

CITY OF LATHROP
PRINCIPAL ENGINEER

*Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications **may not include all** duties performed by individuals within a classification. In addition, specifications are intended to outline the **minimum** qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.*

DEFINITION:

Under direction, supervises, evaluates and participates in professional and technical civil engineering work in the planning, design, construction and maintenance of the City's Capital Improvement Projects, streets, storm drain facilities, landscape, lighting, sanitary sewer facilities, parks, water production and distribution facilities, buildings and other projects; ensures safe work practices, work quality and accuracy; maintains appropriate work records; serves as a technical resource for assigned work staff; performs other related duties as required.

DISTINGUISHING CHARACTERISTICS:

The **Principal Engineer** is a division manager within the Public Works Department and exercises full responsibility for planning, organizing and directing the work activities of either the CIP and Engineering Planning or Land Development Engineering Section staff. The incumbent performs the more complex design and construction of Capital Improvement Projects, reviews private development projects for design conformance and accuracy, and performs complex professional engineering assignments requiring considerable knowledge of various aspects of civil engineering, including land development, planning, design standards and regulations, construction and maintenance. This classification is distinguished from the next higher classification of Director of Public Works/City Engineer in that the latter has management responsibility for the entire Public Works Department.

SUPERVISION RECEIVED/EXERCISED:

Receives direction from the Director of Public Works/City Engineer. Exercises direct and indirect supervision over professional, technical and office support staff.

ESSENTIAL FUNCTIONS: *(include but are not limited to the following)*

- Assigns work to subordinate staff; monitors work activities to ensure safe work practices, work quality and accuracy; ensures compliance to applicable rules, policies and procedures; participates in the development of policies and procedures; recommends programs, projects and work assignments to higher level engineering personnel; participates in the selection and training of engineering personnel; assumes responsibility for motivating and evaluating assigned personnel; provides necessary training; initiates discipline procedures as is appropriate.
- Performs a broad range of design activities on a variety of public works projects, including capital projects, streets, storm drain facilities, sanitary sewer facilities, lighting, landscaping, parks, water production and distribution facilities and buildings; performs field inspections; develops design procedures; prepares plans, specifications, project budget and cost estimates; interprets the application of design criteria; checks plans and specifications for accuracy of design and completeness; makes recommendations for the Engineering Division budget and monitors the approved budget.

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- Supervises the plan review and permit programs, surveying, and the public and private development review process.
- Coordinates Capital Improvement Projects with staff, project managers, contractors, utility companies and other agencies; administers construction contracts; supervises staff on construction sites; performs field inspections; plans, coordinates, prioritizes, monitors and participates in the work of staff responsible for reviewing design conformance and accuracy of public and private development projects.
- Participates in the selection and supervision of contract professional engineers for the development of plan specifications, studies and reports.
- Prepares and provides complex engineering reports, correspondence, staff reports, ordinances and resolutions to the Director of Public Works/City Engineer, City Manager, City Council, committees, City departments, outside agencies and the public; develops and reports statistics; participates in Division budget development; makes oral presentations and participates in organizational and community group meetings; responds to questions and inquiries and investigates complaints concerning engineering problems.
- Accepts responsibility for the design and development of public works and utility structures and the preparation of project specifications; consults with contractors; reviews plans submitted by consultants and developers to ensure conformity with established standards and regulations; provides advice and instruction to subordinates on design standards and problems from the construction phase to completion of the project; provides supervision of field work; prepares, reviews and recommends change orders.
- Prepares various applications for state and Federal grants; initiates and conducts engineering planning studies to identify public works facility needs.
- Responds to the most complex and difficult inquiries and requests for information; provides information and resolves service issues and complaints; represents the Department with other City departments, other agencies, civic groups and the public; establishes and maintains a customer service orientation within the Division.
- Establishes positive working relationships with representatives of community organizations, state/local agencies and associations, City management and staff, and the public.

PHYSICAL, MENTAL AND ENVIRONMENTAL WORKING CONDITIONS:

Position requires sitting, standing, walking on level and slippery surfaces, reaching, twisting, turning, kneeling, bending, stooping, squatting, crouching, grasping, crawling and making repetitive hand movement in the performance of daily duties. The position also requires both near and far vision when inspecting work and operating assigned equipment, and acute hearing is required when providing phone and personal service. The need to lift, carry, pull and push tools, supplies and other equipment weighing up to 25 pounds is also required. Additionally, the incumbent in this position works outdoors in all weather conditions, including wet, hot and cold.

Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

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QUALIFICATIONS: *(The following are minimal qualifications necessary for entry into the classification.)*

Education and/or Experience:

Any combination of education and experience that has provided the knowledge, skills and abilities necessary for a **Principal Engineer**. A typical way of obtaining the required qualifications is to possess the equivalent of five years of increasingly responsible engineering experience, and a bachelor's degree in civil engineering.

License/Certificate:

Possession of, or ability to obtain, a valid Class C California driver's license; possession of a valid certificate of registration as a Civil Engineer issued by the California State Board of Registration for Civil and Professional Engineers.

KNOWLEDGE/ABILITIES/SKILLS: *(The following are a representative sample of the KAS's necessary to perform essential duties of the position.)*

Knowledge of:

Modern principles, procedures, practices and standards of municipal civil engineering; surveying methods and techniques; principles and practices of Capital Improvement Project construction project management; strength of materials and stress analysis; engineering project inspection methods; contract administration; municipal engineering laws, ordinances, codes, specifications and plans; methods and techniques of supervision, training and motivation; basic principles of mathematics; applicable federal, state and local laws, codes and regulations, including Lathrop Municipal Code; methods and techniques of scheduling work assignments; standard office procedures, practices and equipment; modern office practices, methods and equipment, including a computer and applicable software; methods and techniques for record keeping and report preparation and writing; proper English, spelling and grammar; occupational hazards and standard safety practices.

Ability to:

Plan, organize, direct and evaluate the work of subordinate staff; make adjustments to standard operation procedures as necessary to improve organizational effectiveness; coordinate the project management of multiple Capital Improvement Projects; prepare and administer a division budget; negotiate and manage construction contracts; plan, organize, train, evaluate and direct work of assigned staff; perform mathematical calculations quickly and accurately; interpret, explain and apply applicable laws, codes and regulations; read, interpret and record data accurately; organize, prioritize and follow-up on work assignments; work independently and as part of a team; make sound decisions within established guidelines; analyze a complex issue, and develop and implement an appropriate response; follow written and oral directions; observe safety principles and work in a safe manner; communicate clearly and concisely, both orally and in writing; establish and maintain effective working relationships.

Skill to:

Operate an office computer and a variety of word processing and software applications; safely and effectively operate engineering tools and equipment.