



## JOB DESCRIPTION

### Engineering Aide

Date Prepared: March 2014

Class Code: 7145

**SUMMARY:** Under basic supervision, performs a variety of routine engineering work related to the drafting and design of plans for public works facilities and projects; performs survey and topography activities to collect horizontal and vertical data for construction projects; assists with the conduct of plan checks and the inspection of encroachment permits; and enters and maintains data for City projects; performs related duties as required.

**ESSENTIAL FUNCTIONS:** -- *Essential functions, as defined under the Americans with Disabilities Act, may include any of the following representative duties, knowledge, and skills. This is not a comprehensive listing of all functions and duties performed by incumbents of this class; employees may be assigned duties which are not listed below; reasonable accommodations will be made as required. The job description does not constitute an employment agreement and is subject to change at any time by the employer. Essential duties and responsibilities may include, but are not limited to, the following:*

- Uses a variety of drafting tools, equipment and software to prepare construction drawings and related maps reflecting topography, drainage, right-of-ways, structures, utility lines, roadways, construction symbols and related information; tabulates and plots field data.
- Assists with the preparation, evaluation, and editorial review of City memorandum, including selection of request for proposal for City contracts.
- Prepares plans on AutoCAD related to the construction and maintenance of a variety of capital projects; calculates material quantities and costs.
- Coordinates installation of temporary water meters and processes deposits/repayments.
- Maintains records and assists in preparation of a variety of reports.
- Assists survey group, records elevations for engineering department projects; records routine topography within the boundaries of the City of Vernon.
- Reviews and check plans for compliance with various City, state, and federal requirements.
- Inspects materials and workmanship on water/street department and survey projects to assess conformance with construction plans, City standards and specifications.
- Responds to a variety of complaints and inquiries from the general public.

When assigned to field work:

- Surveys existing roads to collect data for engineering staff for the planning and design of proposed construction projects.
- Performs plan checks; enters data and information into the City's data base for encroachment permits; participates in field inspections; contacts applicants to request additional information.
- Enters as-built information into the City's data base for nearly completed projects; updates and converts survey records and topography into digital formats.
- Scans and prints plans as needed.
- Locates and marks underground traffic signal conduits for USA dig alerts at intersections as needed.
- Supports the relationship between the City of Vernon and the general public by demonstrating courteous and cooperative behavior when interacting with visitors and City staff; maintains confidentiality of work-related issues and City information; performs other duties as required or assigned.

## **MINIMUM QUALIFICATIONS:**

### **Education, Training and Experience Guidelines:**

High School Diploma or equivalent AND two years of experience in construction management and planning, drafting, field surveying, or engineering is required.

### **Knowledge of:**

- City policies and procedures.
- Fundamental engineering computations, methods, practices, and techniques used in mapping.
- Fundamental survey methods, practices, and techniques.
- Customer service and public relations methods and practices.
- Record keeping and file maintenance principles and procedures.

### **Skill in:**

- Interpreting and applying state and federal statutes, codes, rules, and regulations.
- Analyzing data and information to draw logical conclusions.
- Computing mathematical engineering calculations.
- Reading, interpreting, and applying field notes to perform drafting assignments.
- Working effectively with others to develop solutions for problems.
- Collecting and analyzing data, and making appropriate recommendations.
- Operating a personal computer utilizing standard and specialized software.
- Establishing and maintaining cooperative working relationships with co-workers.
- Communicating effectively verbally and in writing.

### **LICENSE AND CERTIFICATION REQUIREMENTS:**

A valid California State Driver's License is required. Additional technical certifications are preferred and may be required.

### **PHYSICAL DEMANDS AND WORKING ENVIRONMENT:**

Work is performed in a standard office environment, and in internal and external environments throughout the City, with possibility of exposure to hazardous materials.