who are involved in data collection/entry;
- Interpret construction and professional service contracts and construction contract documents;
- Make complex engineering calculations;
- Apply direct civil and engineering principles and practices to the solution of specific engineering problems for the District;
- Work in a variety of environmental conditions, indoors and out, including wide temperature variations;
- Operate computerized hydraulic modeling software and analyze results;
- Operate standard office equipment, personal computers, Internet, Microsoft Office software products, and engineering related software including AutoCAD and GIS;
- Adhere to and comply with safety standards and the proper use of safety equipment;
- Operate a vehicle observing legal and defensive driving practices;
- Work under moderate or high stress conditions;
- Observe proper safety precautions
- Use math and mathematical reasoning;
- Analyze and solve problems;
- Learn and apply new information;
- Perform highly detailed work on multiple, concurrent tasks while meeting deadlines;

Minimum Qualifications

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Education: Equivalent to a Bachelor's degree in Civil or Mechanical, Engineering, or related field.

And

Experience: Seven (7) years of progressively responsible professional civil engineering experience that includes utility engineering, project management, and construction management experience.

Licenses, Certificates; Special Requirements:

Possession of a valid Class C California driver's license, acceptable driving record, and proof of auto insurance in compliance with the District Vehicle Insurance Policy standards.

Possession of a Professional Civil Engineering License in current and good standing in the State of California

Possession of SWRCB Certification as a Water Distribution Systems Operator and/or Water Treatment Operator is desirable.

PHYSICAL AND MENTAL DEMANDS

The physical and mental 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.

While performing the duties of this job, the employee is typically required to speak, hear, touch, and see. This is primarily a sedentary office classification although standing in work areas and walking between work areas may be required. Employee is frequently required to communicate with others, use a telephone and work on a personal computer. Close vision for reading and working on a visual display terminal screen and the ability to focus on small objects is required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard, typewriter, 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. Positions in this classification occasionally lift and carry reports and records that typically weigh less than 25 pounds.

THIS POSITION MAY BE ELIMINATED, OR THE DUTIES, QUALIFICATIONS AND TRAINING REQUIRED CHANGED BY THE BOARD OF DIRECTORS AND/OR THE GENERAL MANAGER, WHEN IN THEIR JUDGEMENT, IT IS CONSIDERED NECESSARY AND PROPER FOR THE EFFICIENT OPERATION OF THE DISTRICT.