SENIOR ENGINEER

DEFINITION

Under general direction of the District Engineer, the exempt Senior Engineer classification performs technically difficult and complex professional engineering tasks associated with the planning, permitting, design, construction and operation of District facilities. The Senior Engineer provides oversight of other Engineering staff in absence of the District Engineer.

EXAMPLES OF DUTIES

The duties listed below are illustrative only and are not meant to be a complete and exhaustive listing of all the duties and responsibilities of the Senior Engineer classification:

Engineering Duties:

- Plan, design, and manage complex construction projects.
- Prepare, review, and administer engineering project budgets.
- Assists the District Engineer with the development and implementation of Business Management Plans, i.e. Water Management Plans, Urban Water Management Plans, Watershed Sanitary Surveys and other business planning activities as necessary.
- Assist the District Engineer with updating the District's Capital Improvement Plan for major construction projects and development/improvement of District facilities.
- Resolves facility location issues related to engineering, construction and maintenance.
- Develops RFPs and RFBs and recommends awards to contractors.
- Develops engineering plans and specifications.
- Coordinates District projects with consultants, reviews plans and specifications developed by consultants and recommends approval.
- Prepares and reviews a variety of engineering reports and technical analyses.
- Prepares and/or reviews environmental assessment reviews in compliance with California Environmental Quality Act (CEQA) and/or other regulatory permits and compliance documentation as required by state and federal regulatory agencies.
- Reviews facility modification requests from operations and maintenance for compliance with engineering and District standards, and cost effectiveness.
- Represents the District in coordination with other utilities, regulatory agencies, governmental bodies, planning agencies, trade and professional associations, technical groups, and developers as delegated.
- Monitors ongoing planning efforts by other agencies and changes in the law as they affect the District.
- Assists the District Engineer with the collection, analysis and refinement of field data.
- Provides support to the District Engineer in making presentations regarding engineering issues to the Board of Directors.
- Reviews work performed by Engineering staff for technical accuracy and provide day-to-day technical guidance.

Operations and Maintenance Duties:

- Develops and documents engineering standards for process, mechanical, electrical, control, and instrumentation systems, including equipment specifications, drawings, and configurations.
- Evaluates process strategies, controls, and efficiencies.
- Responsible for the District's Process Safety Management Program, including water supply and treatment operations.
- Ensures all water supply facilities and operations and maintenance programs comply with applicable Federal, State and local ordinances and regulations.
- Assess technically challenging maintenance activities and provide recommendations and direction to maintenance staff.
- Performs other duties as assigned.

Typical Physical Activities:

- Travel by automobile in conducting District business.
- Regularly uses a telephone/radio for communication.
- Uses office equipment such as computers, copiers, printers, scanners and facsimile machines.
- Frequently walks on uneven terrain, in an outdoor environment, making inspections of District facilities and construction projects.
- Sits for extended periods of time.
- Requires hearing and vision within normal ranges.
- Primary work environments are a combination of office and field work at various water supply and treatment facility locations.

EMPLOYMENT STANDARDS

Knowledge of:

- Principles and practices of civil engineering with particular emphasis on the design and construction of water resource development and conveyance, water treatment, and other hydraulic projects and facilities.
- Principles of engineering economics and their practical application to water resource development, water conveyance, and water treatment projects.
- Laws, rules, ordinances, and legislative processes governing water rights, water resource development, water quality and water treatment.
- Principles and practices of process, mechanical, electrical, control, and instrumentation design and construction in water supply, water treatment, and other hydraulic facilities. Contract development and administration.
- Principles and practices of water resource development, chemical and biological aspects of water quality and local context in State and regional plans.
- Regulations for water resources, conveyance and treatment.
- Basic principles of supervision or leadership.

Ability to:

- Plan, carry out, and coordinate District engineering projects, particularly as they affect irrigation, water supply development, water conservation, and water treatment.
- Assist with development long-range capital improvement plans.
- Prepare and monitor project budgets.
- Prepare and develop plans, specifications, and District engineering standards.
- Insure proper completion and inspection of major construction projects.
- Prepare and review a variety of engineering studies and reports.
- Travel to different construction/job sites and locations.
- Effectively represent the District's engineering functions with the public, other government agencies, contractors, developers, and professional engineering consultants.
- Establish and maintain cooperative working relationships.
- Conduct training activities as they relate to District engineering staff.
- Use computer systems and software packages related to engineering analysis and functions.
- Establish and maintain cooperative working relationships with co-workers, outside agencies, and the public.
- Communicate effectively both orally and written, with local government officials, District staff, customers and the public.

QUALIFICATIONS

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

Required Certification/Education/Experience/License:

- Certification:
  - Possession of a current California Professional Engineering License as a Civil Engineer.
  - Possession of a Qualified SWPPP Developer (QSD) Certification.
  - Possession of a Grade 2 (T2) Water Treatment Plant Operator Certification issued by the California State Water Resources Control Board.
  - Possession of a Grade 2 (D2) Distribution Operator Certification issued by the State of CA.

- Education:
  - Completion of a Bachelor's of Science Degree from an accredited college or university in Civil Engineering, Environmental Engineering or other closely related Engineering Program or equivalent experience.

- Experience:
  - Five (5) years of increasingly responsible professional engineering experience in design and construction of water conveyance and water treatment systems.

- Driver's License:
  - Possession of a valid California (Class "C") Driver's License may be required at the time of appointment. Failure to obtain or maintain such required license(s) may be cause for disciplinary action. Individuals who do not meet this requirement due to a physical disability will be considered for accommodation on a case-by-case basis.
  - Possession and proof of a driving record free of multiple or serious traffic violations or accidents for two (2) consecutive years.

The specific statements in each section of this job description are not intended to be all-inclusive. They represent typical elements which are necessary to successfully perform the job.