# SENIOR CIVIL ENGINEER

Approved: July 2016 FLSA: Exempt Unit: AFSCME



### **Definition**

Under general direction, manages the activities of an assigned Section of the Engineering Division; plans, schedules, assigns, and reviews the work of professional engineering staff; serves as project manager for complex professional engineering activities including environmental program planning and compliance, design, construction, land development engineering, utilities, water resources engineering and other programs; ensures that functions meet all applicable laws, regulations, and City policies related to the City's Capital Improvement Program (CIP), land development and water utility infrastructure; provides complex staff assistance to departmental management staff in areas of expertise; and performs related work as required.

# Supervision received and exercised

Receives general direction from assigned management staff. Exercises direct supervision over assigned professional and technical staff.

#### Class characteristics

This is the full supervisory-level class in the professional engineering series. Incumbents are responsible for managing an assigned Section of the Engineering Division, including planning, organizing, supervising, reviewing, and evaluating the work of professional engineering staff as well as providing professional-level support to assigned management staff in a variety of areas of expertise. Performance of the work requires the use of considerable independence, initiative and discretion within established guidelines. This class is distinguished from the Assistant Public Works Director in that the latter has managerial responsibility for all functions and activities within Engineering and Facilities.

# **Examples of typical job functions (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 professional engineering staff in the Engineering
  Division; trains staff in work procedures; evaluates employee performance, counsels employees, and effectively
  recommends initial disciplinary action; assists in selection and promotion.
- Monitors activities of the work unit; recommends improvements and modifications and prepares various reports
  on activities and projects; recommends and assists in the implementation of goals and objectives; implements
  policies and procedures.
- Determines and recommends staffing needs for assigned activities and projects; participates in the annual budget preparation; prepares detailed cost estimates with appropriate justifications, as required; maintains a variety of records and prepares routine reports of work performance.
- Oversees the development of consultant requests for proposal for professional and/or construction services and
  the advertising and bid processes; evaluates proposals and recommends project award; negotiates and
  administers contracts after award; ensures contractor compliance with City standards and specifications, time
  and budget estimates; analyzes and resolves complex problems that may arise; recommends and approves
  field changes as required.
- Conducts Capital Improvement Program (CIP) planning activities; provides oversight and input into conceptual
  designs of engineering projects; investigates and resolves problems with scope of work or cost issues of major
  facility upgrade and replacement projects; ensures that projects are completed on time and within budget.
- Develops, directs, and reviews standards for design and construction of public works facilities, including streets, storm drains, water systems, City buildings and recreational facilities.
- Administers, reviews, and fulfills environmental impact analysis for City projects and private development.
- Participates in and oversees the planning, operation, and management of the City's utilities, including water, storm and landfill; participates in the development of policies related to the City's utilities; ensures that the operation and maintenance of utility facilities are compliant with regulations and requirements.
- Manages land development activities, including the review and approval of subdivision maps, grading/drainage
  and erosion control plans, Storm Water Management and developer public improvement plans; ensures
  compliance with ordinances, regulations and requirements; oversees the issuance of encroachment permits for
  construction work within the City's public right of way.
- Analyzes civil engineering plan design, specifications, and consultant and staff comments in accordance with design requirements and municipal and intergovernmental standards and regulations; recommends approval or additional engineering conditions and changes.

- Meets and confers with contractors, engineers, developers, architects, a variety of outside agencies, and the
  general public in acquiring information and coordinating engineering matters; provides information regarding
  City development requirements.
- Prepares, or oversees the preparation of, development agreements, fee schedules, cost estimates and reimbursements.
- Responds to and resolves various issues with residents, other department representatives, and outside agencies in a professional manner; identifies and reports findings and takes necessary corrective action.
- Serves as a liaison for an assigned functional area with other City departments, divisions and outside agencies; attends and participates in meetings as necessary; participates on a variety of boards, commissions, committees and task forces.
- Attends and participates in meetings, conferences, workshops, training sessions and professional groups;
   reviews publications and audio-visual materials to become and remain current on principles, practices, trends, and new developments and innovations in assigned work areas.
- Conducts a variety of organizational studies, investigations and operational studies; assists in developing policies and procedures such as procedure guidelines, design standards, and standard plans and specifications while ensuring that operation and maintenance, financial, regulatory and legal requirements are met.
- Develops and reviews staff reports related to engineering activities and services; may present information to the City Council and various commissions, committees and boards; performs a variety of public relations and outreach work related to assigned activities.
- Performs other duties as assigned.

