

SENIOR CIVIL ENGINEER

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

DEFINITION

Under general direction from the City Engineer, or Principal Civil Engineer, to assign, review and participate in the work of staff responsible for the design and construction of public works projects including Streets, Signals, Traffic Control Systems, Traffic Management, Parks, City Facilities, and City Water/Wastewater Systems; to serve as project manager on engineering project design and implementation; to ensure work quality and adherence to established policies and procedures; and to provide complex assistance to the City Engineer and/or Principal Civil Engineer; and to perform related duties as assigned.

DISTINGUISHING CHARACTERISTICS

The Senior Civil Engineer is the advanced level within the professional Engineering Series, which may serve as the lead over a section such as Land Development or Capital Improvement Projects within the Public Works Engineering Division. This class is distinguished from the higher level Principal Civil Engineer by the responsibility of the later class to serve as a supervisor over multiple sections, or over Traffic Engineering. The Senior Civil Engineer is further distinguished from the Associate Civil Engineer by the responsibility for a functional area of the Engineering Division (e.g. Land Development or Capital Improvement Projects) and the management of work and multiple projects through assigned team members. Incumbents assigned to this class may exercise functional and technical supervision over assigned staff, and oversight of the projects and activities associated with the area of assignment. The application of professional knowledge and skills is required in the research, analysis, planning, and implementation of effective engineering programs, and requires frequent use of independent judgment. The work frequently requires attending meetings and hearings, and making presentations to City Council, business and community groups. Assigned duties and responsibilities will require work to be performed during and outside of normal office hours, weekends, and holidays.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from the City Engineer, and/or Principal Civil Engineer.

May exercise functional and technical supervision over professional and technical staff, as assigned.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS--*Essential responsibilities and duties may include, but are not limited to, the following:*

Essential Functions:

1. Plans, prioritizes, assigns, supervises, reviews and participates in the work of staff and/or consultants responsible for providing professional engineering services in the design and

CITY OF RIALTO
Senior Civil Engineer
(Continued)

construction of public works projects including Streets, Signals, Traffic Control Systems, Traffic Management, Parks, City Facilities, and City Water/Wastewater Systems for assigned section.

2. Assists in establishing schedules and methods for providing engineering services in conjunction with City Engineer; identifies resource needs; reviews needs with appropriate management staff; allocates resources accordingly.
3. Prepares and/or reviews professional civil engineering designs for assigned projects utilizing a variety of computer software programs; performs detailed calculations and computations; prepares and/or reviews the adequacy and accuracy of computations, preliminary layouts and design work from field and survey data.
4. Reviews and approves changes to approved plans and specifications; processes a variety of permits.
5. Exercises professional engineering judgment in accordance with currently accepted practice of civil engineering and appropriate laws and codes.
6. Serves as project manager on complex engineering studies and projects; administers construction and professional services contracts; monitors budget, inspects work in progress and conducts final inspections to accept completed work; ensures compliance with contractual obligations; reviews and approves change orders; approves progress and final payments; ensures compliance with applicable codes and regulations; provides resolutions to construction problems.
7. Oversees the bidding process for capital projects including receiving applications, awarding contracts and issuing notices as assigned.
8. Reviews land development plans, subdivision maps and grading plans for compliance with applicable laws, codes and regulations as assigned.
9. Assists construction inspectors in the interpretation of plans, specifications and other contract documents as assigned.
10. Participates in the selection of technical engineering staff; provides or coordinates staff training; works with employees to correct deficiencies; provides input to employee performance evaluations; recommends disciplinary actions.
11. Participates in the preparation and administration of assigned sections or projects of the engineering program budget; submits budget recommendations; monitors expenditures.
12. Prepares engineering specifications, costs and quantity estimates for utility related projects; obtains required easements or permits for water and sewer system construction and utility structures as assigned.
13. Performs field reviews of proposed construction site, obtain measurements and create preliminary plans for construction as assigned.

