

ENGINEERING TECHNICIAN

DEFINITION

To perform public works engineering duties including the review permits, site inspections and research and creation of engineering drawings; to support public works Capital Improvement Projects (CIP) and routine maintenance projects; and to provide technical support to an assigned supervisor.

DISTINGUISHING CHARACTERISTICS

This is the journey level in the single level technical Engineering Technician class. Incumbents initially perform the more routine duties assigned to positions in this class and work under close supervision. However, as experience is gained, incumbents are expected to perform the full range of duties as assigned with increasing independence.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the assigned supervisor; and may receive technical and functional supervision from more experienced staff.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Perform general public works engineering tasks including the receipt, review and processing of various permits; prepare, file, update, maintain, research and retrieve a variety of engineering maps, documents, contracts and other records.

Prepare a variety of documents for the Public Works Department, contractors, clients and other departments; calculate fees for permits; participate in a variety of traffic and other studies.

Assist the public, contractors, architects and City personnel with information on private and public improvement projects, flood zones, study zones and various requirements and guidelines in person, by phone and by email.

Perform, or assist with, field inspections including sewer video inspections; assist the Public Works Inspector with minor construction inspections; assist with construction and maintenance projects.

Research data using assessor's maps, Geographic Information System (GIS), Computer Aided Drafting (CAD) and other sources; use GIS for the creation of maps, charts and reports for project and infrastructure analysis; assist with the review of subdivision maps and construction plans and research utility information.

Build and maintain positive working relationships with co-workers, other City employees and the public using principles of good customer service.

Foster an environment that embraces diversity, integrity, trust, and respect.

Be an integral team player, which involves flexibility, cooperation, and communication.

Perform related duties as assigned.

MINIMUM QUALIFICATIONS

Knowledge of:

Terminology, methods, practices and techniques used in sub-professional engineering work, including drafting, surveying, and mapping.

Mathematics and trigonometry, Auto CAD and Arc View GIS use, drafting design and terminology.

Relevant local, State, and Federal laws, rules and regulations related to area of assignment.

Applicable equipment and instruments used in drafting, surveying, and mapping.

Principles and practices of minor construction inspection.

Ability to:

Perform basic public works engineering duties including research and review of permits, maps, diagrams and other technical documents, performance of site inspections, creation of engineering drawings to support public works Capital Improvement Projects (CIP) and assistance with routine public works maintenance projects.

Intermittently, review and evaluate documents related to department operations; observe, identify and problem solve office operations and procedures; understand, interpret and explain department policies and procedures; explain operations and problem solve issues for the public and with staff.

On a continuous basis, sit at desk for long periods of time or stand at public counter; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone; write or use a keyboard to communicate through written means; and lift or carry weight of 25 pounds or less.

Read and understand a variety of diagrams, maps and construction plans.

Understand and communicate basic technical engineering information to others.

Create accurate reports and documents.

Perform research of needed engineering and related data.

Use sound judgment in recognizing scope of authority.

Operate and use modern office equipment including computers and applicable software.

Maintain regular attendance and adhere to prescribed work schedule to conduct job responsibilities.

Utilize appropriate safety procedures and practices for assigned duties.

Establish and maintain effective working relationships with those contacted in the course of work.

Work with various cultural and ethnic groups in a tactful and effective manner.

Communicate clearly and concisely, both orally and in writing.

Experience and Training

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Experience:

Two years of responsible CAD, GIS, field survey, and office engineering experience.

Training:

Equivalent to the completion of the twelfth grade supplemented by college course work in mathematics, CAD, GIS, construction practices, materials testing or related courses.

License and Certificate

Possession of a valid California Class C Driver License is required at the time of appointment. Failure to obtain or maintain such required license(s) may be cause for disciplinary action. Individuals who do not meet this requirement due to a physical disability will be considered for accommodation on a case-by-case basis.