



## JOB DESCRIPTION

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<b>JOB TITLE:</b>	Civil Engineer II	<b>FLSA:</b>	Exempt
<b>DEPARTMENT:</b>	Public Works	<b>GRADE:</b>	P3
<b>REPORTS TO:</b>	City Engineer		\$73,309 to \$109,965
<b>BARGAINING UNIT:</b>	Non-Represented	<b>DATE:</b>	April 2021

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### SUMMARY

This is a professional civil engineering position overseeing private and public construction projects within the City. Analyzes and interprets complex engineering construction and planning documents for compliance with City requirements. The position encompasses design/construction of private development, public works and utility projects. Provides information assistance to the public and staff regarding City standards and policies. Work is performed under the direction of the City Engineer.

### ESSENTIAL FUNCTIONS

*Essential functions as defined under the Americans with Disabilities Act (ADA) may include any of the following representative duties, knowledge and skills. This list is ILLUSTRATIVE ONLY and is not a comprehensive listing of all functions and duties performed by incumbents within this classification. Incumbents are required to be in attendance and prepared to begin work at their assigned work location on specified days and hours. Factors such as regular attendance on the job are not routinely listed in the job descriptions, but are an essential function.*

*Essential duties and responsibilities **may** include, but are not limited to, the following:*

- Reviews site plans by developers and builders on private construction projects.
- Ensures that all stormwater detention, best management practices and erosion control requirements are met.
- Reviews drainage plans, site plans for conformance to current standards and DuPage County Countywide Stormwater and Floodplain Ordinance.
- Reviews and interprets floodplain maps, issues letters of determination, and works with DuPage County staff to revise floodplain maps as needed.
- Designs, prepares, and evaluates preliminary and final plans and specifications for a variety of public works, building, roadway, traffic, utility infrastructure, maintenance, retrofitting, and new construction projects.
- Performs project resident engineering oversight on various construction projects; coordinates daily activities, ensures compliance with plans and specifications, administers contracts, documents work performed, and measures quantities.
- Conducts feasibility and cost studies; recommends alternative approaches, including the use of contract services and the incorporation of new methods and materials.
- Confers with and may direct the work of, on a specific project, City staff as required.
- Reviews and evaluates parcel maps, records of survey, subdivision and construction plans, and other documents submitted by the public; provides engineering design and code information and ensures that designs meet accepted industry and legal standards.

- Conducts research studies and prepares reports and recommendations regarding land use, building and facility design, transportation, housing, redevelopment, and a variety of engineering-related community service needs.
- Conducts field surveys and investigations related to engineering projects or requests.
- Develops engineering solutions to complex problems related to such areas as bridges, storm or sanitary sewers, roadways, water systems, flood control systems, and office or facility design and retrofitting.
- Prepares project designs, cost estimates, specifications, and project schedules.
- Participates in writing requests for proposal and contract specifications for design and construction services; participates in the selection of contractors and administers professional service contracts.
- Ensures that codes and standards are met in assigned projects.
- Administers contracts with and confers with consultants, engineers, architects and/or construction contractors; schedules projects; provides technical oversight, inspects work in progress, and ensures that all work complies with contract specifications and applicable codes and standards.
- Reviews and authorizes requests for payment and change orders; tracks and documents project and/or program costs.
- Contributes to the efficiency and effectiveness of the Engineering Division's service to its customers by offering suggestions and directing or participating as an active member of a work team.
- Maintains accurate records and prepares a variety of periodic and special reports.
- Drives a motor vehicle in order to drive to project sites and meetings.
- Monitors developments in equipment, materials and techniques in the engineering design and construction field.
- Makes presentations before various advisory committees, legislative, regulatory and community groups; oversees the best interests of the City in negotiations with others to provide services or take action supportive to the City.
- Confers with members of other departments regarding departmental or Citywide requirements and solutions; facilitates the resolution of problems and the development of coordinated policies.
- Demonstrates courteous and cooperative behavior when interacting with public and staff; acts in a manner that promotes a harmonious and effective workplace environment.

