Code: 5905
Family: Technical Engineering
Service: Operation and Construction
Group: Engineering, Designing, and Structural
Series: General Engineering

CLASS TITLE: ASSISTANT CHIEF ENGINEER

CHARACTERISTICS OF THE CLASS

Under direction, the class is assigned to either the Bridges or Highway Unit in the Department of Transportation. This classification is managerial in nature responsible for overseeing assigned unit comprised of sub-sections responsible for the planning, design, and management of major infrastructure construction projects, and performs related duties as required

ESSENTIAL DUTIES

- Directs section supervisors and manages engineering consultants functioning as design and resident engineers on assigned bridge and highway infrastructure projects
- Prioritizes street construction, highway, and renovation projects
- Directs the development of and approves design plans and engineering specifications for infrastructure projects prepared by consultants and in-house staff
- Establishes and implements policies and procedures, quality standards and performance measurements for engineering projects
- Directs the preparation of project budgets, contracts, and work schedules
- Makes certain projects are inspected by resident engineers and work is completed according to contract specifications and project timelines
- Assists in directing the conduct of field surveys and engineering studies to identify conditions that may impact the scope of proposed street construction and renovation projects
- Meets with engineers and consultants to determine scope, costs, design criteria, and specifications for street construction and renovation projects
- Reviews project design plans and contract documents, cost estimates, and engineering calculations to ensure compliance with established design criteria, project scope, and schedules and budget specifications
- Oversees the resolution of design and construction problems with engineering and construction firms
- Assists in coordinating construction schedules to ensure minimal disruption to traffic flow
- Assists in developing work standards and conducts performance evaluations of subordinate personnel
- Assists supervisors in resolving complex engineering problems
- Acts as a liaison between consultants, contractors, and other departments and agencies to resolve problems and conflicts that arise during the course of projects
- Approves plan changes, contract modifications, and partial and final payments submitted by engineering staff and consultants
- Assists in preparing and administering the bureau's operating budget
- Assists in directing the preparation of project status reports
- Consults with other departments and agencies to coordinate personnel engaged in construction activities
- Visits construction sites to monitor progress, as required

- Provides technical information on road construction activities at hearings and regulatory proceedings

***NOTE**: The list of essential duties is not intended to be inclusive; there may be other duties that are essential to particular positions within the class.*

MINIMUM QUALIFICATIONS

Education, Training, and Experience

- Graduation from an accredited college or university with a Bachelor's degree in Civil Engineering or a directly related field of engineering, PLUS at least six (6) years of work experience in the planning, design, and construction management of engineering projects of which four (4) years are in a supervisory role related to the responsibilities of the position, **OR**
- Graduation from an accredited college or university with a Master's degree or higher in Civil Engineering or a directly related field of engineering, PLUS at least five (5) years of work experience in the planning, design, and construction management of engineering projects of which four (4) years are in a supervisory role related to the responsibilities of the position

Licensure, Certification, or Other Qualifications

- Registration as a Professional Engineer (R.P.E.) is required. At the time of employment, positions must have obtained Registration as a Professional Engineer (R.P.E.) in the State of Illinois
- Positions assigned to the Bridge unit must have a license as a Professional Structural Engineer (S.E.). At the time of employment, must have obtained license as a Structural Engineer (S.E.) in the State of Illinois.
- Some positions may require a State of Illinois driver's license.

WORKING CONDITIONS

- General office environment
- Exposure to outdoor weather conditions
- Exposure to loud noise
- Exposure to hazardous conditions (e.g., construction sites, heavy machinery)

EQUIPMENT

- Standard office equipment (e.g., telephone, printer, photocopier, calculator)
- Computers and peripheral equipment (e.g., personal computer, computer terminals, hand-held computer)
- Applicable safety equipment

PHYSICAL REQUIREMENTS

- Ability to inspect construction sites

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

Knowledge

Comprehensive knowledge of:

- applicable federal, state, local laws, regulations, and guidelines affecting transportation projects

- *methods and procedures utilized in planning, scheduling, and funding of projects (e.g., transportation, public works, construction)
- *applicable engineering design theories, principles, methods, and practices

Considerable knowledge of:

- *management and supervisory methods, practices, and procedures
- *budgetary preparation and planning
- *contract administration procedures
- *project costing, monitoring, and reporting methods, practices, and procedures
- *applicable safety principles, methods, practices, and procedures
- procedures and techniques used in testing and inspecting materials and equipment used in construction projects

Knowledge of applicable City and department policies, procedures, rules, regulations, and ordinances

Skills

- *ACTIVE LEARNING - Understand the implications of new information for both current and future problem-solving and decision-making
- *ACTIVE LISTENING - Give full attention to what other people are saying, taking time to understand the points being made, ask questions as appropriate, and not interrupt at inappropriate times
- *CRITICAL THINKING - Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems
- *MONITORING - Monitor and assess performance of one's self, other individuals, or organizations to make improvements or take corrective action
- *MANAGEMENT OF FINANCIAL RESOURCES - Determine how money will be spent to get the work done and account for these expenditures
- *MANAGEMENT OF PERSONNEL RESOURCES - Motivate, develop, and direct people as they work and identify the best people for the job
- *COMPLEX PROBLEM SOLVING - Identify complex problems and review related information to develop and evaluate options and implement solutions
- *JUDGEMENT AND DECISION MAKING - Consider the relative costs and benefits of potential actions to choose the most appropriate one
- *SCIENCE – Use scientific rules and methods to solve problems

Abilities

- COMPREHEND ORAL INFORMATION - Listen to and understand information and ideas presented through spoken words and sentences
- SPEAK - Communicate information and ideas in speaking so others will understand
- COMPREHEND WRITTEN INFORMATION - Read and understand information and ideas presented in writing
- WRITE - Communicate information and ideas in writing so others will understand
- REASON MATHEMATICALLY - Choose the right mathematical methods or formulas to solve a problem

- MAKE SENSE OF INFORMATION - Quickly make sense of, combine, and organize information into meaningful patterns
- ORGANIZE INFORMATION – Arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations)
- REACH CONCLUSIONS - Combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events)

Other Work Requirements

- LEADERSHIP - Demonstrate willingness to lead, take charge, and offer opinions and direction
- DEPENDABILITY - Demonstrate reliability, responsibility, and dependability and fulfill obligations
- ANALYTICAL THINKING - Analyze information and using logic to address work or job issues and problems
- INNOVATION – Think creatively about alternatives to come up with new ideas for and answers to work-related problems
- ADAPTABILITY/FLEXIBILITY - Be open to change (positive or negative) and to considerable variety in the workplace

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All employees of the City of Chicago must demonstrate commitment to and compliance with applicable state and federal laws, and City ordinances and rules; the City's Ethics standards; and other City policies and procedures.

The City of Chicago will consider equivalent foreign degrees, accreditations, and credentials in evaluating qualifications.

* May be required at entry.

City of Chicago
Department of Human Resources
July, 2023; April, 2025