



ASSISTANT CIVIL ENGINEER

DISTINGUISHING CHARACTERISTICS

Assistant: Under direction, the incumbent is expected to develop the following engineering skills: serve as assistant engineer in conjunction with road, bridge, airport, water system, and related construction projects; or design of bridge, road, airport, water system, and related projects; learn and become proficient with materials testing in relation to road, bridge, airport, water system, and related projects; or serve in any special assignment requiring engineering skills.

ESSENTIAL JOB DUTIES: Under limited direction, plans, assigns, directs the work of nonprofessional engineering personnel or personally performs work in the planning, design, survey, construction of public works projects including roads, bridges, structures, water systems, airports, and related structures; assigns and supervises or personally performs the more difficult phases of design and layout on these projects; supervises or personally performs the preparation of maps, plans, charts, estimates, or diagrams; supervises the maintenance of various engineering records and performs engineering office work in connection with cost analyses and progress reports; confers with supervisor during preliminary and design stages of work and discusses technical and policy problems; provides technical information to other engineers and the public; works with utilities and land and water companies in matters of relocation and rights of way; supervises or personally performs inspection and testing required under county contracts and all inspections for highway projects under the Federal Aid Program; supervises traffic surveys; coordinates survey work and materials testing; trains and evaluates the performance of personnel; prepares complex engineering reports; other related duties as needed.

EMPLOYMENT STANDARDS

Education/Experience: A Bachelor's degree in civil engineering or a related field and one year experience performing civil engineering duties is required. Possession of a certificate as an Engineer-in-Training issued by the California Board of Registration for Professional Engineers and Land Surveyors may be substituted for a Bachelor's degree.

Knowledge of: Basic principles, practices, and methods of civil engineering as applied to the planning, designing, construction, maintenance, and operation of roads, bridges, structures, airports, water systems, and related systems; methods, materials, and equipment used in highway, building, bridge, and water system construction; properties and uses of materials used in the construction thereof; common descriptions of real property and engineering surveying.

Ability to: Plan, design, and supervise the construction of highways, bridges, structures, utilities, and related systems; train and supervise professional and non-professional engineering personnel; prepare accurate plans, specifications, cost estimates, quantity estimates, and comprehensive engineering reports; establish and maintain project files and records including financial records; prepare clear, concise reports; analyze complex problems, evaluating alternatives and make sound recommendations; exercise sound independent judgment within general policy guidelines; work cooperatively with those contacted in the course of work; ability to stand, sit, bend squat, climb, kneel, twist, and lift and carry up to 50 pounds in the course of work.

Special requirements: Must possess or obtain by appointment date a valid operator's license issued by the State Department of Motor Vehicles.