

ENGINEERING SPECIALIST III

DEFINITION

Performs the most difficult technical and para-professional engineering duties in support to the City's Engineering program; performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Incumbents perform a variety of assignments including relieving engineers of simple construction project management activities.

REPRESENTATIVE DUTIES

*The duties listed below are examples of the work typically performed by employees in this class. An employee may not be assigned all duties listed and may be assigned duties which are not listed below. Marginal duties (shown in italics) are those which are **least** likely to be essential functions for any single position in this class.*

1. Assists with building and/or public works inspections and performs routine inspections independently.
2. Acts as a project manager for simple construction projects; designs and prepares plans, specifications and cost analyses; monitors progress of work; and makes field inspections.
3. Participates in in-depth study projects, has independent responsibility for technical engineering-related projects, and/or support a professional engineer; acts as liaison, as designated to coordinate unit activities with other public agencies, private concerns and the public; and represents the Division as assigned.
4. Checks plans prepared by: in-house staff, other agencies, contractors, and the public for conformance of codes, standards, current maps and/or plans, policies, engineering principles, and conditions for approval; and calculates fees.
5. Uses CADD software to create drawings, construction plans, and record maps; and updates drawings and maps based on field inspection information.
6. Assists public at the counter and over the phone; accepts permit application and plans; and provides information regarding property characteristics, department procedures, fee structure, ordinances, and zoning.
7. *Provides vacation and temporary relief in similar occupational fields as necessary.*

EMPLOYMENT STANDARDS

Education and/or Experience

Completion of twenty-four units of college coursework in technical engineering and related mathematics, and five years of technical engineering experience which included application of mathematics and basic engineering principles related to design, drafting, and/or survey, or any combination of training and experience that provides the desired knowledge and abilities. Additional experience may be credited toward necessary education.

Knowledge of:

Principles and practices of civil engineering design; modern practices of civil engineering as applied to the construction and maintenance of public works; street, highway, traffic control, water, and sewer construction and maintenance practices; legal implications and code requirements which will affect a given project; design drafting; drafting techniques; modern principles, practices, and standards of survey and civil engineering as applied to the level of assigned public works projects; elementary algebra and geometry; code requirements and legal implications as applied to the level and type of assigned engineering activity; computer word processing, spreadsheet and database programs; and land survey and drafting software applications.

Ability to:

Prepare and interpret maps, drawings, and engineering records; analyze public works plans and apply engineering principles at the level required by assignment; plan and complete work from written or verbal instruction, past practice, and/or standard procedures; establish and maintain cooperative working relationships; work independently based on written or verbal instruction in the support of a professional engineer and/or in the functional supervision of others with minimal technical assistance; apply sound judgments; perform mathematical calculations for engineering design; analyze public works plans and apply necessary engineering principles; apply project management techniques and principles; and independently resolve conflict situations when working with contractors.

Special Requirements

Possession of or ability to obtain a valid California Driver's License.

Physical Demand

Sitting, standing, walking, some stooping and bending; dexterity and coordination to handle files; occasional lifting of objects up to 25 lbs. such as: files, stacks of paper and other reference materials; moving from place to place within the office; some reaching for items below and above desk level; strength, dexterity, coordination and vision to use a keyboard and computer for long periods of time.

WORKING CONDITIONS

Environment is generally clean with limited exposure to conditions such as dust, fumes, odors, and noise. A computer is used on a daily basis. Periodic contact with upset or angry individuals. Independent travel throughout the area is required.

Date Adopted: August 6, 1996