

CIVIL ENGINEER

Definition:

Under general supervision performs difficult and complex professional civil engineering work in an assigned public works section or area to include reviewing plans related to public works construction projects; performs a variety of engineering work to include the preparation of plans, estimates, specifications and other documents; serves as project engineer, provides direction to professional and technical engineering staff as assigned and performs related work as required.

Essential Duties and Responsibilities:

The responsibilities and essential duties performed on a frequent and recurring basis by an incumbent include the following:

- Reviews plans related to public works construction to include streets, sidewalks, curbs, gutters, sanitary sewers and storm drains.

- Checks plans for conformance with regulations and/or policy regarding line, grade, size, elevation and location of structures.

- Prepares plans and specifications and designs a variety of specialized and complex engineering projects such as roads, sewers, storm drains and structures.

- Develops and prepares reports, correspondence, plans, petitions, diagrams, profiles, cross-sections and estimates.

- Manages assigned projects, prepares related reports, develops related contracts and other correspondence and maintains records of plans and documents.

- Performs and checks difficult and complex engineering calculations to include hydrology, hydraulic, super elevation and other calculations for a variety of projects.

- Establishes technical criteria and standards and makes difficult and technical engineering decisions.

- Prepares difficult and specialized engineering studies and reports and makes reports orally and/or in writing as appropriate.

- Coordinates assigned activities with consultants, other engineers, developers, contractors, other City departments and outside agencies as needed.

Prepares requests for proposals and contracts for consulting services.

Trains, provides technical and functional direction to, monitors the work of and assists in the supervision of assigned staff.

Investigates site conditions in the field, assists in the construction inspection of assigned projects and makes recommendations on approval of progress payments and change orders.

Responds to inquiries from a variety of individuals as needed.

Assists in determining the scope of engineering projects.

Operates a personal computer and uses applicable software.

Lifts and moves boxes of records weighing 30 pounds or less.

Drives a vehicle on City business.

Other Duties and Responsibilities:

Performs other projects/tasks as assigned.

Class Characteristics:

Civil Engineer is a multi-incumbent professional engineering class in the Engineering Department. Assignments are project-oriented, broad in scope and require the use of considerable judgment and initiative. Civil Engineer is differentiated from the lower level of Associate Engineer by the Civil Engineer's broader scope of responsibility, difficulty and complexity of projects assigned requiring substantial knowledge of engineering tasks related to public works design. In addition, a Civil Engineer provides technical and functional supervision to staff as assigned.

Contacts and Relationships:

A Civil Engineer establishes and maintains contact with staff in the Engineering Department and staff in other City Departments. Additional contact will occur with other governmental agencies, consultants, contractors, vendors and the public.

Qualification Guidelines:

The knowledge and abilities which are required to perform the duties and responsibilities of this class are as follows:

Knowledge of:

Principles and practices of civil engineering and related project administration.

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

Advanced mathematics and their application to engineering work.

Laws, regulations, codes and ordinances applicable to area assigned including Federal and State laws/requirements.

Rules and regulations governing supplemental funding sources for public works construction and/or studies.

Recent developments, literature and sources of information regarding civil and structural engineering matters

Effective supervisory techniques.

English usage, spelling, grammar and punctuation.

Computer applications as they relate to area assigned.

AND

Ability to:

Make engineering design computations and check, design and prepare engineering plans, specifications, studies and technical reports.

Conduct comprehensive engineering studies and prepare administrative and financial reports and recommendations.

Understand and interpret complex engineering construction plans, specifications and other contract documents.

Train and supervise staff as assigned.

Produce accurate cost estimates related to complex projects.

Perform technical research and solve difficult engineering problems.

Prepare and oversee large and complex project budgets.

Coordinate phases of complex construction projects, ensure project compliance with applicable rules and regulations and prepare progress reports.

Interpret and apply pertinent laws, rules and regulations.

Communicate effectively orally and in writing.

Understand and carry out oral and written instructions and use independent judgment and initiative.

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

Operate a personal computer and use applicable software.

Meet the public with courtesy and tact.

A typical way to obtain the knowledge and abilities is as follows:

Education:

Bachelors Degree in Engineering or a closely related field from an accredited college or university.

AND

Experience:

Three years of engineering experience involving the design, construction, inspection and surveying of public works projects.

Special Requirements Include:

Valid and appropriate California Drivers License and acceptable driving record at time of appointment and throughout employment in this position.

Registration as a Professional Civil Engineer in the State of California.

The City of Fullerton's Conflict of Interest Code requires that the Civil Engineer file financial disclosure statements in accordance with state and local laws.

Must be able to work a flexible schedule to accommodate City needs.

Physical Tasks and Working Conditions Include the Following:

Work is performed indoors in an office environment and on-site in the field. When work is performed outdoors there is full exposure to the elements. An incumbent uses a computer, keyboard and related equipment, drives a vehicle on City business, sits for extended periods of time, uses standard drafting tools, stands, walks, reaches, bends, twists, kneels, crouches and grasps, lifts and carries boxes of records weighing 30 pounds or less. In the field an incumbent may walk on slippery/uneven surfaces and slopes and be exposed to construction materials and dust. An incumbent must be able to meet the physical requirements of the class and have mobility, balance, coordination, vision, hearing and dexterity levels appropriate to the duties to be performed.

Fair Labor Standards Act Designation: Exempt.

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