

Engineering Aide

Purpose of the role:

Under direct supervision, performs entry-level, paraprofessional and clerical engineering work involving basic engineering knowledge and skills; performs routine traffic engineering support tasks including collecting, tabulating and analyzing traffic information; and performs related duties as assigned.

Essential Duties and Responsibilities:

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.

- Collects, tabulates and analyzes traffic information; develops striping and signing plans.
- Prepares miscellaneous illustrative materials such as charts and graphs; participates in the filing and retrieval of a variety of engineering maps, documents and records.
- Prepares work orders for changes and improvements as required.
- Uses computer equipment to analyze, manipulate and store a variety of traffic related data; operates calculator, personal computer, blueprint, reproduction, and copying machines.
- Makes simple mathematical computations as required.
- Assumes personal responsibility for ensuring the assigned duties are conducted in a safe, efficient manner.
- 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.

Knowledge of:

Desired Minimum Qualifications:

- Basic methods, practices and procedures of mapping and drafting.
- Standard terminology techniques, practices and equipment used in engineering surveying and drafting.
- Basic research techniques.
- Mathematical principles and applications.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.
- Principles and procedures of record keeping and filing.
- Principles and practices used to establish and maintain files and information retrieval systems

Ability to:

- Read, interpret, understand and prepare basic engineering records, maps and descriptions.
- Make basic engineering and mathematical calculations.
- Produce written documents using standard office and computer equipment.
- Implement and maintain standard filing systems.
- Ensure adherence to safe work practices and procedures.
- 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:

- Strategic Thinker
- Results Oriented
- Customer- Focused
- Problem Solver and Decision Maker
- 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:

Education/Training:

Equivalent to the completion of the twelfth grade supplemented by college level course work in civil engineering, drafting, engineering mathematics or a related field.

Education and Experience Guidelines:**Experience:**

Some related engineering experience including the performance of public service tasks and mathematical calculations experience.

Licenses; Certificates; Special Requirements:

A valid class C California driver's license.

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 and to travel to field locations; 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; operate assigned equipment; lift, carry and push tools, equipment and supplies weighing 50 pounds or more. **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 and field work; work outside, with exposure to inclement weather conditions, elevated noise levels and heavy vehicle traffic conditions.

*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: