

## CITY OF COVINA

### ASSISTANT CIVIL ENGINEER

*Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications **may not include all** duties performed by individuals within a classification. In addition, specifications are intended to outline the **minimum** qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.*

#### **DEFINITION:**

Under immediate supervision, learns to perform professional engineering work in the design, evaluation and construction of streets, traffic controls, landscaping, parks, storm drains, sewer, water, and other public works projects; performs other related duties as required.

#### **DISTINGUISHING CHARACTERISTICS:**

The **Assistant Civil Engineer** is the entry-level class in the professional civil engineering series that allows the incumbent to develop journey level knowledge and abilities. Initially, under immediate supervision, incumbents perform a broad range of more routine assignments within an established procedural framework where there are minimal consequences of error, including a wide variety of less complex engineering tasks.

#### **SUPERVISION RECEIVED/EXERCISED:**

Receives immediate supervision from higher-level management staff. May exercise technical and functional supervision over lower level public works and office support staff.

#### **ESSENTIAL FUNCTIONS:** *(include but are not limited to the following)*

- Assists in the review of project plan specifications and confers with other professional staff concerning plan preparation, acceptance testing, evaluation of field conditions, design changes, and reports.
- Updates standard engineering drawings in residential, commercial and development areas using AutoCad or similar computer software; drafts detailed dimensional drawings such as those needed for street, water, sewer, drainage, and other plans and projects.
- Advises and assists the public on construction codes and standards, and acquiring required permits; assists with consultants, contractors, builders and the public during the design and construction stages with City requirements; assists developers, contractors, and the general public in plan checking to determine if they meet City requirements.
- Revises basic City maps and records; checks engineering design plans on street improvements, curbs, gutters, sewers, and storm drains for conformance to City standards; checks specifications and reviews estimates and supporting data for accuracy and conformance with City policies and standards.
- Reviews and checks subdivision tract maps and contingent engineering plans to ensure the proper inclusion of necessary public works in conformance with City policies and standards with inspection and planning personnel and prepares reports on proposed projects.

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- Plans and performs traffic conditions studies; analyzes data obtained from traffic surveys to determine possible remedial action; conducts on and off-street parking surveys and analyzes data obtained for proper parking arrangements; prepares traffic flow diagrams; prepares plans for channelization of traffic on the streets; prepares intersection accident flow diagrams for study in connection with remedial traffic design.
- Establishes positive working relationships with representatives of community-based organizations, other agencies, City management and staff, and the public.

### **PHYSICAL, MENTAL AND ENVIRONMENTAL WORKING CONDITIONS:**

Position requires sitting, standing, walking on level and slippery surfaces, reaching, twisting, turning, kneeling, bending, stooping, squatting, crouching, grasping, crawling, and making repetitive hand movement in the performance of daily duties. The position also requires both near and far vision when inspecting work and operating assigned equipment, and acute hearing is required when providing phone and face-to-face service. The need to lift, carry, pull and push tools, supplies and other equipment weighing up to 25 pounds is also required. Additionally, the incumbent in this position works outdoors in all weather conditions, including wet, hot and cold.

Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

**QUALIFICATIONS:** *(The following are minimal qualifications necessary for entry into the classification.)*

#### **Education and/or Experience:**

Any combination of education and experience that has provided the knowledge, skills and abilities necessary for an **Assistant Civil Engineer**. A typical way of obtaining the required qualifications is to possess the equivalent of one year of professional engineering experience in civil engineering, traffic engineering, surveying, or related areas, and a bachelor's degree in civil engineering or a related field. Possession of a valid certificate of registration as a Civil Engineer can be substituted for a bachelor's degree.

#### **License/Certificate:**

Possession of, or ability to obtain, a valid Class C California driver's license. Possession of a valid certificate of registration as an Engineer-in-Training, issued by the California State Board of Registration for Civil and Professional Engineers is also required.

**KNOWLEDGE/ABILITIES/SKILLS:** *(The following are a representative sample of the KAS's necessary to perform essential duties of the position.)*

#### **Knowledge of:**

The principles of civil engineering as used in public works and related construction and development projects; modern principles and practices of Capital Improvement Project construction project management; principles, procedures, practices, and standards of municipal engineering; engineering mathematics and sciences; the principles and practices of engineering drafting and the sources of engineering information; engineering mechanics and topographic and

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construction surveying methods and procedures; applicable federal, state and local laws, codes and regulations; standard office procedures, practices and equipment; methods and techniques for record keeping and report preparation and writing; proper English, spelling and grammar; occupational hazards and standard safety practices.

### **Ability to:**

Apply engineering principles to the solution of specific problems; learn and apply established principles and practices of municipal civil engineering; review plans and documents for conformance with regulations; prepare plans and specifications neatly and accurately; make accurate engineering computations; perform construction inspections as needed; prepare and maintain accurate records and reports; understand, interpret, and prepare legal descriptions, engineering reports and maps; read and utilize field survey notes in the preparation of maps and plans; plan and conduct traffic surveys, field investigations and site analysis; use drafting instruments, and computer programs such as AutoCad; read, interpret and record data accurately; organize, prioritize and follow-up on work assignments; work independently and as part of a team; make sound decisions within established guidelines; analyze a complex issue, and develop and implement an appropriate response; follow written and oral directions; observe safety principles and work in a safe manner; communicate clearly and concisely, both orally and in writing; establish and maintain effective working relationships.

### **Skill to:**

Operate an office computer and a variety of word processing, design and engineering software applications; safely and effectively operate engineering tools and equipment.