



**CITY OF LONG BEACH
CLASSIFICATION SPECIFICATION**

TITLE: ENGINEERING TECHNICIAN I - II

DEFINITION: Under supervision, makes engineering computations, layouts and lettering and prepares engineering drawings, maps and charts.

DISTINGUISHING CHARACTERISTICS:

Grade Level I - Performs the duties of the class (journey-level).
Grade Level II - Leads a small group of engineering technicians and/or performs the most difficult and specialized technical assignments.

EXAMPLES OF DUTIES:

- Lays out, letters, makes computations and prepares drawings of streets, structures, sewers, storm drains, harbor areas, gas, water, and other utility plans;
- Draws, traces and updates maps and charts;
- Performs structural detailing by preparing and finishing sketches;
- Prepares visual aids for public presentations;
- Makes trigonometric and other mathematical calculations;
- Reads and interprets engineering sketches, maps, survey field notes, aerial photographs and drawings of electrical and mechanical systems;
- Plots profiles and cross sections;
- Makes field investigations;
- Transposes scales;
- Details enlargements;
- Performs substructure studies;
- Enters and maintains various logs, records and files;
- May compute areas, angles, grades, elevations, boundaries, distances, volumes, and traverses;
- May assist in preparing cost estimates and analyzes material costs, quality and quantity;
- May perform field survey;
- May conduct plan checks for compliance with City standards, regulations and non-interference with utilities;
- May investigate public complaints;
- May assist in preparing and processing legal descriptions, deeds, dedications, encroachments, vacations, easements, and subdivisions;
- May issue or process various permits, franchises, street occupancies and deeds;
- May utilize CAD (Computer Aided Design) and/or CAM (Computer Aided Mapping) systems;
- May collect data such as traffic parameters and inspect traffic control and striping;
- May prepare reports and letters;
- May assist in developing project standards and specifications;
- Performs other related duties as required.

ENGINEERING TECHNICIAN I-II (continued)

MINIMUM REQUIREMENTS:

High school, college or technical classes in geometry, algebra and trigonometry and either:

High school drafting and approximately two years of experience in civil or other engineering drafting (one year in an engineering field party may be substituted for one year of drafting experience); or

Six units of college level drafting and one year of experience in civil or other engineering work; or

An equivalent of training and experience.

Valid motor vehicle operator's license.

DESIRABLE QUALIFICATIONS:

Familiarity with various related computer programs and/or systems, including CAM and CAD.

Ability to communicate effectively with public.

HISTORY:

Approval/Adoption Dates: 01/08/87 - Human Resources Department
02/11/87 - Civil Service Commission