

## ENGINEERING TECHNICIAN I

**Reports To:** Construction Engineer

**FLSA Status:** Non-Exempt

**Grade:** K-NE

**Department:** Engineering

**Summary:** Basic functions include the performance of varied engineering assignments, such as engineering drafting, field survey work, and construction inspection. The work may include collecting survey information, construction layout, utility locations, drafting of construction plans, basic technical computations, inspection of routine construction projects, and maintenance of department records. Work is performed under the direction of staff engineers or other technicians.

**Essential Functions** include the following. Other duties may be assigned. (These examples may not include all of the tasks and/or knowledge which may be expected of the employee, nor do they cover all of the specific duties which may be required).

Performs basic engineering computations.

Serves on the survey crew, performs level circuits, construction layout staking, may serve as crew member or crew leader as assigned. May supervise and train subordinates in the operation of survey instruments and taking field notes.

Reduces and plots survey plot field notes for various projects such as: sewers, water mains, pavements, traffic signals, right-of-way, and construction projects. Consults with survey crew members.

Drafts public improvement projects, and assists engineers in routine project design. May use Computer Aided Drafting software and design software.

Inspects construction projects including sewers, water mains, pavements, resurfacing, curb & gutter, and traffic signals.

Assists in the maintenance of various department records, possibly including scanning of documents and data entry.

Assists in the collection of traffic counts and the preparation of traffic studies.

Assists in the preparation of pay estimates, inspection reports and record drawings.

### **Qualifications**

To perform this job successfully, an individual must be able to perform all essential functions satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**1) Education/Experience:** Graduation from High School or GED. Associates degree in Construction Technology, Civil Engineering Technology or related field desirable, or any combination of relevant course work, training and experience which would provide the necessary knowledge, abilities and skills.

**2) General Skill Levels:** General knowledge of the elementary principles of civil engineering, including the methods employed in land surveying and use of appropriate instruments. General knowledge of construction methods, materials and testing techniques. General knowledge of state and municipal codes and specifications. General knowledge of methods and practices involved in road, sewer, sidewalk, curb and gutter construction, and maintenance. Knowledge of current computer and/or electronic systems, techniques and requirements being utilized for specific applications in the department. Ability to detect and locate defective workmanship and materials. Ability to perform precise survey and design work, make moderately complex calculations, reduce field notes, and assist in the preparation of plans and designs for departmental projects. Ability to maintain standard clerical records and field notes. Ability to effectively communicate technical data orally and in writing. Ability to manage functions, resolve conflict, and work harmoniously with department heads, officials, employees, outside professionals and the general public.

**3) Certificates and Licenses:** Possession of a valid Illinois Driver's License.

**Physical Requirements/Working Conditions:** Work is performed in both an office environment and in the field on construction sites. Work requires driving to other office locations and other agency facilities in town or around the state for meetings, as well as visits to work sites. Work may include attending meetings outside of normal work hours. There are no extraordinary physical demands on this position other than incidental outdoor work including frequent oversight activities in dusty, moist or humid conditions and in a range of outdoor temperatures.