

## **ENGINEERING TECHNICIAN**

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in this class. Specifications are not intended to reflect all duties performed in a job.*

### **DEFINITION**

Under supervision, performs technical engineering work involving plan check and review; to inspect a variety of private and public civil improvement projects; to design and draft plans, maps, and designs; to collaborate and confer with developers, architects, and engineers; and to perform a variety of clerical functions in support of an assigned area.

### **DISTINGUISHING CHARACTERISTICS**

The Engineering Technician class is an experienced, journey level class, fully competent to independently perform the full range of technical engineering duties at the technician level in both the field and the office. Incumbents are expected to work independently, exercise a great degree of discretion, and to perform the full scope of duties. The Engineering Technician differs from the Civil Engineer series in that the latter is a paraprofessional classification that does not require a college degree. The Civil Engineer series is the professional class series requiring at least a bachelor's degree in the civil engineering and the desirable qualification of possession of an Engineer-in-Training Certificate.

### **EXAMPLES OF DUTIES**

Duties may include, but are not limited to, the following:

- Perform a variety of technical civil engineering functions involving plan check and review, design, project management, Auto CAD drafting, and inspection of private and civil improvements.
- Collaborate and confer with developers, architects, engineers, contractors, and the general public; provide information and assistance; interpret and explain laws, codes, and regulations related to development activities.
- Review various improvement plans and designs for accuracy and completeness; ensure compliance with local and state standards.
- Inspect public works construction projects including grading, underground utilities, encroachments, curbs, gutters, paving, and irrigation systems; ensure conformance to construction plans and engineering standards; recommend approval.
- Track and monitor status of construction progress and materials used; coordinate with engineers and outside consultants; process permits as approved, including encroachment and overweight/size permits.
- Coordinate construction projects with public works operations and maintenance staff.
- Disseminate, modify, and maintain Public Works and engineering records, maps, files, databases, and associated GIS base maps.

- Investigate resident complaints and coordinate with property owners regarding project schedules, hazards, and inconvenience.
- Assist in administering routine engineering contracts; estimate contract quantities and set costs; inspect projects; prepare change orders, as necessary.
- Conduct investigation of citizen complaints; write report of findings and solutions.
- Act as the liaison between the City, contractors, consultants, and developers; respond to and resolve questions; provide oversight and direction over contractor work.
- Perform a variety of related office or field tasks to gather, analyze, and record data; prepare a variety of memos, letters and other correspondence related to plan reviews.
- Perform related duties as assigned.

## **EMPLOYMENT STANDARDS**

**Note:** The level and scope of the knowledge, skills, and abilities listed in this section are related to the job duties as defined under Distinguishing Characteristics.

### Knowledge of:

- Basic civil engineering principles and practices.
- Basic civil engineering design standards.
- City land use development codes and related policies.
- Land surveying principles and practices.
- Drafting techniques, terminology, methods, and instruments.
- Materials, methods, and techniques of modern construction.
- Civil engineering maps and records.
- Construction plans and specifications.
- Applicable laws, regulations, codes, and department policies governing assigned technical civil engineering duties.
- Modern office procedures, methods, and computer equipment.
- Customer service methods and techniques.
- Pertinent federal, state, and local laws, codes, and ordinances.
- GIS and computer aided drafting software.

### Ability to:

- Perform technical civil engineering plan reviews.
- Understand and interpret civil engineering plans and specifications.
- Analyze data and a variety of problems, determining options and using engineering methodology.
- Maintain accurate civil engineering records.
- Use algebraic formulas, trigonometry tables, and statistical mathematics to accomplish technical civil engineering work.
- Learn applicable laws, regulations, codes, and department policies governing assigned technical engineering duties.
- Learn City land use development codes and related policies.
- Perform routine civil engineering drafting work.
- Prepare and maintain accurate engineering records.

- Read plans and maps.
- Apply federal, state, and local laws and regulations pertaining to accounting and auditing activities.
- Understand and follow oral instructions.
- Provide quality customer service.
- Establish and maintain effective working relationships with those contacted in the course of work.

**Minimum Qualifications**

Experience and/or Education:

Two years of full-time experience in a civil engineering office performing surveying, construction management, construction inspections, and/or drafting.

**Physical Requirements**

Work is performed in a typical outdoor environment on a year-round basis. (1) Mobility: frequent performance of heavy manual labor; frequent standing for long periods of time; frequent bending and squatting. (2) Lifting: frequent lifting up to 50 pounds; occasional lifting up to 75 pounds. (3) Vision: constant use of overall vision. (4) Dexterity: frequent grasping, holding, and reaching. (5) Hearing/Talking: frequent hearing and talking in person. (6) Emotional/Psychological: frequent coworker contact; occasional working alone. (7) Environmental: frequent exposure to loud noise; frequent exposure to chemicals, fumes, and other environmental substances

Other Requirements

May require evening, weekend or shift work.

Classification	Adopted	Revised	Retitled	Class Code	FLSA Designation	Rep Unit
Engineering Technician	7/2010			4441	Non-Exempt	4

APPROVED: \_\_\_\_\_  
Human Resources Director

Date: \_\_\_\_\_