#### **Qualifications**

#### Knowledge of

- Principles and practices of employee supervision, including work planning, assignment, review and evaluation, discipline, and the training of staff in work procedures.
- Basic principles and practices of budget development, administration and accountability.
- Principles and practices of civil engineering as applied to the planning, design, cost estimating, construction, installation, and inspection of a wide variety of municipal facilities and miscellaneous buildings, structures and systems, including streets, parks and utilities.
- Civil engineering principles, concepts, standards, and practices associated with public works programs and private development projects.
- Principles and practices of environmental impact assessment and related regulatory processes.
- Methods, materials, and techniques used in the construction of public works projects.
- Contract management practices in a public agency setting.
- Applicable Federal, State and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Practices of researching engineering and design issues, evaluating alternatives, making sound recommendations, and preparing and presenting effective staff reports.
- Recent and on-going developments, current literature, and sources of information related to the operations of the assigned functional area.
- Safety principles and practices.
- Record keeping principles and procedures.
- Modern office practices, and methods, including computers and software programs relevant to the work performed.
- English usage, grammar, spelling, vocabulary and punctuation.
- Techniques for effectively representing the City in contacts with governmental agencies, community groups, various business, professional, educational, and regulatory organizations and with property owners, developers, contractors and the public.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors and City staff.

# Ability to

- Develop and implement goals, objectives, practices, policies, procedures and work standards.
- Supervise, train, plan, organize, schedule, assign, review, and evaluate the work of staff.
- Conduct complex civil engineering research projects, evaluate alternatives, make sound recommendations and prepare effective technical reports.
- Analyze and interpret engineering plans and specifications in accordance with design requirements and applicable standards and regulations.
- Manage and monitor complex and high profile projects on-time and within budget.

- Research, analyze, and evaluate new service delivery methods, procedures and techniques.
- Prepare and present clear, concise, and logical written and oral reports, correspondence, policies, procedures, legal descriptions and other written materials.
- Analyze, interpret, summarize and present administrative and technical information and data in an effective manner.
- Interpret, apply, explain and ensure compliance with Federal, State and local policies, procedures, laws and regulations, technical written material, and City engineering policies and procedures.
- Conduct complex research projects, evaluate alternatives, make sound recommendations, and prepare effective technical staff reports.
- Effectively represent the department and the City in meetings with governmental agencies, community groups and various businesses, professional, and regulatory organizations and in meetings with individuals.
- Establish and maintain a variety of filing, record-keeping and tracking systems.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities and meet critical time deadlines.
- Operate modern office equipment including computer equipment and software programs relevant to the work performed.
- Use English effectively to communicate in person, over the telephone and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

# **Education and experience**

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

- Equivalent to graduation from an accredited four-year college or university with major coursework in civil engineering or a related engineering field.
- Five (5) years of professional engineering design, plan review, and project administration experience, including two (2) years in a supervisory or lead capacity.

#### Licenses and certifications

- Possession of, or ability to obtain, a valid California driver's license by time of appointment.
- Possession of a Registered Professional Civil Engineer license issued by the State of California.

# **Physical demands**

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer, to inspect City development sites, including traversing uneven terrain, climbing ladders, stairs, and other temporary or construction access points, to operate a motor vehicle, and to visit various City and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups and over the telephone. This is primarily a sedentary office classification although standing and walking between work areas and to conduct inspections may be required. 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 occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 25 pounds.

#### **Environmental elements**

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may work in the field and occasionally be exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, 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.