

# **Senior Engineer**

## **DEFINITION:**

Working under limited direction of the Engineering Manager, performs, oversees and supervises professional engineering work for planning, permitting, design, inspection, maintenance and completion of District capital projects and operational projects for water and wastewater utility systems and recreation facility improvements. Administers and manages construction projects.

## SUPERVISION RECEIVED AND EXERCISED:

Receives general direction from the Engineering Manager. Exercises independent and direct supervision to contractors and consultants. May provide temporary direction and technical review of the work product of technical and administrative support staff.

## CLASS CHARACTERISTICS:

This is a senior level confidential position in the Engineering Division. This position performs a wide variety of engineering and construction management related duties and functions of varying complexity. Responsible for overseeing and administering multiple complex capital projects from concept to completion. Assignments are general and of a continuing nature, requiring the exercise of independent judgment and initiative in scheduling, assigning, and coordinating work with other operational units, consultants, regulatory bodies, public agencies and contractors.

Must have excellent communication and organizational skills. Works closely with District staff to maintain an in-depth awareness and understanding of District's infrastructure and operational objectives. Supervises, manages, and reviews the work of consultants and contractors and may provide temporary direction and technical review of the work product of technical and administrative staff. Provides support to management. Incumbents work independently, seeking assistance only as new or unusual situations arise. The Senior Engineer receives direction from the Engineering Manager. Duties may require direction from other District staff as applicable.

## EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only):

The following reflects the general duties and responsibilities of this position and should not be considered all-inclusive. Other duties as assigned may occur, as prioritized by the General Manager. Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- 1. Plans, manages, integrates and evaluates project staff and consultants according to project requirements.
- 2. Prepares or directs preparation of planning, design, permitting, environmental studies and construction documents for operational and capital projects. Performs calculations, estimates of time and probable costs of construction.

- 3. Prepares Requests for Proposals, Requests for Pricing, and Contractor Prequalification documents and evaluates and selects consultants and contractors.
- 4. Performs engineering investigations, analyses of facilities and prepares design solution alternatives or directs consultant in this work.
- 5. Manages, prepares, and coordinates with staff the review of contract documents for the District's capital improvement projects for constructability and to achieve goals and objectives of the project.
- 6. Prepares costs estimates, establishes the scope, schedule and budget for construction projects; negotiates and manages construction contracts.
- 7. Directs bidding, award, execution and close-out for capital projects. Represents the District at pre-bid conferences, pre-construction conferences and construction progress meetings.
- Inspects active or completed construction for compliance with District standards, specifications and ordinances; maintains daily log of construction and inspection activities and prepares progress reports; ensures conformance to engineering plans, specifications, prepares change orders, and construction and safety standards.
- 9. Participates in the development and preparation of operating budgets, monitors work activities and expenditures to control costs and monitor performance.
- 10. Supports leadership and works to build a high-performance, customer service-oriented work environment which supports achieving the department's and the District's mission, strategic plan, objectives and values.
- 11. Participates in developing, implementing and evaluating plans, work processes, systems and procedures to achieve District goals, objectives and priorities.
- 12. Performs and/or participates in the District's plan review approvals process for property owner development projects.
- 13. Act as representative and liaison to regulatory agencies, public agencies, property owners and operating departments related to District capital and non-capital projects and activities.
- 14. Attend and participate in public and internal meetings. Make presentations and answer questions at public and internal meetings.

#### MINIMUM QUALIFICATIONS:

Any combination of education and/or experience that provides the required knowledge, skills, and abilities to perform the essential functions of the position. A typical combination includes:

EDUCATION AND EXPERIENCE: Graduation from an accredited four-year college or university with a degree in civil engineering or a closely related field; and

A minimum of five (5) years of increasingly responsible professional engineering project experience in Public Works projects. The Senior Engineer shall have experience as a project manager. Experience in municipal professional public works and/or engineering and supervisory experience is desired.

