



## CITY OF LEMON GROVE

Class Title: Associate Civil Engineer  
Department: Public Works

### **DEFINITION:**

Under the general direction of the Public Works Director/City Engineer, the Associate Civil Engineer shall perform a variety of professional engineering tasks involving either public works improvements, development projects, capital improvement projects, or traffic engineering projects; examine plans and maps and related specifications and reports; prepare designs and specifications for assigned projects; collaborate and confer with developers, contractors, other engineers and the general public; and perform a variety of related duties and responsibilities. May exercise technical and functional supervision over technical staff.

### **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

#### **Essential Functions:**

1. Review commercial, industrial, and residential subdivision street improvement plans, storm drain plans, grading plans, and related drainage aspects of development; ensure technical correctness; apply appropriate ordinances, codes, and regulations.
2. Assist at the front counter; review applications and submittal; recommend modifications or approvals.
3. Review development projects, including plans, maps and supporting documents; establish conditions for improvement including off-site improvements and financial obligations.
4. Conduct engineering studies on assigned projects; perform civil engineering cost analyses; prepare and/or review the adequacy and accuracy of computations, preliminary layouts and design work from field and survey data.
5. Perform engineering design work, including researching data and determining design criteria in accordance with required standards and codes; prepare calculations, sketches, plans, specifications and estimates; develop designs either manually or using computer equipment.
6. Manage and administer capital improvement projects from design to completion; prepare designs and specifications; review the work of consultants and contractors; ensure compliance with specifications; recommend modifications; recommend processing of payments.
7. Respond to public inquiries; investigate citizen complaints relating to public works issues; provide higher-level staff with recommendations for resolving issues and complaints.
8. Review and process tracts maps, traffic studies, urban runoff reports, parcel maps, abandonments, lot line adjustments, lot merges, soil reports and related documents; ensure compliance with conditions of approval; prepare reports for finalizing documents; collect bonds, fees and deposits.

9. Process and review legal descriptions and prepare plats and sketches for property easements and street rights-of-way.
10. Collaborate and confer with developers, engineers, architects and contractors; provide information on City policies and procedures related to engineering.
11. Coordinate City-wide vertical and horizontal control survey monuments and City surveying functions.
12. Review plans, specifications and cost estimates for improvement projects (i.e. road, storm drain, sewer, sidewalk, bridge, etc).
13. Act as Resident Engineer for City improvement projects including project administration and dispute resolution.
14. Attend and participate as an alternate in regional meetings including, but not limited to, the San Diego Traffic Engineers Council (SANTEC), cities/County Technical Advisory Committee (CTAC) and Metro Wastewater JPA Technical Advisory Committee (Metro TAC).
15. Prepare and deliver staff reports on traffic engineering issues for the City's Traffic Advisory Committee.

**Additional Functions:**

1. Attend and participate in professional group meetings; stay abreast of trends and innovations in civil and traffic engineering.
2. Review and analyze hydrology and hydraulic reports; storm water and geotechnical reports submitted by private engineers; ensure technical correctness and conformance with city requirements.
3. Participate in the implementation of the City's Geographic Information System.
4. Conduct field inspections; ensure compliance with specifications.
5. Perform related duties and responsibilities as required.

**\*\* DESIRED MINIMUM QUALIFICATIONS:**

**Licenses and Experience:**

Possession of a valid Class C California driver's license and a satisfactory driving record. Registration as a Professional Civil Engineer in the State of California is required.

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

**Experience:** Three years of responsible civil engineering experience.

**Education:** Equivalent to a Bachelor's degree from an accredited college or university with major course work in civil engineering, traffic engineering or a related field.

**Necessary Knowledge, Skills and Abilities:**

**Knowledge of:**

- Principles and practices of civil engineering.
- Urban runoff best management practices and regulations.
- Street and storm drain design and grading techniques.
- Principles of mathematics as applied to engineering work.
- Engineering design principles and practices.
- Construction principles and practices in the public works industry.
- Modern office procedures, methods, and computer equipment.
- Pertinent Federal, State and local codes, laws and regulations.
- Terminology, methods, practices, and techniques used in technical civil engineering and surveying report preparation.
- Recent developments, current literature, and sources of information regarding civil engineering and land surveying.
- Pertinent Federal, State and local laws, codes and regulations relating to civil engineering and land surveying.
- Technical report writing techniques.
- Operational characteristics of traffic signals, sign controllers, pavement striping and marking devices.
- Technical research and engineering problem solving.

**Ability to:**

- Develop, review and modify civil engineering plans, designs, and specifications.
- Learn terminology, methods, practices, and techniques used in technical civil engineering report preparation.
- Learn to interpret and apply pertinent Federal, state, and local laws, codes, and regulations related to civil engineering.
- Learn to perform technical research and solve engineering problems.
- Maintain technical civil engineering records and prepare reports.
- Operate computer engineering systems.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain cooperative working relationships with those contacted in the course of work.
- Maintain mental capacity that allows the capability of making sound decisions and demonstrating intellectual capabilities.
- Maintain effective audio/visual discrimination and perception to the degree necessary for the successful performance of assigned duties.
- Analyze and compile technical and statistical information and prepare reports.
- Complete work with minimal supervision.
- Analyze and compile technical and statistical information and prepare reports.
- Respond to difficult and sensitive public inquiries.

## **TOOLS AND EQUIPMENT USED**

- Basic office equipment, including personal computers, facsimiles, and copier; telephone; pager; and/or mobile phone.
- Personal and/or City vehicle

## **PHYSICAL DEMANDS**

Frequently sit, stand, reach, lean, twist, turn, grasp, push, pull, bend, and kneel; sit for prolonged periods of time. Requires lifting, pushing and/or pulling of objects that are 50 pounds and depending on the work can exceed 50 pounds. Walk to different areas at project construction sites. Hear and speak to contractors, the general public and City staff on the telephone and in person. Requires vision (which may be corrected) to read engineering drawings, plans, specifications, contracts, correspondence, memoranda, and other records.

## **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Works in outside weather conditions; exposed to hot, cold, wet and/or humid conditions.
- Works near moving mechanical parts/vibrations; works around vehicle traffic.
- Exposed to fumes or airborne particles, toxic or caustic chemicals.
- Noise level in the work environment is loud.
- May be required to use personal vehicle
- Incumbent required to attend evening meetings and /or travel within and out of City boundaries to attend meetings and respond to emergencies 24 hours a day.
- Day, evening, night, holiday, and weekend work may be required.
- Incumbent may be required to wear protective apparel including goggles, face protectors, aprons, shoes and oxygen breather apparatus in case of an emergency circumstance

## **GUIDELINES**

The duties listed above are intended only as illustrations of the various types of work that may be performed. The list may not include all required duties. The omission of specific duties does not exclude them from the position if the work is similar, related, or a logical assignment to the position.

The job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.

\* Duties listed are examples of typical duties performed by employees in this class. The list may not include all required duties, nor are all listed tasks necessarily performed by everyone in this class.

\*\* Desired Minimum Qualifications are a guide for determining the education, training, experience, special skills, and/or licenses that may be required for employment in the class.

Approved, City Council: August 15, 2006