

**Definition:** Under direct and/or indirect supervision, performs subprofessional engineering office and field work of moderate difficulty.

**Essential Duties:** Depending upon assignment, the duties of an Engineering Technician include:

- Doing drafting work, including CAD, in preparing materials such as City project improvement plans, City Standard Drawings, landscaping and irrigation plans, City base and street maps, and assessment diagrams.
- Plotting existing street alignments, existing utility locations, and subdivision boundary property lines.
- Drawing details from rough layouts.
- Preparing maps for exhibits; laying out charts/graphs including computer aided mapping and elementary Geographic Information System (GIS) associated tasks.
- Operating transits and levels in the performance of minor surveying work.
- Issuing, inspecting and closing out encroachment permits in accordance with City Policies and Procedures.
- Performing traffic related tasks such maintaining and updating traffic records and accident reports, performing traffic counts and radar studies, preparing traffic field orders and maintaining the traffic field order database and traffic devices inventory database.
- Assisting with project administration, contract document, preparation, contract inspection, contract management and project closeout of the annual sidewalk repair program.
- Researching, retrieving and maintaining records and files.
- Updating and maintaining various division databases such as those for newsracks, storm water, assessors log, technical library, improvement plans and drawing index.
- Assisting with checking improvement plans for compliance with design criteria, special conditions, and City standards.
- Assisting in the preparation of plans and specifications for public works contracts.
- Initiating action to correct street obstructions/safety problems and following up on corrective actions.
- Preparing Engineering Division project cost estimates.
- Obtaining project information from various public records.
- Using computers for word processing, spreadsheet, and database analysis.
- Responding to public inquiries and requests for assistance in person and over the phone.
- Conducting sidewalk inspections and maintaining the program.
- Conducting Public Works construction inspections.

**Minimum Qualifications:**

**Knowledge of:** Principles of algebra, geometry, and trigonometry; nomenclature, symbols, techniques, and instruments used in drafting and mapping; construction inspection techniques and principles; filing system techniques and principles; operation of computers and computer programs including Word, Excel, Access and AutoCad.

**Ability to:** Understand and carry out oral and written instructions and communicate effectively orally and in writing; express self effectively; handle confrontational situations or controversial matters; interpret engineering maps, plans, specifications, and legal descriptions; transcribe drawings and diagrams, prepare neat and accurate drawings and tracings; make accurate engineering computations; operate surveying and drafting instruments and equipment; understand City policies and engineering standards; issue, inspect and track encroachment

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permits; initiate and manage routine studies; complete tasks and assigned workload; maintain miscellaneous databases, engineering files, maps and records; and establish and maintain effective working relationships with fellow employees and the general public.

**Education:** Equivalent completion of the 12<sup>th</sup> grade and possess an additional 15 college semester units in engineering, mathematics, mechanical drawing, or a closely related field.

**Experience:** One year of full-time subprofessional civil engineering work.

**License:** Must possess and maintain a valid California Driver's License issued by the State Department of Motor Vehicles and a satisfactory driving record.