



CITY OF SANTA CRUZ ENGINEERING TECHNICIAN

Reports To Associate Civil Engineer or Other Engineering Supervisory Staff
Supervises Nonsupervisory
Bargaining Unit Service

BASIC FUNCTION

Under general supervision, provides technical assistance to field and office engineering functions by designing basic plans, collecting data, preparing plans and maps by both manual and computerized drafting methods, processing permits and work orders, maintaining records, advising the public and performing other related work as assigned.

DISTINGUISHING CHARACTERISTICS

The engineering technician is the technical/entry-level professional class in the engineering classification series. Incumbents perform a range of duties from technical drafting and computation to design and management of medium-sized projects.

TYPICAL DUTIES *(May include but are not limited to, those duties listed below).*

- Designs or assists with the design of plans and specifications for small to medium-sized construction projects such as curbs, gutters, sidewalks, drains and water mains, including the necessary research, computation, final drafting, construction coordination and inspection.
- Reduces and translates field notes and computations submitted by field survey crews.
- Performs a variety of field activities such as surveying, data collection, testing and inspection; checks potential, new and existing services for permit compliance. May flush and disinfect new water mains.
- Makes reports and recommendations relative to field or design activities and maintains related files.
- Reviews plans for new services; determines requirements and fees; processes agreements, permits and work orders.
- Researches and implements revisions to existing system drawings, records and maps.
- Check-reads and drafts property descriptions.
- Responds to inquiries both in person and by phone from interested persons regarding engineering projects and activities; explains regulations to property owners and contractors.
- Assists with the maintenance of engineering files and documents; prepares regular reports and records on department projects.
- Reproduces blueprints and other design drawings as required.
- Performs other related duties as assigned.

WORKING CONDITIONS

Position requires sitting for extended periods of time, with frequent standing, walking and occasional balancing, stooping, crouching, kneeling, reaching, grasping, pushing, pulling and use

of finger dexterity and feeling by touching. Job duties may require occasional lifting and carrying of up to 50 lbs. The incumbent is occasionally required to crawl into cramped spaces, climb to and walk at heights, and walk on slippery, uneven surfaces. The position requires talking, hearing, both near and far vision, plus the ability to distinguish colors, shades of colors, and to perceive depth and field of vision while performing assigned duties. The incumbent in this position works indoors daily and outside in various types of weather weekly, with occasional exposure to dust, electrical energy, and dry atmosphere. Job duties require working around moving or stationary machinery and/or vehicles. The nature of the work requires the incumbent to drive a City vehicle daily, with repetitive use of both hands and right foot.

Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

MINIMUM QUALIFICATIONS

Knowledge:

- General knowledge of the principles and practices of civil engineering as related to the planning, design, drafting and construction of public works projects.

Abilities:

- Perform algebraic and trigonometric calculations related to engineering applications.
- Collect and record accurate technical data.
- Clearly explain and interpret complex regulations.
- Act in a courteous and effective manner when dealing with the general public.
- Process and maintain accurate records in accordance with specific guidelines.

EDUCATION AND EXPERIENCE

Any combination of education and experience that provides the above knowledge and abilities and licenses shown is qualifying. A typical way to obtain the required qualifications is to possess the equivalent of the following:

- High school graduation or tested equivalent, and
- Two (2) years of experience in engineering drafting or other technical civil engineering work or similar related experience. An Engineering degree or EIT may substitute for the two years of experience.

LICENSES

- Possession at time of hire and continued maintenance of a valid California driver's license and safe driving record.

City of Santa Cruz
Engineering Technician

DESIRABLE QUALIFICATIONS

- Proficiency with GIS such as ArcMap, and computer aided drafting such as AutoCad.

Classification No. 135
Date of Issue: 10/92
Supersedes: 2/88
Update: 1/14

Career Ladder:

- Associate Civil Engineer
- Engineering Associate
- Assistant Engineer I/II
- *Engineering Technician*