



December, 2017

FINAL DRAFT

SENIOR CIVIL ENGINEER Salary Grade 540

DEFINITION

Under general direction, plans, directs and supervises the work of assigned staff and performs complex civil engineering work related to the planning, design, construction, and maintenance of District projects and programs; manages complex engineering projects and programs; provides professional assistance and technical advice to District officials and management; coordinates projects with contractors, other departments, and other agencies; administers professional services and construction contracts; evaluates requests for changes or additional work; performs other duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from the Technical Services Director - District Engineer. Exercises direct supervision over professional and technical staff.

CLASS CHARACTERISTICS

This is the full supervisory, professional level in the engineering class series that exercises independent judgment on diverse and specialized civil engineering functions with significant accountability and ongoing decision-making responsibilities associated with the work; incumbents at this level must possess registration as a Professional Civil Engineer. The incumbent organizes and oversees day-to-day engineering functions including capital program and project management and is responsible for providing professional-level support to the Technical Services Director - District Engineer in a variety of areas. Performance of the work requires the use of considerable independence, initiative, and discretion within established guidelines, and an extensive professional background, as well as skills in coordinating work with other District departments, contractors, regulatory bodies and public agencies. This class is distinguished from the higher-level class of Technical Services Director – District Engineer in that the latter has management authority for planning, organizing, and directing the full scope of activities of the department.

EXAMPLES OF DUTIES (Illustrative Only)

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.

- Plans, organizes, assigns, supervises, and reviews the work of engineering professional and technical support staff; trains staff in work procedures; provides policy guidance and interpretation to staff; evaluates employee performance and works with employees to correct deficiencies; recommends and implements disciplinary procedures; assists in selection and promotion.
- Assists with the development and implementation of the District's Capital Improvement Program (CIP); prepares and directs the preparation of designs, specifications, plans, estimates, and reports for projects and the development and modification of District infrastructure; including wastewater treatment facilities, recycled water lines, pumping stations, sewer lines, manholes, and other public facilities.

- Researches project design requirements, performs calculations, prepares estimates of time and material costs, and determines construction sequencing and related project logistics; monitors and supervises design and construction, including reviewing plans, specifications, estimates, and calculations and gives technical advice on corrective action.
- Conducts advanced engineering and related studies; evaluates alternatives, makes recommendations, and presents reports to the Technical Services Director-District Engineer, the General Manager, and the Board of Directors.
- Serves as project manager on complex projects; defines project scope; selects consultants, and negotiates contracts, amendments, and change orders; prepares and monitors project schedules; monitors, reviews, and coordinates project design and construction; evaluates consultants' and contractors' requests for extra work; enforces terms of contracts, processing of payments, and change orders; coordinates projects with businesses, utilities, and other District departments; conducts field and construction site inspections and resolves contract disputes.
- Investigates or delegates the investigation of field problems affecting the public, property owners, contractors, and maintenance operations; collects the necessary data or assigns the collection of data to technical personnel; develops recommendations and meets with the appropriate parties to discuss and implement recommendations.
- Performs and/or coordinates advanced planning studies, including update of the District's Master Plan, and makes recommendations regarding future public infrastructure needs.
- Prepares a variety of written materials, including staff reports, engineering reports, and grant applications for engineering projects; may conduct studies and confer with the public.
- Serves as the District's, or department's representative with a variety of committees, commissions, businesses, and community organizations; attends meetings and promotes department and District activities and objectives; maintains liaison with other regulatory and public and private entities; fosters collaborative relationships to the mutual benefit of the District and these organizations.
- Confers with and provides information to property owners, contractors, developers, engineers, architects, and the general public regarding conformance to standards, plans, specifications, and codes; explains codes, requirements, and procedures and evaluates alternatives.
- Monitors changes in laws and regulations and technology that may have an impact on engineering operations; recommends policy and procedures changes as required.
- Performs project development for complex projects including finalizing scope of projects, preparing bid summaries, conducting bid openings, preparing project budgets, and preparing cost estimates.
- Prepares engineering documents, including agreements, maps, legal descriptions, resolutions, and ordinances.
- Performs other duties as assigned.

QUALIFICATIONS

Knowledge of:

- Principles, practices, procedures, and standards related to District engineering infrastructure development, construction and maintenance.
- Principles and practices of employee supervision, including work planning, assignment, review and evaluation, and the training of staff in work procedures.
- Principles and practices of civil engineering.
- Principles and practices of cost estimation and public agency contract administration.
- Principles and practices of project management.
- Methods and techniques of developing engineering project scopes of work, specifications, drawings and related technical documentation.
- Practices related to surveying, including reviewing and preparing maps and legal descriptions.
- Applicable laws, codes, and regulations and engineering standard practices.

- Techniques for effectively representing the District in contacts with governmental agencies, community groups, various business, professional, educational, and regulatory organizations and with property owners, developers, contractors, and the public.
- Practices of researching engineering and design issues, evaluating alternatives, making sound recommendations, and preparing and presenting effective staff reports.
- Modern office practices, methods, and computer equipment and specialized applications related to the work.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.

Ability to:

- Select and supervise staff; provide training and development opportunities; ensure work is performed effectively and evaluate performance in an objective manner.
- Effectively provide staff leadership and work direction.
- Monitor and manage capital engineering program area activities, goals, and objectives, and evaluate effectiveness.
- Develop and review engineering plans and designs for capital program projects.
- Develop and administer contracts for professional services and construction in a public agency setting.
- Organize work of staff and self; set priorities and meet critical deadlines.
- Prepare and review budgets and cost estimates.
- Write technical reports and review plans, specifications, estimates, and engineering calculations.
- Effectively represent the department and the District in meetings with governmental agencies, community groups, and various business, professional, educational, regulatory, and legislative organizations and in meetings with individuals.
- Operate modern office equipment, including computer equipment and specialized software application programs.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines.
- Establish and maintain effective working relationships with those contacted in the course of the work.

Education and Experience:

Any combination of training and experience, which would provide the required knowledge, skills, and abilities, is qualifying. A typical way to obtain the required qualifications would be:

Education

Equivalent to a bachelor's degree from an accredited four-year college or university with major coursework in civil engineering or related field.

Experience

Eight (8) years of progressively responsible professional engineering design, plan review, and project management experience.

Licenses and Certifications:

- Must possess registration as a Professional Engineer as issued by the State of California.
- Must possess valid California Class C Driver's License and maintain a satisfactory driving record.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; mobility to visit and inspect various construction sites; to stand for long periods of time and work on uneven surfaces; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification bend, stoop, kneel, reach, and climb to perform work and inspect work sites. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds, or heavier weights with the use of proper equipment and assistance from other staff.

ENVIRONMENTAL CONDITIONS

Employees work in an office environment with moderate noise levels, controlled temperature conditions and no direct exposure to hazardous physical substances. When working in the field environment, employees are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspaces, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.