FLSA Exemption Status: Exempt

# ASSOCIATE CIVIL ENGINEER

Group: RMMA

DOT Participant: No

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

## **DEFINITION**

Under general supervision, to perform journey-level engineering duties in 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 a project manager on engineering project designs and implementation; to ensure work quality and adherence to established policies and procedures; and to provide complex assistance to the City Engineer; and to perform related duties assigned.

#### DISTINGUISHING CHARACTERISTICS

The Associate Civil Engineer is the intermediate/journey level within the professional Engineering Series. This class is distinguished from the higher level Senior Civil Engineer by the responsibility of the later class to serve as a lead over a functional area of the Engineering Division (e.g. Land Development or Capital Improvement Projects), the management of work and multiple projects through assigned team members, and the ability to provide functional and technical supervision over assigned staff. Incumbents assigned to the Associate level are experienced professional Engineers who are expected to perform with a high degree of independence in preparing designs and in fully managing mid-size projects, or in managing large and complex projects as part of a team. The application of professional knowledge and skills is required in the research, analysis, planning, and implementation of effective engineering designs and project management work, and requires frequent use of independent judgment. The work may require occasional attendance at meetings and hearings, and in making presentations to City Council, business and community groups.

# SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the City Engineer and/or Principal Civil Engineer; and/or receives functional and technical supervision from the Senior Civil Engineer, as assigned.

May exercise technical direction with lower level professional and technical staff.

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

#### **Essential Functions:**

1. Performs journey-level professional and complex engineering services in the design and construction of mid-size public works projects, or large and complex projects as part of a team, including Streets, Signals, Traffic Control Systems, Traffic Management, Parks, City Facilities, and City Water/Wastewater Systems for assigned section.

- 2. 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.
- 3. Reviews and approves changes to approved plans and specifications; processes a variety of permits.
- 4. Exercises professional engineering judgment in accordance with current accepted practices of civil engineering and appropriate laws and codes.
- 5. Serves as a project manager on complex small to mid-size, or aspects of large engineering studies and projects as part of a team; administers construction and professional services contracts; monitors budgets, 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.
- 6. Oversees the bidding process for assigned capital projects including receiving applications, awarding contracts and issuing notices.
- 7. Reviews land development plans, subdivision maps, and grading plans for compliance with applicable laws, codes, and regulations, as assigned.
- 8. Assists construction inspectors in the interpretation of plans, specifications and other contract documents.
- 9. Provides or coordinates staff training; works with employees to improve knowledge and skills; provides input to performance evaluation and discipline.
- 10. Participates in the preparation and administration of assigned project budgets; submits budget recommendations; monitors expenditures.
- 11. Prepares engineering specifications, costs and quantity estimates for assigned projects; obtain required easements or permits for water, sewer system, or utility structures construction.
- 12. Performs field reviews of proposed construction site; obtains measurements and creates preliminary construction plans.
- 14. Plans and coordinates the collection, analysis and reporting of various traffic engineering studies.
- 15. Attends and participates in community meetings regarding the impact of proposed construction; responds to citizen complaints and revises plans accordingly.
- 16. Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of civil and/or traffic engineering.

17. 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 of construction surveying.
- Modern and complex principles and practices of engineering design and construction.
- Principles and practices of civil 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.
- Advanced 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 professional engineering duties in support of a comprehensive public works engineering and construction program including streets, traffic, water and utilities.
- Manage small, mid-size, or aspects of large and complex engineering projects.
- Assist in leading and reviewing the work of lower level staff.
- Coordinate private land development projects.
- Prepare conditions of approval.
- Prepare professional staff reports.
- Prepare request for proposals and requests for bids and evaluate proposals.
- 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.
- 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:**

Two years of increasingly responsible professional civil engineering experience at the Assistant (entry level) including one year of project management responsibility.

# **Training:**

Equivalent to a Bachelors' 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, or ability to obtain an Engineer-In-Training (EIT) Certification.

Possession of, or ability to obtain, registration as a Professional Engineer in the State of California is highly desirable.

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.

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: Associate Civil Engineer

TO: Senior Civil Engineer

Revised 5/19/20