## **QUALIFICATIONS**

*To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.*

### **Education and Experience**

- Bachelor's degree in civil engineering or related field.
- Minimum four years of professional engineering design and project management experience; OR an equivalent combination of education, training and experience as determined by Human Resources.
- Prior work experience in a municipal environment preferred.
- Registration as a Certified Floodplain Manager (C.F.M.) preferred.
- Prior plan review experience preferred.
- Prior construction oversight experience preferred.

- Prior drainage investigation experience preferred.
- Working knowledge of the DuPage County Countywide Stormwater and Flood Plain Ordinance preferred.

### **Required Certificates, Licenses, and Registrations**

- Valid driver's license.
- Registration as a Professional Engineer in the State of Illinois or other state (or ability to obtain within 6 months).

### **Required Knowledge and Skills**

Knowledge of:

- Engineering objectives, principles, procedures, standards, practices, and information sources.
- Public works, facility and/or building design and construction principles, methods, and materials.
- Applicable laws, codes, and regulations.
- Project design and management principles and techniques.
- Statistical analysis and mathematical concepts related to the engineering process.
- Terminology, symbols, methods, techniques, and instruments used in engineering graphics and drafting.
- Principles and practices of materials and soils analysis and grading.
- Computer applications related to the position including intermediate to advanced Microsoft Office (Word, Excel, and Powerpoint) knowledge. AutoCAD experience a plus.
- Engineering mathematics.
- Business letter writing and the standard format for typed materials.
- Record keeping principles and practices.
- Safety principles and practices related to the work.
- Correct business English, including spelling, grammar, and punctuation.
- Techniques for dealing with the public, in person, and over the telephone.

### **Required Knowledge and Skills**

Skill in:

- Researching, analyzing, and summarizing engineering data both manually and with computer applications.
- Interpreting maps, plans and specifications, graphs, and statistical data.
- Making complex engineering calculations quickly and accurately.
- Preparing clear, concise, and complete technical documents, reports, correspondence, and other written materials.
- Exercising sound independent judgment within established procedural guidelines.
- Working without close supervision in standard work situations.
- Understanding and applying federal, state and local laws, regulations, policies, procedures, and standards pertaining to engineering and construction.
- Performing technical, detailed engineering design, computer modeling, and related project development.
- Representing the City effectively in meetings with developers, contractors, representatives of business, community, and professional groups and the public.
- Interpreting, applying, and explaining complex federal, state, and local laws related to the areas of responsibility.

- Using tact, discretion, and prudence in dealing with those contacted in the course of the work.

**PHYSICAL/MENTAL REQUIREMENTS**

*The physical demands described herein are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Mobility to work in an office setting, use standard office equipment, operate surveying equipment in the field, and stamina to sit for extended periods of time; strength to lift and carry up to 30 pounds; vision to read printed materials; and hearing and speech to communicate in person or over the telephone.

**WORKING ENVIRONMENT**

Work is performed in an office and field setting. Agility to navigate construction sites safely. Work is subject to performance under adverse environmental conditions, exposure to intense noise, inclement weather, fumes, and traffic.

**SAFETY FUNCTIONS**

- Becomes familiar with and observes all applicable safety and security policies/procedures.
- Immediately reports all unsafe conditions and acts to supervisor.
- Reports all accidents to supervisor immediately.
- Obeys and adheres to all safety rules and work practices.

**CONDITIONS OF EMPLOYMENT**

1. *Continued employment is contingent upon all required licenses and certificates being maintained in active status without suspension or revocation.*
2. *Any City employee may be required to stay at or return to work during emergencies to perform duties specific to this classification or to perform other duties as requested in an assigned response position. This may require working a non-traditional work schedule or working outside normal assigned duties during the incident and/or emergency.*

**I have read and understand the contents of this job description, and I have received a copy of this job description for my records.**

**EMPLOYEE**

**PRINT NAME:** \_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**SUPERVISOR**

**PRINT NAME:** \_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

*The City is an EOE employer.*