

ENGINEERING TECHNICIAN

DEFINITION

Under general supervision or direction, performs skilled and sub-professional office and field technical engineering work of widely varying difficulty; including routine drafting, preparation and/or review of engineering plans and specifications for a variety of projects, ensuring compliance with standards and District requirements; reviews improvement plans, coordinates facility planning and general plan amendments, ensures conformity with District standards and regulations; performs project management as assigned on District CIP projects; and performs other duties as required.

SUPERVISION RECEIVED AND EXERCISED

General supervision is given by the Deputy General Manager/District Engineer. No direct supervision of staff is exercised.

CLASS CHARACTERISTICS

This is the entry-level, non-registered class in the professional engineering series. Incumbents perform the less difficult and complex tasks in the field of civil engineering. As experience and proficiency are gained, assignments will become more technically diverse and difficult, while exercising increasing independence of judgment. Incumbents receive general supervision from the assigned supervisor and functional direction from a higher-level class within the series.

EXAMPLES OF DUTIES (Illustrative Only)

- Prepares, revises and maintains a variety of maps, property maps, easements, right of ways, drawings and sketches;
- Prepares and revises a variety of graphic presentations, including visual displays for meetings, technical illustrations, signs, charts, graphs, pamphlets, and similar materials;
- Reads and interprets engineering contracts, plans, specifications, and survey notes; Calculates distances, angles, ties, areas, traverses, and enclosures;
- Makes field surveys to verify as-built discrepancies and to verify locations of existing facilities; assists in conducting, tabulating and analyzing various engineering surveys and studies:
- Uses and maintains a variety of drafting tools and equipment, including survey equipment, reproduction equipment, calculators, etc.; enters and retrieves data from computers and operates CAD and GIS equipment;
- Provides and obtains information as directed and delivers and picks up maps, drawings. records, and documents from other agencies;
- Compiles information required for assignments and consults with engineering staff to obtain

- necessary information;
- Updates and maintains engineering records and files of maps, drawings, notes and records, including project files, runs copies, and obtains supplies as necessary;
- Provides engineering support to construction inspectors; responds to inquiries and provides information to contractors, developers, other agencies and the public;
- ➤ Operates standard office equipment, including job-related computer hardware and software applications, facsimile equipment and multi-line telephones; may operate other department-specific equipment;
- Builds and maintains positive working relationships with co-workers, other District employees, and the public.

QUALIFICATIONS

Knowledge of:

- ➤ Basic drafting principles, practices, and techniques; simple detailing practices and standard representations:
- Basic GIS principles, practices and techniques.
- Algebra, geometry, and solving mathematical problems related to drafting, basic surveying principles and equipment
- Basic principles and practices of civil engineering;
- Engineering practices with emphasis on water supply, treatment and distribution; and wastewater collection;
- Construction methods and standards, and read and interpret plans and specifications; Engineering mathematics and economics;
- Plan Check review procedures for new developments;
- Basic report preparation and technical letter writing;
- Modern office procedures, methods, and equipment including personal computers

Skill in:

- Interpreting, applying and explaining statutes, codes, regulations and ordinances;
- Preparing clear and concise reports, correspondence, policies, procedures and other written materials.
- Following oral and written directions with ability to work on projects alone or cooperatively in a group effort.
- Using tact, initiative, prudence and independent judgment within general policy, procedural and legal guidelines;
- Maintaining accurate records and files.
- Providing excellent customer service when interacting with the public, other agencies and co-workers.

Education:

Equivalent to graduation from the twelfth grade or its equivalent, including successful completion of coursework in mechanical drawing, algebra, geometry, and trigonometry.

Experience:

Two 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' experience.

License:

Some positions may require possession of a valid California class C driver's license and provide proof of satisfactory driving record.

Physical Demands:

Must possess mobility to work in a standard office setting, to inspect District development and construction sites, to operate a motor vehicle and to visit various District and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups and over the telephone.

FLSA Status: Non-exempt eligible for overtime Bargaining Unit: MCWD Employees Association