VALLECITOS WATER DISTRICT

CAPITAL FACILITIES ENGINEER

DEFINITION

Under general supervision, independently performs technical engineering work related to all District capital facilities; oversees assigned capital facilities projects, including design criteria, selection of materials, and environmental considerations; performs contract administration; performs related duties as required.

CLASS CHARACTERISTICS

This class performs complex technical engineering analysis duties, including proper file management of capital facility records. The incumbent is responsible for overseeing large capital facility projects and contract administration. This class is distinguished from the Capital Facilities Senior Engineer which is responsible for overall management of capital project planning and construction, inspection, and mapping activities.

ESSENTIAL FUNCTIONS

Essential functions include, but are not limited to, the following:

- Coordinates, manages, and monitors the organizational and operational activities for assigned projects independently; responds to District project related inquiries from the public, developers, contractors, engineering professionals, and neighboring agencies;
- Prepares, reviews, and approves designs, plans, and specifications; for the construction of District structures and facilities; assists with other projects as assigned.
- Prepares District Capital Improvement Project budgets assigned by the Senior Engineer for the planning of multiple projects for the upcoming fiscal year.
- Reviews and approves engineering plans, including design criteria and methods of analysis; makes technical recommendations;
- Performs project engineering duties, reviews contracts and improvement plans; provides project direction to staff and consultants; tracks projects and coordinates construction inspection services; reviews and processes requests for payment and change orders; assists engineering staff, customers, developers, and contractors with items needed to start and complete projects;
- Prepares project reports, technical memos, cost estimates, and routine memoranda and correspondence between the District and contractors, developers, public agencies, and other concerned parties;
- Utilizes and helps maintain GIS based water and sewer hydraulic model; performs hydraulic analysis of proposed developments and capital improvements utilizing computer systems and manual calculations; performs sewer loading analysis of proposed developments and capital improvements utilizing computer systems and manual calculations;
- Calculates angles, areas, stationing, traverses, earthwork volume, hydraulic calculations, cost estimates, project budgets, and related mathematical functions for engineering
construction drawings and field surveys; may assist as a member of survey crew;
prepares information, material, and maps for condemnation actions;
- Reads and interprets regulations, contracts, plans and specifications, maps, survey data,
and a variety of other engineering and contract related information; uses computers,
calculators, drafting tools and equipment, reproduction equipment, and a variety of other
engineering and office equipment in performing job duties;
- Represents District in coordination with other utilities, regulatory agencies, governmental
bodies, planning agencies, technical groups, contractors, and the public; provides
support to the Capital Facilities Senior Engineer in making presentations regarding
engineering issues to the Board of Directors;
- Coordinates project activities with other department staff, District personnel, and District
legal representation; provides technical assistance to other departments and District
personnel;
- Operates copiers and a variety of office equipment;
- Performs duties in a professional manner and works well with others or in a team setting;
- Establish and maintain cooperative working relationships with co-workers, outside
agencies, and the public;
- Regular attendance and adherence to prescribed work schedule to conduct job
responsibilities;
- Observes safe work practices and safety methods; performs other duties as assigned.

QUALIFICATIONS GUIDELINES

Knowledge, Skills, and Abilities

Knowledge of:
- Principles, practices, methods, and materials of civil engineering project management
  including mapping, drafting, design and specifications, estimation, and construction as
  related to District systems;
- Engineering mathematics including complex hydraulic calculations;
- Principles and practices of contract administration and data collection and analysis
  methods;
- Surveying principles, practices, and equipment;
- Operation of standard office and engineering equipment including computers,
calculators, reproduction equipment, drafting tools, and related equipment; standard
office practices and procedures;
- AutoCAD computer software.

Ability to:
- Communicate clearly and concisely, both orally and in writing;
- Keep accurate records;
- Read figures quickly and accurately and make mathematical engineering computations;
- Plan, organize, and coordinate multiple engineering and construction projects; meet
critical deadlines;
- Use and care for drafting instruments;
- Perform engineering support work in a variety of work areas; read, interpret, and apply
  field notes to perform drafting assignments;
- Establish and maintain effective working relationships with other employees and those
  contacted in the course of the work;
- Explain and apply policies and procedures;
- Understand and follow verbal and written directions; work independently;
- Operate a computer and use a variety of computer software;
- Manage projects and perform contract administration;
- Analyze information, evaluate alternatives, and make sound recommendations;
- Conduct field surveys.

**Education & Experience**

Any combination of education or experience that would likely provide the necessary knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be: equivalent to graduation from an accredited four year college or university with a degree in civil engineering or a closely related field; and three years of responsible experience in civil engineering, construction contracts administration, or construction inspection.

**Licenses, Certificates, and Special Requirements**

- Possession of a current and valid California Professional Engineer’s license, is required.

**PHYSICAL DEMANDS AND WORK ENVIRONMENT**

The physical demands and work environment described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Employees may be required to wear and/or use personal protective and other safety equipment. 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 frequently required to sit; talk or hear; use hands and fingers to grasp and feel objects, tools, or controls; and reach with hands and arms. Employees are occasionally required to stand, walk, stoop, kneel, crouch, or reach and may occasionally be required to lift to 25 pounds. Specific vision abilities required by this job include close vision and the ability to adjust focus.

Environment: Office environment. Frequently works in or around areas with minor amounts of dust. Some work done on ladders up to 4 feet above ground. Some work done in field setting. Noise level is usually quiet.

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**I have reviewed this Job Description with my Supervisor and agree with its contents.**

______________________________________________________________________  ____________________________________________  ______________
Employee Signature Date

______________________________________________________________________  ____________________________________________  ______________
Supervisor Signature Date

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