#### KNOWLEDGE OF:

- Design and construction principles of civil, mechanical, electrical, and structural engineering and surveying as they apply to the design and construction of Public Works projects.
- > Principles and practices of contract management and California Contract codes.

- Modern developments, methods, techniques, literature, and sources of information used in the construction of wide variety of utilities, building, and other Public Works capital projects.
- Principles and practices of construction management, scheduling, and change order resolution as applied to utilities, buildings, and other Public Works projects.
- Applicable laws and regulatory codes related to development and construction of utilities, buildings and other Public Works projects. Knowledge of environmental process requirements, NEPA, CEQA and TRPA.
- > Engineering mathematics, economics and research practices.
- Working knowledge of municipal government, special districts, public utility district issues of concern to developers, property owners, contractors, private engineers, and others when dealing with the District on planning and engineering matters.
- > Principles and practices of customer service.

#### ABILITY TO:

- Make complex computations and review plans and specifications for a wide variety of utilities, buildings, and other Public Works capital projects
- > Ability to plan, design, layout and prepare accurate construction plans.
- > Conduct independent project administration and manage contracted construction firms.
- Identify needs and assignments and exercise sound independent judgment in carrying them out within general policy guidelines.
- Monitor and maintain schedule on individual project tasks, multiple projects, and project and departmental budgets. Organize work, set priorities and set deadlines.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted during the work, including other District personnel, Board of Directors, regulatory agencies, other public agencies, outside consultants and contractors, and general public.
- > Utilize standard engineering, mathematics, economics and research practices.
- Under direction, prepare clear and concise engineering reports, maps, plans, contracts, design drawings, specifications and documentation.
- Proficiently use software platforms as applicable for task(s). Utilize engineering software (CAD, GIS, scheduling, estimating) at a proficient level with the ability to become advanced in any given software.
- > Perform technical research and make detailed analysis.
- Keep accurate records.
- > Be able to follow oral and written directions.
- > Oversee and direct the work of consultants and contractors.

#### LICENSES AND CERTIFICATIONS:

- Valid Class C California or Nevada Driver's License; acceptable driving record at the time of appointment and throughout employment.
- State of California Professional Engineer (PE) in Civil Engineering or ability to obtain reciprocity within 12 months.

Failure to obtain and maintain required licenses/certifications may result in immediate dismissal from position.

## TOOLS AND EQUIPMENT USED:

Personal computer, including word processing, spreadsheet, database, project scheduling, computerized maintenance management system software, geographic information system (GIS) software, computer-aided-design software (desirable), hydraulic modeling (desirable); phone, mobile device, copy machine, and other modern office equipment; motor vehicle.

### PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job in compliance with the American with Disabilities Act (ADA) requirements. Reasonable accommodations, on a case-by-case basis, may be made to enable individuals with disabilities to perform the essential functions.

Work is performed mostly in office setting. Some outdoor work is required in the inspections of various land use developments, construction sites, or District facilities; must be physically able to move about on construction work sites, up and down ladders, and under adverse field conditions. Hand-eye coordination is necessary to operate computers and various pieces of office equipment; use fingers to write or type. While performing the duties of this job, the employee is occasionally required to stand; walk; use hands to finger, handle, feel or operate objects, tools, or controls; and reach with hands and arms. The employee must possess the ability required to sit; climb or balance; stoop, bend, kneel, crouch, or crawl; talk or hear; and smell. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus. The employee will occasionally be required to lift, carry, push, and pull materials and objects weighing up to 50 pounds.

## ENVIRONMENTAL CONDITIONS:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this position.

Employees work mainly in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures. Employees occasionally work in outside weather conditions exposed to hot, cold, wet and/or humid conditions. The employee occasionally works around moving mechanical parts, and in high, precarious places and is occasionally exposed to fumes or airborne particles, toxic, or caustic chemicals, risk of electrical shock, and vibration.