



CIVIL ENGINEER – TRANSPORTATION

JOB DESCRIPTION

Department: Public Works	Division: Engineering
Work Location: Urbana City Building	Percent Time: 100%
Job Type: Civil Service	FLSA Status: Exempt
Reports To: Assistant City Engineer	Union: Non-Union

JOB SUMMARY

Designs improvements and prepares construction plans for municipal infrastructure projects; conducts field investigations; prepares technical reports; monitors construction work; supervises work of permanent and part-time staff.

This job description reflects the general concept and intent of the classification and should not be construed as a detailed statement of all of the job requirements that may be inherent in the position.

JOB DUTIES

- Collects and analyzes field data; researches property histories and old project plans; prepares technical reports and cost estimates, and recommends improvements.
- Designs, prepares plans, specifications, contract documents, estimates of cost and monitors construction and maintenance of municipal infrastructure projects.
- Monitors construction of contract work to insure work is performed in compliance with contract plans and specifications and required quality is obtained; measures quantities and prepares pay estimates.
- Supervises work of survey parties, observing and recording data, establishing line and grade control.
- Prepares documentation and facilitates acquisition of easements and rights-of-way.
- Maintains files on correspondence and documentation on projects.
- Maintains effective relations with governmental officials, community leaders, citizens, Illinois Department of Transportation (IDOT), City of Champaign, University of Illinois, Champaign County, adjacent rural townships, the Urbana Park District, Urbana School District 116, Illinois American Water, Ameren, various communication utility companies, engineering consultants,

citizens, contractors, and other City departments.

- Provides technical support to various City departments.
- Requests for information, service or complaints are handled over the phone, via electronic or regular mail and in person, or referral made to appropriate staff in a concerned manner that reflects an effort to be helpful while at the same time acting responsibly on behalf of the City of Urbana; all calls are promptly returned.
- May serve as a Public Works Department/Engineering Division representative on special intergovernmental and interagency committees
- Performs other related duties as assigned.

JOB REQUIREMENTS

GENERAL

- Proficient in Word; Excel; Access; Outlook; AutoCAD or Microstation; and the Internet.
- Familiar with ArcGIS.
- Familiar with intersection traffic signalization.
- Familiar with documentation required for federal and state funded projects.

KNOWLEDGE & EXPERIENCE

Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

- A Bachelor of Science degree in Civil Engineering from an accredited college or university with emphasis in the studies of transportation engineering. A minimum of four years of increasingly responsible professional engineering experience, with transportation engineering background (including internships).
- Knowledge of investigation, design, construction, and documentation phases of engineering projects. In particular, Phase I/II experience with IDOT and other governmental agencies, districts, counties and/or municipalities. The applicant should have the ability to direct and perform work to complete Phase I engineering and environmental studies, including traffic studies, crash analysis, geometric studies; hydraulic/drainage evaluations, environmental compliance and project development reports. Also, the applicant must have the ability to direct and perform work to complete Phase II engineering plans, specifications, and estimates for transportation improvements.
- Demonstrated ability to apply principles and practices of civil engineering toward the completion of projects.
- Knowledge and skill in the use of field survey instruments and knowledge of operation of construction machinery.

ABILITY TO:

- Effectively manage work of technical and paraprofessional personnel.
- Apply strong verbal and written skills required for the preparation of technical reports and the presentation of recommendations orally and in writing.

- Learn and interpret IDOT design and construction manuals, standard specifications and highway standards as well as American Association of State Highway and Transportation Officials (AASHTO) design manuals and Manual on Uniform Traffic Control Devices (MUTCD) standards.
- Work effectively with others, monitor contractors, and manage work of technical and paraprofessional staff.
- Manage work to conform to project scope, schedule, and budget.
- Facilitate public meetings to gather input from various shareholders.
- Work with confidential information.
- Make public presentations to City Council, government agencies, and other organizations.

LICENSES, CERTIFICATIONS AND MEMBERSHIPS REQUIRED

- Illinois Professional Engineer license (P.E.) or ability to obtain license within 12 months of employment.
- Within fifteen (15) working days of employment, a valid State of Illinois Class D driver's license.

RESPONSIBLE FOR:

- Investigating problems, designing improvements, and preparing construction plans.
- Monitoring construction of municipal infrastructure type projects.
- Supervising the work of Engineering Technicians and/or Engineering seasonal personnel.

CONTACTS: INTERNAL/EXTERNAL

- Daily contact with construction contractors and general public.
- Frequent contact with other Public Works employees, other City departments, City Council, utilities, businesses, and government agencies.

WORK ENVIRONMENT

- Works indoors and out-of-doors year round.
- Works around traffic and automobile fumes.

Supplemental Information

Working Environment: *The work environment characteristics described herein are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

The work will occur in an office and field environment. Incumbents may be subjected to dusts, fumes, extreme temperatures, inadequate lighting, and intense noises. May be required to work in excess of 40 hours a week and/or work irregular hours, particularly during emergency situations.

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

- Sit for extended periods, frequently stand and walk.
- Have manual dexterity and eye-hand coordination need to use a variety of office equipment such as computers, telephones, calculators, copiers, and drafting equipment.
- Have corrected vision in order to review plans and specifications and perform other essential functions of the job.
- Occasionally walk on uneven terrain at construction sites, etc.

Vision/Hearing: See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; visually inspect work in progress. Ability to hear in the normal audio range with or without correction.

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

The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

The job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.

Approved By: _____
Department Head Date

Approved By: _____
Personnel Manager Date

This job description was approved by the Urbana Civil Service Commission on .

Class Specification History

General revision:

For HR/Finance Use

Title Code 109	Pay Grade 46
EEO Category 2- Professionals	