



## Engineering Assistant

**Purpose of the role:**

Under general supervision, performs routine technical engineering work in the research, design and construction of public works and water and wastewater utility projects; and performs related duties as required.

This is a broad classification and individual duties will vary depending on area of assignment.

**Distinguishing Characteristics:**

The Engineering Assistant is the entry level in the professional engineering class series. Initially under direct supervision, incumbents perform the more routine professional engineering assignments requiring sound knowledge of engineering principles. With experience, the work becomes progressively more diversified and difficult and requires increasing independence.

*The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.*

**Essential Duties and Responsibilities:**

- Assists with specification writing and preparation, prepares plans and work orders, and calculates cost estimates for various engineering projects.
- Coordinates engineering projects between contractors and the City; enforces City codes and standards on engineering projects.
- Performs plan checks to ensure contractor compliance with City specifications.
- Analyzes materials and design data submitted to the City; checks and analyzes environmental impact reports.
- Responds to inquiries from developers, contractors and the public concerning engineering problems and traffic and public safety.
- Performs complex engineering calculations; performs field inspections for various engineering projects; performs field survey work.
- Reviews traffic and transportation elements of environmental impact reports and major developments for compliance with City policies, rules and regulations.
- Records installation and removal of traffic signs and striping.
- Provides engineering data and cost estimates for the City budget.
- Performs related duties as required.

*The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.*

<b>Desired Minimum Qualifications:</b>	<b><u>Knowledge of:</u></b>
	<ul style="list-style-type: none"><li>• Basic principles and practices of civil engineering, including design and construction.</li><li>• Basic principles and applications of engineering mathematics.</li><li>• Basic principles and practices of traffic and highway engineering.</li><li>• Principles, modern techniques and equipment used in design, construction and maintenance of various projects.</li><li>• Operation and maintenance of traffic control devices and equipment.</li><li>• Pertinent federal, state, and local laws, codes, and regulations.</li></ul>

**Ability to:**

- Perform detailed analyses of designs, specifications and plans.
- Apply engineering principles and techniques to evaluate and solve basic to moderately difficult engineering problems.
- Make or check complex engineering computations quickly and accurately.
- Deal tactfully and effectively with the public, City staff, engineering firms, contractors, developers, manufactures and others.
- Utilize standard office equipment including computers and related software applications.
- Prepare clear, concise and accurate engineering reports and documents.
- Understand and follow oral and written instructions.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Respond and perform assigned duties in the event of a City-declared emergency.

**Competencies:**

- Effective Communicator
- Strategic Thinker
- Results Oriented
- Customer-Focused
- Problem Solver and Decision Maker
- Planner and Organizer
- Technically Knowledgeable

*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:*

<b>Education and Experience Guidelines:</b>	<b><u>Education/Training:</u></b>
	A Bachelor's degree from an accredited college or university with major course work in civil or structural engineering or a related field.
	<b><u>Experience:</u></b>
	Previous experience performing responsible, paraprofessional engineering work.

**Licenses; Certificates; Special Requirements:**

A valid class C California driver's license may be required for some positions.

*The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.*

***Physical and  
Environmental  
Conditions:***

**Physical:** Sufficient physical ability to work in an office setting; sit, stand, walk, reach, twist, turn, kneel, bend, squat, and/or stoop for prolonged periods of time; perform duties requiring grasping, repetitive hand movement, and fine coordination; and operate office equipment. **Vision:** See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents and to operate office equipment. **Hearing:** Hear in the normal audio range with or without correction.

**Environment:** Standard office setting; occasionally required to work outside, with exposure to inclement weather conditions or elevated noise levels; interact with officials and the public.

*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 final qualifications of incumbents within the position.*

*Pursuant to California Government Code Section 3100, all public employees are required to serve as disaster service workers subject to such disaster service activities as may be assigned to them by their supervisor or by law.*

Date Adopted: 7/5/03

Date Revised: