

Summary of Duties : Directs a large group of professional engineers and technical staff engaged in reviewing and managing the activities of contract construction design projects; assists in administering a contract construction program for the Department of Public Works; acts as assistant division engineer and may act as division engineer; and does related work.

Distinguishing Features : A Senior Construction Engineer is responsible for the construction and/or alterations of buildings and municipal facilities under the control of the Department of Public Works performed under contract. Under general direction of a Principal Civil Engineer or Principal Architect, an employee in this class works principally with groups of professional engineers and private contractors to design, process bids, conduct contract negotiations, and interpret contracts concerning buildings and municipal service facilities. A Senior Construction Engineer receives assignments in general terms, delegates detail to subordinates, and is personally concerned with the fundamental aspects of engineering problems and the review of completed work. An employee of this class usually discusses nonroutine problems with the division head, but assigns, directs, reviews, and prepares reports on the work after basic decisions are made.

Example of Duties : Directs an engineering unit responsible for planning and directing elements of the construction design and/or alteration of buildings and facilities under the jurisdiction of the Bureau of Engineering; supervises subordinate staff of City and consultant engineers engaged in the preliminary reviewing contractors price breakdowns, and checking for correct balances and completeness; checks construction progress reports to make adjustments for projects that are off schedule; conducts job site meetings with contractors to review construction progress and to avoid construction delays; reviews proposed change orders to insure that adequate funds are available; meets with contractors to resolve differences in interpretations of contract provisions related to buildings and other facilities; supervises a large group of engineers and technical staff who review and make recommendations concerning construction projects and plans; reviews completed plans for possible construction problems; contacts other agencies to coordinate joint construction projects; reviews time and cost estimates for accuracy and completeness; develops cost and data collection procedures used to prepare status and manpower utilization reports; personally reviews, approves, and coordinates the more complex work; resolves nonroutine problems with contractors and coordinates such resolutions with other public agencies and private organizations; acts as assistant division engineer or may act for the Principal Civil Engineer or Principal Architect in ones absence; and may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications : A good knowledge of the methods, processes,

equipment, tools, and materials used in construction; a good knowledge of the principles of administration and management involved in the supervision of a large organization of engineers and various technical advisors related to the construction field; a good knowledge of construction contract administration; a good knowledge of the proper methods of construction and of accepted standards; a good knowledge of the Municipal Building Code; a good knowledge of the Standard Specifications for Public Works Construction; a good knowledge of Mechanical and Electrical Engineering involved in the analysis of building plans and specifications; a good knowledge of safety principles and practices; a working knowledge of the laws and regulations related to equal employment opportunity and affirmative action; a general knowledge of the Civil Service Rules; a general knowledge of City personnel rules, policies, and procedures; a general knowledge of memoranda of understanding as they apply to subordinate personnel; the ability to estimate costs on large construction projects; the ability to interpret and analyze plans and specifications; the ability to determine personnel, equipment, and material requirements; the ability to plan, coordinate, direct, and inspect the work of a large group of employees; the ability to deal with administrative matters arising in connection with large scale construction projects; the ability to prepare progress, cost, and special reports and make recommendations; the ability to deal tactfully and effectively with employees, contractors, representatives of other governmental units, and the public.

Two years of full-time paid professional experience as a Civil Engineer, Architect, or in a class at least at that level and which provides experience in the design or construction of commercial, industrial, or public buildings, or large wastewater treatment plant facilities is required.

Registration: Registration as a Professional Engineer with the California State Board of Registration for Professional Engineers and Land Surveyors, or possession of a valid certification of registration as an Architect issued by the California State Board of Architectural Examiners is required.

License: A valid California Driver's License is required.

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

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.