

## **Civil Engineer - Town of Ithaca (NCP Description) Tompkins County**

**Department:** Town of Ithaca

**Classification:** Competitive

**Labor Grade:** 13

**Revised:** 9/82;3/86;2/90;5/91;12/98;12/03;6/11; 7/16

**By:** AF, Commissioner or Personnel

### **QUALIFYING EXPERIENCE FOR TAKING THE EXAMINATION:**

This will be a non-competitive promotion situation in accordance with Section 52-7 of the New York State Civil Service law. The candidate nominated by their appointing authority must currently hold, and have continuously held, at least six months of permanent competitive class status in a lower title. Tompkins County is Committed to Equity and Inclusion. We encourage those with similar values to apply.

### **SPECIAL REQUIREMENT:**

The applicant must be eligible for a New York State motor vehicle operator's license at the time of application, possess such license at the time of appointment and maintain a valid driver's license for the duration of employment.

### **DISTINGUISHING FEATURES OF THE CLASS:**

This is a basic professional engineering position requiring the ability to apply principles of physics, mathematics, mechanics, and materials to engineering and infrastructure related problems. The work requires independent judgment in devising new methods and adapting standard procedures to meet unusual conditions. Work may involve cross department functions with Engineering and Public Works Departments on various infrastructure and project assignments. Work is performed under the direct supervision of the Director of Engineering with some day-to-day leadership from the Senior Civil Engineer, and Director of Public Works or their designee. Supervision may be exercised over the work of subordinates. Attendance at evening meetings of various boards and committees of the Town may be required. The incumbent will perform all related duties as required.

### **TYPICAL WORK ACTIVITIES:**

Conducts surveys for road, conduits, etc., map developed areas, and to run location lines for roads, conduits, etc.;

Conducts surveys to obtain data on drainage structures guide rail systems, traffic signing, etc.;

Reviews and inspects storm water pollution protection plans submitted to Town;

Supervises construction work on assignment;

Keeps records of amount of work done and of changes in plans and specifications;

Checks design computations and plans of other staff for routine errors;

Works with engineering technicians and students engaged in design surveys and construction inspection;

Supervises and instructs in the use of transits, levels and other surveying instruments;

Drafts plans, topographical and cross-section maps and charts;

Computes and estimates quantities of materials used for determining payments to contractors;

Prepares bid documents for water, sewer, storm water, road projects and other projects as assigned;

Evaluates and acquires products, materials, and services for Engineering and/or Public Works Department;

Completes State Environmental Quality Reviews for water, sewer, storm water and road projects;

Reviews building permit applications, including representing the Town at meetings with applicants and boards.

**FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:**

Good knowledge of the principles of civil engineering, physics and mathematics;

Good knowledge of construction and engineering practices;

Working knowledge of the codes, laws rules, regulations and procedures governing highway and bridge design and construction, and storm water compliance;

Working knowledge of municipal procurement processes;

Skill in the use of surveying and drafting instruments;

Ability to use a computer and many types of software programs such as Microsoft Word, Excel, Access and a variety of mapping and engineering surveying software;

Ability to design moderately difficult engineering projects;

Ability to make difficult technical computations and compile engineering data;

Ability to read and interpret engineering drawings and specifications;

Ability to plan and supervise the work of others;

Ability to operate a variety of surveying instruments (e.g., surveyor's level, theodolite);

Ability to use drafting equipment;

Ability to establish cooperative working relationships with contracts, the public, consultants, vendors, co-workers, and other department staff;

Ability to perform activity requiring physical effort (walking, climbing or reaching);

Ability to perform work requiring prolonged visual concentration;

Resourcefulness, accuracy, alertness, good judgment;

Physical condition commensurate with the demands of the position, either with or without reasonable accommodations.