

CLASS TITLE: SENIOR ENGINEER

PURPOSE OF THE CLASSIFICATION: Under general direction explores subject areas, defines scope and selects problems for investigation, and develops engineering concepts and approaches for executing projects concerned with unique or controversial problems which have an important effect on major programs; acts independently on engineering matters; and performs other related required duties.

ESSENTIAL TASKS:

- Conceives, plans, and conducts research in problem areas of considerable scope requiring novel and sophisticated research approaches
- Generates, researches, and develops new designs, techniques, or products which are of material significance in the solution of the problem
- Serves as technical specialist for the department or the City in the application of advanced theories, concepts, principles, and processes for an assigned area of responsibility
- Develops constant specifications on specialty materials
- Keeps abreast of new scientific methods and developments affecting the City for the purpose of recommending changes in emphasis of program or new program development
- May plan, develop, train, coordinate, direct, and evaluate a staff of engineers and technicians working on projects of major scope and importance
- Investigates field projects for compliance with safety and environmental standards
- Maintains liaison with individuals and units within and outside the City
- Prepares engineering reports on complex projects
- Must report to work on a regular and timely basis

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential tasks.

QUALIFICATIONS:

Training and Experience: Graduation from an accredited college or university with a bachelor's degree in civil, electrical, mechanical, or chemical engineering and minimum of ten (10) years of experience, with minimum five (5) years verified experience performing "Responsible Charge" work of broad responsibility above that required of a Professional Engineer; doctoral thesis can be substituted for a maximum of two (2) years experience; master's degree work cannot be substituted for experience; and new hires must complete three (3) hours of additional approved engineering related coursework with a 2.0 grade point or higher or equivalent training during initial probationary period.

Knowledge, Abilities and Skills: Comprehensive knowledge of the principles and practices of engineering, drafting, and design as related to municipal public works projects; comprehensive knowledge of the methods, materials, and tools used for street, sewer, water, and other public works construction; comprehensive knowledge of applicable safety and environmental regulations; and comprehensive knowledge of the principles and practices of land surveying and engineering mathematics. Ability to plan and supervise the work of subordinates; ability to make independent investigations of complex engineering problems in connection with design work; ability to prepare reports of technical and advanced engineering information; ability to make complex engineering calculations quickly and accurately; and the ability to understand and influence the behavior of others within the organization, customers, or the public in order to achieve job objectives and cause action or understanding. Must possess skill in the use of drafting and surveying instruments.

Physical Requirements: Physical requirements include arm and hand steadiness and finger dexterity enough to use a keyboard and telephone; may be subject to walking, standing, sitting, reaching, balancing, bending, kneeling, crawling, handling, feeling, climbing, smelling, and twisting; and vision, speech, and hearing sufficient to perform the essential tasks.

Licenses and Certificates: Possession of a Professional Engineer's License for the State of Oklahoma.

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WORKING ENVIRONMENT: Working environment is primarily indoors in an office setting and occasionally outdoors and in inclement weather; and may require traveling to various locations for field investigations.

Class Code: 2018

EEO Code: E-03

Pay Code: EX-44

Group: Engineering, Planning, and Technical

Series: Professional Engineering

Effective Date: July 1, 2000