Code: **5616** 

Operation and Construction Service Engineering, Designing and Structural Group Civil Engineering Series

## CLASS TITLE: Supervising Engineer

CHARACTERISTICS OF THE CLASS: Under direction, the class supervises an engineering section and oversees engineering consultants engaged in the planning, design and construction of multiple infrastructure and building construction projects of moderate scope and complexity; and performs related duties as required.

ESSENTIAL DUTIES: Supervises the conduct of field surveys to identify conditions that may impact the scope of proposed construction, repair and maintenance projects; drafts specifications for projects such as runways, streets, water, sewer, airport and related systems and facilities; supervises subordinate engineers and inspectors engaged in monitoring infrastructure and building construction projects ensuring work is completed according to contract specifications and project time lines; interprets design plans and specifications to contractors and assists in resolving design and construction problems; supervises the preparation of project status and cost reports; monitors projects assigned to staff and consultant engineers ensuring projects comply with engineering specifications, are completed on schedule and are within budget; supervises the payment process and approves partial and final payments to contractors ensuring payment requests reflect completed work according to contract specifications; supervises the review of design plans, contract documents, cost estimates and engineering calculations for construction or rehabilitation projects ensuring compliance with established design criteria, project scope and budget specifications, and makes changes as needed; supervises or personally analyzes and resolves complex engineering design and construction problems; reviews and approves plan changes and contract modifications submitted by engineering staff; assigns staff to various projects and reviews and evaluates their performance; provides professional engineering support and advice on joint projects with other city, state and private agencies; represents City at community meetings and to businesses affected by development projects.

RELATED DUTIES: May prepare grant applications to secure project funding; may consult with other departments and agencies to coordinate personnel engaged in project engineering activities; may provide technical information on engineering projects at hearings and legal proceedings; may research new materials, techniques and software for use in engineering projects.

## DESIRABLE MINIMUM QUALIFICATIONS:

Training and Experience. Graduation from an accredited college or university with a Bachelor's degree in Civil, Mechanical, Electrical or Structural Engineering or a directly related field of engineering supplemented by five years of progressively responsible experience in the planning, design and construction of major engineering projects,

including two years of supervisory experience, or an equivalent combination of training and experience, provided the minimum degree requirement is met. Registration as a Professional Engineer (R.P.E.) in the State of Illinois is required.

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## CLASS TITLE: Supervising Engineer (Cont'd)

Knowledge, Abilities and Skill. Considerable knowledge of the principles and practices of engineering design and construction. Considerable knowledge of advanced mathematical principles. Comprehensive knowledge of modern construction methods, materials and equipment. Considerable knowledge of computer assisted design software. Considerable knowledge of infrastructure systems. Considerable knowledge of project costing, monitoring and reporting techniques. Good knowledge of supervisory and management theory and practices.

Ability to assign, supervise and inspect the work of professional and technical personnel. Ability to analyze and resolve complex engineering design problems. Ability to develop and establish engineering project management techniques. Ability to establish effective working relationships with consultants and government representatives.

Considerable skill in the application of modern engineering principles to practical problems. Considerable advanced technical math skills. Considerable analytical skills. Excellent oral and written communication skills. Considerable skill in planning, organizing and administering complex engineering projects. Good supervisory skills.

<u>Physical Requirements</u>. Ability to access work sites during various stages of construction or repair.

<u>Working Conditions</u>. Inside: General office environment. Outside: Occasional exposure to inclement weather and extreme temperatures.

Equipment. Standard office equipment including personal computers.

NOTE: While the list of essential duties is intended to be as inclusive as possible, there may be other duties which are essential to particular positions within the class.