City Council Reso. No. 20-177 Bargaining Unit: Professional

FLSA: Exempt

#### SENIOR CIVIL ENGINEER

## Job Summary:

Under general direction, performs advanced professional civil engineering tasks with minimal supervision such as performing complex and technical engineering plan and systems reviews; provides project leadership and technical guidance to engineering staff, consultants, work groups and/or other staff.

## **Essential Duties and Responsibilities**:

(These functions are representative and may not be present in all positions in the class. Management reserves the right to add, modify, change or rescind related duties and work assignments.)

- 1. Provides leadership and technical oversight to other engineers. May also assist in the supervision of section staff and activities, including budget development/monitoring and employee performance assessment.
- 2. Performs highly advanced technical reviews of plans, specifications studies, and reports for the construction, alteration and/or maintenance of roads, storm drainage systems, sidewalks, bikeways, traffic intersections, signing/striping, traffic signalization, or other related projects.
- 3. Administers and manages multiple construction and design contracts for various capital improvement projects.
- 4. Prepares and/or reviews the computation of engineering calculations for various construction design features in order to detect potential problems and determine appropriate solutions.
- 5. Prepares and monitors project budgets and expenditures.
- 6. Prepares City ordinances, resolutions and engineering manuals.
- 7. Reviews public and private improvement plans such as street and capital improvement plans for compliance with City ordinances and for overall integrity.
- 8. Processes final subdivision maps, including lot line adjustments and lot mergers.
- 9. Directs or prepares final project reports and technical advisory reports. Monitors and provides recommendations on plan check processing fees.
- 10. Prepares cost estimates and develops engineering plan and design criteria. Prepares contract documents, proposal specifications and verifies plans and specifications for accuracy.
- 11. Responds to telephone and in-person inquiries from developers, builders, contractors, and other individuals as needed.
- 12. Provides engineering assistance to citizen committees and commissions. Provides technical assistance to other agencies or departments.
- 13. Prepares clear and concise Staff Reports and makes presentations (i.e. using powerpoint or other software) to City Council, Committees, and other groups when required.
- 14. Performs related duties as required.

# **Qualification Guidelines**:

A typical way to obtain the requisite qualifications to perform the duties of this class is as follows:

City of Carson Senior Civil Engineer

## **Education and Experience:**

Bachelor's degree in Civil Engineering or related field. Five (5) years of progressively responsible professional engineering experience.

#### Licenses and/or Certificates:

Possession of a valid California Class "C" driver's license and professional registration as a Civil Engineer in the State of California is required. Employees in this classification will be enrolled in the Department of Motor Vehicles (DMV) Government Employer Pull Notice Program which confirms possession of a valid driver's license and reflects driving record.

#### Knowledge of:

- Design principles, construction techniques, scheduling, phasing and contract administration of public works projects.
- Methods of working in field conditions.
- Safety practices.
- Government processes and regulations.
- Project management techniques.
- Computer aided design.

### Skill and Ability to:

- Design and construction of complex major public works facilities.
- Read, interpret and check engineering drawings and designs, including specifications and cost estimates.
- Prepare calculations to support engineering designs in accordance with applicable codes.
- Identify the need for change orders and evaluate the financial status of projects.
- Prepare traffic control and construction phasing plans.
- Prepare recovery schedules to ensure completion of projects on time.
- Prepare clear and concise written and oral reports, including recommendations.
- Interpret and apply policies and regulations.
- Make guick and sound business decisions.
- Provide effective customer service.
- Coordinate, manage, strategize, and/or correlate data and information.
- Evaluate, audit, and/or assess data and information using established criteria.
- Function in a supervisory/managerial capacity for a group of workers.
- Provide guidance, assistance, and/or interpretation to others on how to apply procedures and standards to specific situations.
- Utilize consulting and advisory data and information, as well as reference, descriptive and/or design data and information such as engineering reports, building plans, contracts, invoices, statements, budgets, plans, specifications, requests for proposals, cost estimates, legal documents, ordinances, permits, bond documents, Council reports, non-routine correspondence, training materials, operating manuals, and engineering textbooks.
- Communicate orally and in writing with City personnel, attorneys, developers, property owners, business owners, consultants, engineers, contractors, accountants, appraisers, planners, the general public, and other city, state, county, or federal personnel.
- Apply advanced mathematical concepts and perform a full rage of engineering calculations.

- Apply principles of motivation, incentive, and leadership. Exercise independent judgment to apply facts and principles for developing approaches and techniques to problem resolution.
- Exercise the judgment, decisiveness and creativity required in situations involving the evaluation of information against sensory, judgmental, or subjective criteria, as opposed to that which is clearly measurable or verifiable.

### **Physical Requirements and Working Conditions:**

Employee accommodations for physical or mental disabilities will be considered on a case-bycase basis. Positions in this class normally:

- Required to use hands for manipulation, handling or feeling.
- · Required to reach with hands and arms.
- Required to talk and hear.
- Required to stand, walk, sit, stoop, kneel, or crouch.
- Specific vision abilities required by this job include ability to adjust focus.
- May be required to work at a video display terminal for prolonged periods.