



Engineering Intern

Department/Division:	Public Works/Engineering
Reports To:	Engineering Manager or assigned professional position
Provides Direction To:	Not applicable
Date Prepared:	June 28, 2022

GENERAL PURPOSE

Under general supervision, performs entry level professional engineering work and technical, field, and administrative assignments in support of the Engineering Department and staff, and related public works and civil engineering projects; and performs other related duties as assigned.

DISTINGUISHING CHARACTERISTICS

The Engineering Intern is a part-time hourly/non-exempt position that performs varied tasks and assists the Engineering Team with applied research, inspections, and administrative support functions as part of the learning experience in conjunction with educational coursework leading to an advanced degree in Engineering.

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 and assists in the preparation of preliminary and final plans and specifications for City construction projects, including street projects, traffic signals, street lighting system, and sewer facilities.
2. Provides engineering assistance at the public counter and responds to inquiries and public service requests, including plan and permit review, and fee billing.
3. Arranges bid and plan sets, engineering cost estimates, site maps, and other documents in response to requests for public records and information.
4. Coordinates and conducts site inspections and pre-construction meetings within the encroachment permitting process to verify and document conditions.

5. Coordinates work with other agencies, including public utilities for upcoming projects as well as other internal City departments to expedite workflow and fulfill specific requests.
6. Prepares outreach materials to supplement public notices related to City project updates, street closures, and relevant public works information.
7. Participates in door-to-door outreach efforts to notify residents of City work activities.
8. Conducts background research involving City, County, and State engineering standards and codes for City projects and programs.

QUALIFICATIONS GUIDELINES

Knowledge of:

Civil engineering principles applicable to municipal public works design and construction; research methods; topographic and construction surveying and GIS mapping principles; field inspection principles; correct English usage, spelling, grammar, and punctuation; filing and record keeping procedures.

Ability to:

Conduct basic engineering measurements and prepare accurate plans, specifications, and cost estimates; learn department policies and procedures; communicate clearly and concisely, orally and in writing; organize tasks to meet deadlines; utilize word processing, spreadsheet, records management, and office support software; operate standard office equipment and computer software. Assist during emergencies as needed.

Education/Training/Experience:

Any combination equivalent to 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 high school graduation and current enrollment in a civil engineering or construction management academic program leading to the attainment of a Bachelor's degree or Master's degree in Civil Engineering or equivalent field. At least two years of coursework remaining before graduation is preferred.

Experience: Prior technical intern work experience is desirable.

Licenses; Certificates; Special Requirements:

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

Familiarity with AutoCAD or MicroStation is required.

Arcview (GIS) experience is preferred.

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 frequently required to use hands to finger, handle, feel or operate objects, tools, or controls; and reach with hands and arms. The employee is frequently required to sit, talk or hear and to occasionally stand and walk and typically lift and carry records and documents typically weighing less than 20 pounds. When performing work at jobsites, the employee may be required to lift and carry equipment up to 25 pounds. Specific vision abilities required by this job include close vision, depth perception, color vision, and the ability to adjust focus.

Mental Demands

While performing the duties of this class, employees are regularly required to use written and oral communication skills; read and interpret data, information and documents; use math and mathematical reasoning; observe and interpret situations; learn and apply new information or new skills; work under deadlines with constant interruptions; and interact with City staff, other organizations and the public, and occasionally deal with dissatisfied or quarrelsome individuals.

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 noise level is typically quiet and the employee predominately works in a controlled office setting. Employees may occasionally be required to work in outside conditions exposed to the elements, potentially uneven terrain, and loud machinery at construction sites.