CITY OF RIALTO
Senior Civil Engineer
(Continued)

14. Plans and supervises the collection, analysis and reporting of various traffic engineering studies.
15. Attends and participates in community meetings regarding the impact of proposed construction as assigned; responds to citizen complaints.
16. Provides staff support to the City Engineer; attends meetings of a variety of boards, commissions, and committees; prepares and presents staff reports and other necessary correspondence.
17. Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of civil engineering.
18. Performs related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:

- Operations, services and activities of a public works engineering program including Streets, Signals, Traffic Control Systems, Traffic Management, Parks, City Facilities, and City Water/Wastewater Systems.
- Principles and practices in leading a section of the Engineering Division and multiple large and complex engineering projects.
- Methods and techniques of engineering project management.
- Principles of lead supervision and training.
- Principles and practices of construction surveying.
- Modern and complex principles and practices of engineering design and construction.
- Principles and practices of civil and traffic engineering design.
- Principles and practices of project and construction management.
- Principles and practices of contract administration.
- Terminology, methods, practices and techniques used in technical civil engineering report preparation.
- Principles and practices of budget preparation and control.
- Principles of mathematics as applied to engineering work.
- Recent developments, current literature and sources of information regarding civil engineering.
- Pertinent Federal, State and local laws, codes and regulations.

Ability to:

- Perform and lead others in performing professional engineering duties in support of a comprehensive public works engineering and construction program including Streets, Signals, Traffic Control Systems, Traffic Management, Parks, City Facilities, and City Water/Wastewater Systems.
- Manage multiple large and complex engineering projects.
- Lead, organize, and review the work of lower level staff assigned to the Section.

CITY OF RIALTO
Senior Civil Engineer
(Continued)

- Ensure project compliance with appropriate Federal, State and local rules, laws and regulations.
- Coordinate phases of construction projects and prepare progress reports.
- Analyze problems, identify alternative solutions, project consequences of proposed actions, and implement recommendations in support of goals.
- Conduct comprehensive engineering studies and develop appropriate recommendations.
- Perform technical research and solve complex engineering problems.
- Prepare and maintain technical civil engineering records and prepare comprehensive reports.
- Compile rough technical data and prepare statistical and narrative reports from field studies.
- Develop, review and modify civil engineering plans, designs, and specifications.
- Exercise professional engineering judgment to achieve results consistent with objectives.
- Interpret and explain City policies and procedures.
- Prepare clear and concise reports independently.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

Experience and Training Guidelines

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

Experience:

Four years of increasingly responsible civil engineering experience at the Associate (journey level) including two years of project management responsibility.

Training:

A Bachelor's degree from an accredited college or university with major course work in civil or traffic engineering or a related field.

License or Certificate

Possession of registration as a Professional Engineer in the State of California with entitlement to practice land surveying.

Possession of, or ability to obtain, an appropriate, valid driver's license and the ability to maintain insurability under the City's vehicle insurance program.

WORKING CONDITIONS

Environmental Conditions:

The work environment characteristics described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

CITY OF RIALTO
Senior Civil Engineer
(Continued)

The employee works under typical office conditions with exposure to computer screens, and the noise level is usually quiet. The position may occasionally be in the field on construction sites where there will be limited exposure to noise, dust, grease, smoke, fumes, and traffic; and/or exposure to inclement weather conditions including heat, cold, and rain.

Physical Conditions:

Essential functions may require maintaining physical condition necessary for sitting for prolonged periods of time and operating motorized vehicles. The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands:

While performing the duties of this job, the employee is regularly required to sit, walk, and stand; talk and hear; use hands to finger, handle, feel, or operate objects, tools, or controls; reach with hands and arms; perform repetitive movements of hands or wrists; climb or balance on ladders or stairs; stoop, kneel, and bend at the waist; crouch or crawl; and smell. The employee is occasionally required to lift up to 25 pounds unaided.

Specific vision abilities required for this job include close vision, distance vision, use of both eyes, depth perception, color vision, and the ability to adjust focus.

Mental Demands:

While performing the duties of this class, an employee uses written and oral communication skills; reads and interprets data, information, and documents; analyzes and solves problems; uses math, and mathematical reasoning; observes and interprets people, and situations; learns and applies new information and skills; performs highly detailed work; deals with changing deadlines, constant interruptions, and multiple concurrent tasks; and interacts with others encountered in the course of work.

CAREER PROGRESSION

FROM: Senior Civil Engineer

TO: Principal Civil Engineer

Revised 5/19/20