

*CITY OF SCOTTS VALLEY*

***CLASS SPECIFICATION  
ENGINEERING ASSOCIATE***

**JOB PURPOSE**

Under direction, to perform the more difficult and complex office and field engineering tasks related to design, construction plan review, contract administration and inspection of City construction projects, land developments and related facilities. Incumbents perform difficult and complex assignments on a continuing basis with minimal supervision; this class is distinguished from lower level technical classes by the breadth of technical knowledge gained over many years of experience; and to do other work as required.

**EXAMPLES OF DUTIES**

**Essential Duties:**

- ~ Prepares and reviews engineering designs, specifications, and calculations for public works projects, including roads, off-site improvements, drainage, water and sewer systems, pumping stations, landfill disposal sites;
- ~ Determines routes, alignments, profiles, capacities and grades for projects;
- ~ Calculates quantities of materials and prepares cost estimates for construction projects;
- ~ Prepares drawings and final plans;
- ~ Coordinates with Federal, State and local agencies to obtain grants, permits and project approvals, including environmental reviews;
- ~ Prepares legal descriptions and conducts field studies for right-of-way and easement acquisition;
- ~ Inspects construction work for conformity to plans and specifications;
- ~ Collects, reviews and tests chemical and material samples;
- ~ Prepares daily diaries and other field reports;
- ~ Monitors construction projects progress schedules and prepares progress payments, change orders, and notices of completion;
- ~ Acts as liaison to other departments, agencies and parties concerned with public works matters;
- ~ Reviews and processes engineered projects, encroachments, improvement plans and other construction projects for conformance to engineering standards, conditions of the development permit, and City design criteria;
- ~ Field checks sites and coordinates project improvements with other parties;
- ~ Reviews structural calculations and cost estimates;
- ~ Prepares or reviews subdivision and sewer extension agreements, including financial securities;
- ~ Investigates and resolves complaints from the public concerning public works projects and related issues;
- ~ Prepares reports for litigation and may serve as an expert witness;
- ~ Participates in pre-construction conferences with engineers, consultants, contractors and

- representatives from other agencies;
- ~ Prepares reports, correspondence and recommendations including City fees and ordinances;
- ~ Inputs, accesses and analyzes data using a computer terminal;

**Marginal Duties:**

- ~ Supervises subordinate staff as assigned.
- ~ Performs related duties as required.

**EMPLOYMENT STANDARDS**

**Education, Experience and Licenses:** Any combination of education, training and experience which would provide the required knowledge and abilities: five years technical engineering experience performing construction inspection, design, contract administration, or related engineering work.

**Ability to:** Interpret or prepare blueprints, maps, change orders, construction plans and specifications, including cost estimates, bid documents and complex technical engineering reports. Design and evaluate engineering plans for roads, drainage, water, and sewer systems and other public works projects. Inspect large and complex construction projects and enforce compliance with plans, specifications, change orders and laws. Review, evaluate, recommend and approve solutions to unusual field conditions not specified in plans or specifications. Administer large and complex construction contracts, including measure and calculate quantities to determine progress payments. Prepare written reports, correspondence, recommended changes in local fees or ordinances, assist in budget preparations and make oral presentations. Establish and maintain effective working relationships with those contacted in the course of work. Input, access and analyze data using a computer terminal.

**Knowledge of:** Working knowledge of engineering mathematics, science and hydraulics; nomenclature, symbols, methods, practices, techniques, instruments and equipment used in drafting, construction inspection, hydraulics, sanitary engineering and surveying; physical properties and uses of chemicals and materials used in construction and public works related projects, including appropriate hazardous materials handling and principles of safety; principles and techniques used in the design of roads, drainage, water and sewer systems, pumping stations and related public work facilities; contract administration; application of data processing to engineering studies and design,

*CITY COUNCIL APPROVAL:* November 2, 1994