

CITY OF ST. LOUIS CLASSIFICATION SPECIFICATION

CLASSIFICATION

TITLE: Civil Engineer III

CLASS CODE: 4243

GENERAL DESCRIPTION OF DUTIES:

Incumbents provide professional civil engineering services and oversee the design, inspection and management of construction projects.

DISTINGUISHING CHARACTERISTICS:

This is an advanced-level professional classification in the General Engineering Series – Civil Engineering Group job family within the City of St. Louis. Incumbents perform a variety of complex duties. The distinguishing characteristics of this classification within the series include responsibility for overseeing civil engineering construction projects.

Incumbents work under general direction. They are generally in charge of an organizational unit, plan and carry out assignments with considerable independence, and have some latitude in developing procedures and methods. Supervision is given by occasional conferences.

This is an individual contributor class, meaning the incumbent is responsible for his/her own work including output, quality and timeliness. Incumbents may, however, explain work processes and train others, such as new employees, in the same or similar job title. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

EXAMPLES OF WORK (Illustrative Only):

(The list of duties is intended to be representative of the duties performed in positions within this classification. It does not include all the duties that may be assigned to a position and is not necessarily descriptive of any one position in this class.)

Designs construction projects.

Supervises and inspects construction projects and existing facilities.

Reviews contractor requests for payment. Maintains construction project notes and reports.

Prepares project status reports.

Writes change orders.

Conducts technical studies to aid in design and facility improvement.

Estimates construction project cost estimates.

Reviews plans and specifications.

Performs other duties as assigned.

KNOWLEDGE, SKILLS AND ABILITIES:

Data Utilization:

Requires the ability to perform mid-level data analysis including the ability to audit, deduce, assess, conclude and appraise. Requires discretion in determining and referencing such to established criteria to define consequences and develop alternatives.

Human Interaction:

Requires the ability to provide guidance, assistance and/or interpretation to others, such as contractors, co-workers and the public, on how to apply policies, procedures and standards to specific situations.

Equipment, Machinery, Tools and Materials Use:

Requires the ability to operate, calibrate, tune and synchronize, and perform complex rapid adjustment on equipment, machinery and tools such as computer terminal, printers, plotter, computer aided design applications, motor vehicle, surveying instruments, telephone and common hand tools and/or related materials used in performing essential functions.

Verbal Aptitude:

Requires the ability to utilize a variety of reference, descriptive and advisory data and information such as inspection reports, construction diaries, survey notes, designs, blueprints, change orders, payment requests, invoices, requisitions, databases, computer documentation, plats, maps, construction standards/manuals, engineering manuals/periodicals, statutes, procedures, guidelines and non-routine correspondence.

Mathematical Aptitude:

Requires the ability to apply advanced algebra, geometry, trigonometry and/or calculus concepts, including integration of related functions. May require linear programming.

Functional Reasoning:

Requires the ability to apply principles of logical or synthesis functions involving planning and directing of interrelated activities or multiple departments. Ability to deal with several concrete and abstract variables in working out approaches to major problems.

Situational Reasoning:

Requires the ability to exercise the judgment, decisiveness and creativity required in situations involving the evaluation of information against sensory, judgmental and/or subjective criteria, as opposed to criteria that are clearly measurable or verifiable.

Environmental Factors:

Tasks may risk exposure to adverse environmental conditions, such as dirt, dust, pollen, odors, wetness, temperature and noise extremes and machinery during construction site inspections.

Physical Requirements:

Requires the ability to lift, push and pull objects or materials such as manhole covers and carry surveying instruments up to fifty (50) pounds.

Requires the ability to stoop, crouch, climb, balance, bend and twist to inspect construction sites.

Sensory Requirements:

Requires the ability to recognize and identify degrees of similarities or differences between characteristics of colors and shapes to read color-code drawings/maps and clearly distinguish objects, sounds to communicate with others, and textures to determine appropriate construction materials used in projects.

EDUCATION AND EXPERIENCE STATEMENT:

Bachelor's degree in Civil Engineering accredited by the Accreditation Board of Engineering and Technology, Inc.; and four (4) years of progressively responsible professional civil engineering experience; and registration as a Professional Engineer in the State of Missouri.

SPECIAL REQUIREMENTS:

Possess and maintain a valid Missouri driver's license while employed by the City of St. Louis.

The City of St. Louis is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City of St. Louis will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the City.