

## **ENGINEERING AIDE**

### **DEFINITION**

To perform sub-professional engineering work in the areas of design, construction, surveying, traffic and land development; to perform office and field duties including drafting, assisting in construction inspection, permit issuance, engineering research and traffic counts.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from the Division Manager. Functional or technical supervisor may also be provided by professional or management level positions.

**EXAMPLES OF DUTIES** - Duties may include, but are not limited to, the following:

#### **Essential**

Review and issue engineering encroachment permits for street and sidewalk construction.

Assist with field inspection for public works construction.

Initiate follow-up correspondence related to illegal construction and hazardous condition reports.

Answer a variety of inquiries from the public, both over the phone and counter; responds to requests regarding engineering records and mapping.

Perform a variety of routine drafting and surveying duties in connection with engineering and capital project activities.

Monitor and update general engineering maps and engineering records management.

Researches various types of records, participate in the preparation of traffic studies and traffic counts.

Operate office equipment including a personal computer.

#### **Important**

Perform related duties as assigned.

## **QUALIFICATIONS**

### Knowledge of:

Construction inspection procedures and methods and their application to assigned functions.

Drafting and surveying methods, material and application.

Operation of a personal computer and of computer aided drafting programs; applicable computer software including Excel, Work or WordPerfect, and AutoCad.

### Ability to:

Detect and locate faulty material and workmanship in construction.

Read and properly interpret plans, blueprints, construction drawings, specifications and maps.

Reduce, interpret, and apply field or preliminary notes and sketches in the performance of drafting duties.

Clearly communicate, interpret applicable City and government codes, specifications and standards.

Use a computer and applicable computer software.

Communicate effectively both orally and in writing.

Establish and maintain cooperative relationships with those contacted in the course of work

## **EXPERIENCE AND EDUCATION**

Any combination equivalent to experience and education that could likely provide the required knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

### Experience:

One year of experience performing sub-professional engineering work, including surveying and drafting.

### Education:

Equivalent to graduation of twelfth grade supplemented by coursework in engineering,

surveying, drafting, mathematics and computer.

License or Certificate:

Possession of a valid California Driver's license.

**PHYSICAL REQUIREMENTS:**

The work requires a combination of the following physical requirements depending upon a given task, on a given day: 3 to 6 hours of standing; up to 3 hours of sitting, walking, bending, stooping, twisting, turning, driving, or reaching forward or overhead; up to 3 hours of lifting, carrying, pushing/pulling less than 10 lbs., face-to-face talking, verbal contact, telephone conversations or public speaking; 3 to 6 hours of finger dexterity, eye-hand coordination, light grasping, accommodation, and conversations; vision accuracy (near and far), field of vision, color vision.

**MENTAL REQUIREMENTS:**

The work requires a combination of the following mental requirements depending upon a given task, on a given day: abstract variables; taking, interpreting, comprehending and following instructions; simple to complex- reading, writing, and math skills; spatial, clerical; forming, synthesizing, coordinating, analyzing, compiling, computing, copying, comparing, speaking-signaling, serving, helping, setting up, precision work, driving, manipulation, handling; performing simple, repetitive tasks to varied, complex task; generalizing; evaluating; responsibility for direction.

**WORK ENVIRONMENT:**

Work is performed indoors and outdoors; slippery, uneven surfaces, using a computer and other office equipment; working alone; working around or with others.