

STRUCTURAL ENGINEERING ASSISTANT, 7950

Summary of Duties: Performs entry level professional structural engineering work by applying standard practices and techniques while learning and assisting in the checking of designs, plans, specifications, and reports for a variety of structures; and does related work.

Distinguishing Features: This class is the first level of professional structural engineering work and is distinguished from other Engineer Assistant classes in that the work is in the field of structural engineering, rather than in other specialized engineering disciplines in civil engineering, or in electrical, mechanical or sanitary engineering. A Structural Engineering Assistant is assigned to the checking of plans of various types of buildings and other structures for compliance to applicable code requirements in connection with the issuance of building permits.

The work of an employee in this class is distinguished from that of a Structural Engineering Associate in that the Associate has greater latitude in exercising engineering judgment.

Examples of Duties: Checks plans for residential and commercial structures, involving the less complex structural features for conformance to the City Building Code, zoning ordinances, and applicable State laws; may use computer generated calculations to review or conduct analyses of plans involving varying structural systems; checks plans for health, fire, and life safety requirements for the varied uses of buildings; enforces zoning regulations; reviews building and grading permit applications and issues permits; answers questions pertaining to Building Code and zoning requirements at a public counter; and may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications: A good knowledge of the principles of structural engineering and drafting; a good knowledge of the sources of engineering information; a working knowledge of engineering mathematics; a general knowledge of field survey and construction practices; the ability to apply engineering principles to the solution of specific problems; the ability to deal tactfully and effectively with employees and the public; and the ability to communicate effectively both orally and in writing.

Graduation from a school of engineering in a recognized four-year college or university with a degree in engineering, or possession of a valid Engineer-in-Training Certificate issued by the California

State Board of Registration of Professional Engineers is required.

Successful completion of the following classes in structural engineering is desired but not required: structural analysis on both determinate and indeterminate structural systems, strength of materials; soil mechanics; reinforced concrete, masonry, structural steel and timber design; and seismic design.

License: A valid California driver's license may be required.

Physical Requirements : Strength to perform average lifting of less than 5 pounds and occasionally over 15 pounds; good speaking and hearing ability; and good eyesight.

Persons with medical limitations may, with reasonable accommodations, be capable of performing the duties of some of the positions in this class. Such determination must be made on an individual basis in light of the person's limitations, the requirements of the position, and the appointing authority's ability to effect reasonable accommodations to the person's limitations.

As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what all of the duties and responsibilities of any position shall be.