POSITION DESCRIPTION

ASSOCIATE CIVIL ENGINEER

GENERAL PURPOSE

Performs complex engineering work in the provision of office and engineering support and field engineering support for environmental, water, sewer, street, and other Public Works projects and programs ensuring technical competence and compliance with all current codes and criteria; serves as a Project Manager.

DISTINGUISHING CHARACTERISTICS

This is the journey level class in the professional engineering series. Positions in this class possess the applicable educational and training background required for classes in the professional engineering series, including appropriate certificates and licenses in the field, as well as, practical work experience. The Associate Civil Engineer is distinguished from the Assistant Engineer by the performance of the full range of duties as assigned with only minimal instruction or assistance. Incumbents work independently, seeking assistance only as new or unusual situations arise. Positions in this class are flexibly staffed and are normally filled by advancement from the Assistant Engineer class or competitive recruitment. The Associate Civil Engineer position is distinguished from the City Engineer position which is responsible for the administrative direction of the Engineering Division and control of all projects.

SUPERVISION RECEIVED

Receives general direction from the City Engineer.

SUPERVISION EXERCISED

Exercise technical and functional supervision, including evaluation over less experienced professional, para-professional, technical and support staff and/or consultants.

ESSENTIAL DUTIES AND RESPONSIBILITIES (Illustrative Only)

Reviews private project development plans for compliance with codes, regulations, standards, and compliance with approved City master plans. Evaluates transportation,
traffic and other public works related impacts related to private projects. Makes recommendations for conditions of approval. Coordinates and/or undertakes the development of the City Transportation Improvement Program (T.LP.), Comprehensive Plan, Comprehensive Water Plan, the Capital Improvement Program (C.LP.), Pavement Management System and other programs involving the municipal infrastructure.

Determines applicable codes, regulations, and requirements for assigned projects. Develops project scope and selection criteria, and manages consultant selection process if one is utilized.

Coordinates the preparation of, or develops, engineering plans, specifications, estimates for complex public works projects. Coordinates required advertising for bids, reviews construction bids and makes necessary recommendations based on lowest and best bids, competency of vendors and consultants, and the selection criteria. Provides project management for the construction of the municipal public works projects. Inspects and oversees assigned projects to ensure contractor compliance with contract documents, schedules, and budget parameters for the project. Assures accurate as-built records of projects, and coordinates warranty and training issues for a smooth transition to the operation and maintenance programs.

Coordinates the preparation of, or develops, reviews and updates the sanitary sewer, water, storm drainage, and street system maps, data bases’ and comprehensive plans. Manages the engineering library and infrastructure records. Maintains and updates city subdivision and public works standards.

Responds to public or other inquiries relative to engineering policies and procedures on specific projects and other information. Evaluates issues and options regarding municipal public works and makes recommendations.

Issues and administers utility permits, street use permits, franchise utility permits, etc.

Maintains regular contact with consulting engineers, construction project engineers, city, County, State and Federal agencies, professional and technical groups ante the general public regarding division activities and services. Prepares and administers grant applications.

Prepares traffic, utility and other studies and reports. Writes memoranda, prepares reports, and makes presentations to Planning Commission, Traffic Safety & Parking Committee, City Council and other bodies as necessary.

Performs and assists in survey work. Provides engineering support for other city departments.

**PERIPHERAL DUTIES**

Coordinates sidewalk inspection, maintenance and enforcement

Monitors inter-governmental actions affecting public works.
Assists in the training of other city personnel in public works design and construction techniques.

May serve on and/or provide technical and support staff assistance to various City commissions and task forces.

May serve on various employee related committees.

**MINIMUM QUALIFICATIONS**

**Education and Experience:**

(A) Graduation from an accredited four-year college or university with a degree in civil engineering or a closely related field; and

(B) A minimum of three (3) years of responsible civil engineering experience performing duties at least comparable to an Assistant Civil Engineer. Municipal experience or related consultant work is preferred.

(C) Possession and maintenance of a valid registration as a Professional Engineer in the State of California.

**Necessary Knowledge, Skills and Abilities**

**Knowledge of:**

Civil engineering principles, practices and methods as applicable to a municipal setting [public works, utilities, transportation and land development]; applicable policies, laws, and regulations affecting Engineering Division activities.

Applicable laws and regulatory codes relevant to assigned areas of responsibility.

Methods, materials, tools and equipment used in engineering construction; arriving at cost estimates on complex projects.

Principles of algebra, geometry and trigonometry and their application to engineering duties.

Methods, materials, and techniques used in the construction of public works and utilities projects.

Modern standards of alignment, grade, and compaction

Topographic and construction surveying.

Strengths, properties and uses of engineering construction materials.

Public Sector financing and budgeting principles and practices.

**Ability to:**
Prepare plans and drawings neatly and accurately.

Prepare engineering design computations and check, design, and prepare engineering plans and studies.

Learn and understand City engineering policies and procedures.

Learn applicable laws and regulatory codes applicable to areas of assigned responsibility.

Communicate clearly and concisely, both orally and in writing.

Use and care of engineering and drafting instruments and equipment.

Prepare reports encompassing raw technical data; prepare effective cost estimates and recommendations.

Establish and maintain effective working relationships with those contacted in the course of work.

Administer contracts and coordinate and review the work of outside consultants.

Design common engineering structures and facilities.

Use drafting and surveying instruments to prepare maps, plans, cross-sections, and profiles.

Prepare quantity and cost estimates.

Skill in operating the listed tools and equipment.

**SPECIAL REQUIREMENTS**

(A) Must possess a valid State driver's license or the ability to obtain one prior to PYP employment; (B) Associate Civil Engineer - Must pass registration as a Professional Engineer in the State of California, or possess Professional Engineer Registration in another state with ability to obtain California registration within six (6) months; (C) Must be physically able to move about on construction work sites and under adverse field conditions.

**TOOLS AND EQUIPMENT USED**

Personal computer, including word processing, spreadsheet, data base, project scheduling and computer-aided-design software; standard drafting tools; surveying equipment including level, theodolite and electronic distance measuring devices; motor vehicle; phone; mobile radio.

**PHYSICAL DEMANDS**
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Work is performed mostly in office settings. Some outdoor work is required in the inspection of various land use developments, construction sites, or public works facilities. Hand-eye coordination is necessary to operate drafting instruments, computers and various pieces of office equipment.

While performing the duties of this job, the employee is occasionally required to stand; walk; use hands to finger, handle, feel or operate objects, tools, or controls; and reach with hands and arms. The employee is occasionally required to sit; climb or balance; stoop, kneel, crouch, or crawl; talk or hear; and smell.

The employee must occasionally lift and/or move up to 75 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus.

**WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee occasionally works in moving mechanical parts and in high, precarious places and is occasionally exposed to wet and/or humid conditions, fumes or airborne particles, toxic or caustic chemicals, risk of electrical shock, and vibration.

The noise level in the work environment is usually quiet to moderate.

**SELECTION GUIDELINES**

Formal application, rating of education and experience; oral interview and reference check; job related tests may be required.

The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

The job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.