

**CITY OF SANTA CLARA, CALIFORNIA  
CLASS SPECIFICATION**

**TITLE: ENGINEERING TECHNICIAN (JOB CODE 460)**

DEPARTMENT	ACCOUNTABLE TO	FLSA STATUS
Various	Various	Non-Exempt

**CLASS SUMMARY**

The Engineering Technician is an entry-level classification in the paraprofessional Engineering Technician series. An incumbent in this classification performs routine technical office and field work in support of various engineering projects and may be assigned to various departments including the Water and Sewer Utilities Department or the Department of Public Works. Specific responsibilities will vary according to assignment. Performs related duties as assigned.

**DISTINGUISHING CHARACTERISTICS**

The Engineering Technician is distinguished from the Senior Engineering Technician by its focus on routine paraprofessional engineering duties and the performance of duties under more immediate supervision. Incumbents' work is closely supervised, work methods are explained in specific terms and work is subject to frequent review.

**MINIMUM QUALIFICATIONS**

***EDUCATION AND EXPERIENCE***

- Graduation from high school or tested equivalent, and
- One (1) year of experience working with geographic information systems (GIS) tools and systems OR one (1) year experience working with computer aided drafting (CAD).

***DESIRABLE QUALIFICATIONS***

- GIS AND CAD experience
- Completion of post-secondary coursework in GIS and CAD
- Depending on position assignment, engineering-related experience in either a water and/or sewer utility, or in public works

***ACCEPTABLE SUBSTITUTION***

Post-secondary education equivalent to thirty (30) semester units or forty-five (45) quarter units including satisfactory completion of courses in mathematics, engineering, CAD, GIS, or related subjects may be substituted for the experience requirement

***LICENSES/CERTIFICATIONS***

Possession of a valid California Class C Driver's License is required at the time of appointment and for the duration of employment

***OTHER REQUIREMENTS***

Must be able to perform the essential functions of the job assignment, with or without reasonable accommodations

**TYPICAL DUTIES**

This description may not include all the duties listed below, nor do the examples cover all duties

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that may be performed.

Under immediate supervision, the incumbent will:

- Participate in field survey activities such as assisting with measuring and recording distances and elevation and setting markers and reference points
- Research records on routine matters; compile basic reports
- Create and update engineering plans, maps, drawings, diagrams, and charts using manual and computer-aided methods
- Maintain electronic and paper files and databases of engineering documents such as plans, specifications, drawings, and maps; maintains records of field inspections and laboratory tests
- Assist in a variety of water samples collection and performs elementary laboratory procedures for water quality determination
- Assist in plan reviews of utilities and field inspections
- Assist in Fat, Oil and Grease plan reviews and inspections
- Verify the accuracy of engineering documents using mathematical calculations
- Perform field inspections to obtain and verify engineering data; gather samples of materials and runs laboratory tests
- Provide employees and the public with technical information as requested
- Perform other related duties, as assigned.

## **KNOWLEDGE, SKILLS, & ABILITIES**

Knowledge of:

- Mathematical principles, including algebra, geometry and trigonometry
- The principles and practices of engineering drafting and graphic design
- Specialized engineering software and equipment used for drafting, lettering, and duplicating
- Methods, procedures, and materials used in area of assignment
- Principles and practices of filing and records management
- Standard personal computer hardware and software, including word processing, spreadsheet, and database programs

Ability to:

- Interpret, apply, and explain maps, engineering drawings, and building plans
- Prepare neat and accurate drawings, diagrams, dimensions, representations, and schematics
- Perform mathematical calculations with accuracy
- Communicate clearly and effectively, both verbally and in writing
- Establish and maintain effective working relationships with those contacted in the course of work
- Work in a team-based environment to achieve common goals
- Evaluate situations, identify problems, and exercise sound independent judgment within established guidelines
- Walk or stand for extended periods of time and bend, stoop, crawl, climb, and lift as

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necessary to perform assigned duties

- Lift, carry, and relocate a variety of equipment weighing up to 25 pounds

### **SUPERVISION RECEIVED**

Receives immediate supervision from a Senior Engineering Technician, Chief of Party, Engineer, or other supervisor, as assigned.

### **SUPERVISION EXERCISED**

May assist in the training of personnel, as assigned

### **CLASSIFICATION HISTORY**

Established 10/2013; Rev. 9/2024