

## **PRINCIPAL ENGINEERING TECHNICIAN**

**DISTINGUISHING FEATURES OF THE CLASS:** This is semi-professional engineering work involving the responsibility for a variety of engineering programs and projects such as the inspection of construction or independent drafting, engineering computations and field surveys. The work is performed under the general supervision of a higher-level Engineer and direct supervision is exercised over a small number of employees. Does related work as required.

### **TYPICAL WORK ACTIVITIES:**

Consults with engineers to determine preliminary scope of projects;  
Supervises and directs boundary, preliminary, topographical, stake-out, highway and bridge surveys;  
Supervises and directs the creation, placement and maintenance of traffic signs in accordance with procedures;  
Inspects road and bridge maintenance and construction projects and oversees permit construction on county road rights-of-way by outside contractors;  
Inspects plans and specifications as inspector on construction projects;  
Performs and directs drafting work and engineering computations;  
Performs a variety of drafting requirements;  
Plots maps as aides to survey work;  
Operates survey instruments (e.g., level, transit, theodolite, etc.) and supervises staff involved in survey parties;  
Analyzes plans and performs calculations based on plan details for surveying and quality control of construction projects;  
Investigates and approves minor changes on contracts;  
May handle and investigate routine complaints from the public;  
May prepare cost estimates of materials, supplies and equipment for construction projects.

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

Thorough knowledge of engineering mathematics; thorough knowledge of drafting techniques; thorough knowledge of the principles, practices and terminology of land surveying; thorough knowledge of construction and maintenance methods and materials for highways, bridges and drainage structures; good knowledge of the tools, techniques and terminology of drafting; good knowledge of methods and materials of bridge construction and maintenance; good knowledge of engineering concepts; ability to perform inspections; ability to read and interpret highway and bridge plans and specifications; ability to understand and interpret written materials such as graphs, tables and dimensional drawings; ability to understand complex technical written and oral instructions regarding engineering work; ability to supervise the work of others.

### **MINIMUM QUALIFICATIONS:**

1. An Associate's degree in Civil Engineering, Landscaping, Architectural Technology or comparable curriculum and three (3) years of work experience in civil engineering assisting in drafting or survey work or in quality control work related to construction projects. (Time spent as a Laborer shall not be deemed qualifying); or
2. A Bachelor's degree or higher in Civil Engineering, Architecture, Landscaping Engineering or comparable curriculum and one (1) year of work experience in civil engineering assisting in drafting or survey work or in quality control work related to construction projects. (Time spent as a Laborer shall not be deemed qualifying).

(over)

**NOTE:** Graduation from high school or possession of an equivalency diploma plus additional years of the work experience can substitute for the college degree on a year-for-year basis.

**SPECIAL REQUIREMENT:** Possession of a valid driver's license at the time of appointment and throughout the duration of employment in this title. The appointing authority shall have the responsibility for the verification of the driver's license which may be checked throughout the course of employment in this title.

**PROMOTION:** Two (2) years of permanent status as a Senior Engineering Technician.

R.C.D.P. (08.14.2015) 10.03.2024  
Competitive

11.27.2024 New York State Civil Service approved Non-competitive title in the NY HELPS Program.