



## ENGINEERING AIDE I/II

### DEFINITION

To perform a variety of paraprofessional office and field engineering work and to assist other engineering staff in the performance of office and field engineering work.

### DISTINGUISHING CHARACTERISTICS

Engineering Aide I This is the entry level class in the Engineering Aide Series. Positions in this class normally perform a variety of entry level paraprofessional engineering work involving assistance to other engineering staff in the performance of office and field engineering work.

Engineering Aide II: This is the journey level in the Engineering Aide Series. Positions in this class are expected to perform a variety of paraprofessional office and field engineering work involved in the planning and design of public works facilities. All positions assigned to this class require the ability to work independently, exercising judgment and initiative.

### SUPERVISION RECEIVED AND EXERCISED

Immediate supervision is provided by higher level Engineering positions. Functional or technical supervision is also received from higher level engineering positions.

**EXAMPLES OF DUTIES** The following are typical illustrations of duties encompassed by the job series, but are not an all inclusive or limiting list:

#### **ESSENTIAL JOB FUNCTIONS:**

Perform engineering office work; update and file records and maps, photocopying, and blueprinting; prepare property descriptions and parcel maps; review and prepare a simple engineering plans

Make and check notes, maps, drawings, tracings and engineering computations; assist in computing grades, reducing cross-section notes, plotting forfiles and drawing alignments.

Provide general information to the public, other City departments, development community and other government agencies.  
Regular and consistent attendance.

Assist in collecting traffic engineering data; research property title, right-of-way, and easements.

As a survey party member, perform instrument work including the operation of transits, levels, site rods, tapes, chains, and other surveying tools and equipment.

Perform some limited inspections of public works projects.

Prepare graphic displays for studies, reports and presentations.

Work cooperatively with others.

Perform related duties as assigned.

## **QUALIFICATIONS**

### Engineering Aide I

#### Knowledge of:

Nomenclature, symbols, methods, practices, techniques and instruments used in engineering and mapping.

Surveying equipment, principles, problems, techniques and practices.

Mathematics as applied to the computation of distances, angles, areas, and traverses.

Safety principles, practices and procedures.

Operation and programs of a personal computer

#### Skill to:

Provide information to the general public regarding planning department services.

Prepare and maintain accurate records.

Draft with machine, triangles, and compasses; perform instrument work with an engineering survey party.

Understand and carry out both oral and written directions.

Read and interpret maps and engineering drawings.

Establish and maintain effective work relationships with those contacted in the performance of required duties.

Ability to:

Develop cooperative public relations with other City departments, developers, businesses, and the general public.

Meet the physical requirements necessary to safely and effectively perform the assigned duties.

Education and Experience

Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying.

License or Certificate

Possession of a valid California driver's license.

Engineering Aide II

In addition to the qualifications for Engineering Aide I:

Knowledge of:

Fundamentals of civil engineering.

Mathematics, including algebra, geometry and trigonometry.

Construction equipment, materials and methods in the testing of construction materials.

City engineering policies, procedures, construction, design and land use regulations and ordinances.

Skills to:

Gather data and make accurate engineering computations.

Prepare plans and specifications neatly and accurately.

Understand, interpret and prepare legal property descriptions, engineering records and maps.

Perform full survey work with a minimum of supervision.

Perform plans and maps using computer-aided drafting (CAD)

Education:

Equivalent to completion of the twelfth grade, including or supplemented by courses in drafting, algebra, geometry and trigonometry.

Experience:

For Engineering Aide II, one year of para-professional engineering experience comparable to that of an Engineering Aide I in the City of Woodland.

Council Action: Approved 9/21/99