

Sacramento Suburban Water District Classification Specification

Job Title: Assistant/Associate Civil Engineer

FLSA Status: Non Exempt at Assistant Level
Exempt at Associate and Associate (Registered) Levels

Supervisor: Capital Improvement Program (CIP) Manager

Effective Date: March 2011

Definition/Distinguishing Characteristics

Under general supervision, this position performs professional engineering work in the planning, design and construction of District structures and facilities; provides project coordination and direction to technical engineering staff; and may serve as resident engineer on construction projects. Assumes varying degrees of responsibility for the engineering requirements of water system operations, pipeline distribution systems, pump stations and treatment facilities. This is a flexibly staffed class series.

Assistant Engineer: This is the entry level in the professional engineering series. Employees at this level are not expected to perform with the same level of independence of direction and judgment on matters allocated to the Associate Engineer. Since this class is typically used as a training class, employees have only limited or no directly related professional engineering work experience. Employees work under general supervision from higher level engineering staff while learning job tasks.

Associate Engineer: This is the journey level in the professional engineering series. This class is distinguished from the Assistant Engineer by the assignment of the full range of professional engineering duties. Employees at this level receive only occasional instruction, assistance or direction from higher level engineering staff as new or unusual situations arise and are fully aware of the District's operating procedures and policies. Incumbents may exercise direct supervision of technical engineering staff and interns. Persons in this position may serve as the Manager of Engineering Services and/or CIP on relief basis.

Associate Engineer (Registered): This is the journey registered level in the professional engineering series. This class is distinguished from Associate Engineer by the requirement for possession of registration as a professional engineer within the State of California and the ability to independently review, approve and stamp plans.

Example of Duties

The following duties are typical for this classification. Depending upon the assignment, the employee may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices. Management retains the right to add, remove, or change duties at any time.

- Manages a variety of projects simultaneously, from conception through construction, which involves developing project schedules, monitoring project progress and budget, obtaining necessary permits, preparing and maintaining project files, monitoring quality of projects, and insuring deadlines are met.
- Develops and/or assists with the preparation of designs, plans and specifications for the construction and development of District structures and facilities.
- Acts as interface between District and its customers on various capital improvement projects including, but not limited to, answering questions, providing information, reviewing disputes and/or claims, and recommending reasonable dispute and/or claim resolutions.
- Provides project coordination and direction for technical engineering support staff.
- Assists office engineering staff with the analysis and refinement of field data.
- Prepares estimates of materials and quantities.
- Orders materials necessary for construction.
- Prepares environmental assessment reviews.
- Meets with developers and outside engineers to discuss concepts and general requirements for new projects.
- Coordinates outside engineers and contractors with design and construction of domestic water and water treatment facilities.
- Analyzes and interprets federal and state regulations pertaining to District projects.
- Prepares and maintains District long-range master plans.
- Prepares grant applications to obtain capital project funding from various state and/or federal agencies.
- Assists contractors and the general public with questions regarding water pressure, water quality, fire sprinkler systems, and related issues.
- Represents the District in coordination with other utilities, regulatory agencies, governmental bodies, planning agencies, trade and professional associations, technical groups, and developers.
- Prepares correspondence related to engineering functions.
- Represents the CIP Manager at meetings and conferences as delegated.
- Provides support to the CIP Manager in making presentations regarding engineering issues and/or capital improvement projects to the Board of Directors.
- Maintains project files.
- Prepares estimates of probable construction costs.
- Prepares analysis supporting District rates and charges.
- Performs computer modeling.
- Analyzes groundwater hydrogeology, well operation and design.

Mental and Physical Requirements

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

- Travels occasionally by airplane and frequently by automobile in conducting District business.
- Communicates frequently with District management staff, co-workers and the public in one-to-one and group settings.

- Regularly uses a telephone for communication.
- Uses computer, keyboard and mouse.
- Uses office equipment such as copiers and fax machines.
- Frequently walks in uneven terrain, in an outdoor environment, making inspections of District facilities and construction projects.
- Sits for extended time periods.
- Hearing and vision required to be within normal ranges with or without correction.

Qualifications

Knowledge of:

- Principles and practices of civil engineering with particular emphasis on the design and construction of water development and distribution, water treatment, groundwater systems, and other hydraulic projects and facilities.
- Principles of engineering economics and their practical application to water development, water distribution, and water treatment projects.
- Laws, rules, ordinances, and legislative processes including CEQA requirements governing water rights, water development, water quality, and water treatment.
- Public finance, budget development and fiscal controls, and capital improvement fiscal planning.
- Contract development and administration.
- Principles and practices and water supply development, chemical and biological aspects of water pollution, and local water issues, including their relationships to State and regional plans.

Ability to:

- Plan, carry out, and coordinate District engineering projects, particularly as they affect water distribution system development, water conservation, hydrogeology, water quality, and water treatment.
- Develop 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, and perform hydraulic modeling.
- Write reports, specifications, and contract documents.
- Use computer systems and software packages related to engineering, analysis and functions.
- Effectively represent the District's engineering functions with the public, other governmental agencies, contractors, developers, and professional engineering consultants.
- Establish and maintain cooperative working relationships with co-workers, outside agencies and the public.
- Pass pre-employment physical, drug and alcohol examination, and background check.

Education, Experience, Licenses and Certifications:

Required:

- A Bachelor's Degree in Civil Engineering or a related field from an accredited college or university.
- Valid California Driver's License issued by the California Department of Motor Vehicles.
- Proof of good driving record as evidenced by freedom from multiple or serious traffic violations or accidents for at least two (2) years duration. The driving record will not contribute to an increase in the District's automobile rates. Individuals who do not meet this requirement due to a physical disability will be considered for accommodation on a case-by-case basis.

Desirable:

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

Assistant Engineer: Six (6) months to one (1) year of directly related professional engineering experience in planning, design and construction of water system development and distribution, water treatment, and water treatment facilities, and possession of an Engineer-In-Training certificate issued by the California Board for Professional Engineers and Land Surveyors; additional experience may be substituted in place of the certificate.

Associate Engineer: Three (3) or more years of responsible professional engineering experience in planning, design and construction of water system development and distribution, water treatment, and water treatment facilities, and possession of an Engineer-In-Training certificate issued by the California Board for Professional Engineers and Land Surveyors; significant additional experience may be substituted in place of the certificate.

Associate Engineer (Registered): In addition to the qualifications for Associate Engineer, possession of a Certificate of Registration as a professional civil engineer in the State of California.