ASSOCIATE WATER ENGINEER

Definition:

Under general supervision performs professional civil engineering work of above average difficulty related to water projects; serves as water project engineer; reviews water facility plans and performs related work as required.

Essential Duties and Responsibilities:

The responsibilities and essential duties performed on a frequent and recurring basis by an incumbent include the following:

Reviews plans related to water facilities to include pipelines, wells, reservoirs and pump stations.

Develops plans, estimates, specifications and other contract documents.

Prepares and designs a variety of specialized and complex water engineering projects such as pipelines, walls, reservoirs and pump stations.

Manages water projects as assigned.

Checks and performs complex engineering calculations.

Recommends approval of progress payments and change orders.

Coordinates assigned activities with consultants, engineers, developers, contractors, other City departments and/or outside agencies.

Assists in the preparation of water capital improvement programs.

Prepares requests for proposals and contracts for consulting services.

Establishes technical criteria and standards and makes technical engineering decisions.

Investigates field problems affecting property owners, contractors and maintenance personnel.

Responds to citizen inquires and concerns.

Prepares specialized engineering studies and reports.

Makes oral and written presentations.

Assists in the coordination and administration of water conservation and cross-connection control programs.

Uses a computer and applicable software for various water system calculations, data base updates and a variety of reports.

Drives a vehicle on City business.

Other Duties and Responsibilities:

Performs other projects/tasks as assigned.

Class Characteristics:

Associate Water Engineer is a single incumbent professional engineering class in the Water System Management Division of the Engineering Department. The incumbent has substantial responsibility for the approval of water project plans, the management of assigned projects and the design of a variety of specialized and complex water engineering projects.

Contacts and Relationships:

The Associate Water Engineer has contact with other Engineering Department staff, staff in other City departments, the public, contractors and outside businesses and agencies.

Qualification Guidelines:

The knowledge and abilities which are required to perform the duties and responsibilities of this class are as follows:

Knowledge of:

Civil engineering principles and practices as applied to a municipal water system.

Water system operation principles.

Water quality and cross-connection principles.

Drafting and mapping principles and techniques.

Surveying methods.

Computer applications as they relate to area assigned.

State and federal laws, rules and regulations applicable to area assigned.

English usage, spelling, punctuation and grammar.

Basic principles of supervision.

AND

Ability to:

Prepare plans, specifications and technical reports.

Supervise and physically inspect water facility construction projects/sites.

Apply engineering policies and principles to determine compliance with specifications.

Communicate effectively orally and in writing.

Use independent judgment and initiative.

Establish and maintain effective relationships with those contacted in the course of work.

Use a personal computer and applicable software.

Adhere to multiple deadlines and handle multiple projects.

Organize and conduct independent, professional research and collect, analyze and interpret statistical data.

Train employees as assigned and provide direction as needed.

A typical way to obtain the knowledge and abilities is as follows:

Education:

A Bachelors Degree from an accredited college or university in civil engineering or a related engineering field.

AND

Experience:

Three years of experience involving the design, construction and inspection and of water projects.

Special Requirements:

Valid and appropriate California Drivers License and acceptable driving record at time of appointment and throughout employment in this position.

Possession of a State of California Engineer in Training Certificate.

Must be able to work flexible and extended hours to accommodate City needs.

Other:

Valid and appropriate Water Treatment and/or Distribution Operator Certificates at time of appointment and throughout employment in this position are preferred but not required.

Physical Tasks and Working Conditions Include the Following:

Work is performed indoors in an office environment and outdoors when inspecting water related sites. When work is performed outdoors, there may be exposure to the elements. The incumbent drives a vehicle on City business, stands and walks on level, uneven and/or slippery surfaces, reaches, bends, climbs stairs and inclines, kneels, and crouches. When inspecting water related sites the incumbent may be exposed to construction hazards, equipment and materials to include grease, fumes, dust, machinery and chemicals used in the water industry to include chlorine, ozone and ammonia. Indoor office work requires sitting at a desk or table for periods of time and the use of a computer and screen. The incumbent must be able to meet the physical requirements of the class and have mobility, vision, hearing and dexterity levels appropriate to the duties to be performed.

Fair Labor Standards Act Designation: Exempt.

Revised August 2014
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