

Associate Engineer

Department/Division:	Public Works
Reports To:	Engineering Manager
Provides Direction To:	Engineering Intern
Date Updated:	July 16, 2022

GENERAL PURPOSE

Under general supervision, performs complex professional engineering, project management and inspection work for private development and public infrastructure, and other capital improvement programs; assists engineering staff with related assignments; and performs related duties as required.

DISTINGUISHING CHARACTERISTICS

As compared with the Assistant Engineer, this classification provides supervision and performs varied engineering assignments requiring more specialized knowledge of civil engineering principles, design standards, and construction regulations. This job is distinguished from the Engineering Manager who has responsibility for overseeing division-wide programs and services and supervising professional and technical support staff and interns.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below 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 this position.

- 1. Prepares, manages, and develops detailed plans, specifications and estimates for capital improvement projects for construction or maintenance of a wide variety of engineering projects; assists in the development of the division's CIP goals, objectives, budget, policies and procedures, and schedules.
- 2. Prepares and reviews a variety of special report documents such as draft contracts, council agenda reports, memorandums, letters to residents/contractors/agencies, presentations and notices of violations, technical diagrams, charts and reports.
- 3. Reviews various engineering, public contract, government and other applicable codes to ensure compliance with construction and design standards.

- 4. Performs inspections for capital improvement projects, utility work, traffic signals, subdivision development and all other work within the public right of way. Includes Storm drain, NPDES, traffic control, sewer, PCC ADA ramps, sidewalk and pavement preservation, rehabilitation and construction.
- 5. Manages pavement management software, generates reports and provides recommendations for future project selection.
- 6. Reviews and supervises encroachment permit applications including insurance, construction and traffic control plans and provide plan check comments for construction work within the ROW.
- 7. Responds to requests for public information, resident concerns and questions; provides technical requirements/information, plans, files and other information to residents, contractors, businesses and agencies related to public works practices.
- 8. Manages capital improvement projects including processing invoices, balancing/tracking budgets, scheduling/overseeing design, construction and material testing, reviewing project submittals, environmental review, review and process change orders and pull all required construction permits.
- 9. Reviews, processes and conducts plan checks of development plans, bonds, calculations and final maps for compliance with codes, regulations, and standards.
- 10. Develops, prepares and performs various presentations to City Council, residents and internal staff such as public outreach meetings, pre-bid meetings, pre-construction meetings, and agenda item council recommendations.
- 11. Coordinates construction bids for award by Council including advertising, and review of construction bids, bonds and contractors; provides recommendation for selection of consultants, and contract change orders to council.
- 12. Develop comments, corrections and conditions of approval for various development projects within the City. Review development conditions, and provides recommendations to supervisor.
- 13. Develops exhibits and maps using AutoCAD, ArcMap, and other programs.

QUALIFICATIONS GUIDELINES

Knowledge of:

Theory, principles and practices of civil and structural engineering design; Subdivision Map Act; engineering and construction codes; public works design and construction materials and methods; surveying principles; department policies; legal guidelines for construction and environmental engineering projects; public bidding and contract processes; project scheduling and cost estimation practices; research practices;

engineering reports, plans, and study methods; sources of public funding; communications and customer service techniques

Ability to:

Operate computer hardware and AutoCAD, Arc GIS mapping, Pavement Management and Asset Management software and spreadsheet and word processing programs; review and prepare engineering plans, specifications and design requirements; analyze and interpret legal contract and work agreements; prepare and evaluate engineering data; evaluate and present alternatives for solving Engineering and traffic issues; organize and prioritize tasks to meet deadlines; prepare clear and concise reports, drawings, maps, notes, correspondence and other written materials; establish and maintain cooperative working relationships with staff, management, public and private representatives, contractors, architects, developers, and others in the course of work; learn City ordinances related to public works.

Education/Training/Experience:

Any combination of experience and education that could likely provide the required knowledge and abilities. A typical way to obtain the knowledge and abilities would be:

Education: Equivalent to Bachelor's Degree in Civil Engineering, or a closely related field.

Experience: Three years of professional experience in civil engineering work.

Licenses/Certificates/Special Requirements:

A valid Class C California driver's license acceptable driving record, and proof of insurance in compliance with the City's Vehicle Insurance Policy standards.

Possession of a valid Civil Professional Engineer (PE) or Land Surveyor (LS) license issued by the State of California Board for Professional Engineers and Land Surveyors is desirable.

Candidates with a valid Engineer-In-Training certificate issued by the State of California may be considered if there are insufficient applicants possessing a Professional Engineer license.

PHYSICAL AND MENTAL DEMANDS

The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands

While performing the duties of this job, the employee is regularly required to sit; talk or hear both in person and by telephone; use hands to ginger, handle, feel objects or controls; and reach with hands and arms. The employee may occasionally walk and stand and lift and carry records and documents that weight 20 pounds or less.

Specific vision abilities required by this job include close vision, color vision, and the ability to adjust focus.

Mental Demands

While performing the duties of this class, the incumbent is regularly required to use written and oral communication skills; read and interpret data, information and documents; analyze and solve complex problems; use math/mathematical skills; perform highly detailed work under changing, intensive deadlines, on multiple concurrent tasks; work with constant interruptions; and interact with officials and the public.

WORK ENVIRONMENT

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

The employee usually works under typical office conditions where the noise level in the work environment is quiet. Frequent driving is required to visit community services facilities and construction sites and to attend business, community and public meetings.

The employee frequently inspects active construction sites where loud machinery is present and is subject to variable weather conditions, including wetness or humidity.