

PRINCIPAL ENGINEERING TECHNICIAN (CIVIL)

DISTINGUISHING FEATURES OF THE CLASS: Under supervision of an engineer, an incumbent of this classification performs non-professional engineering work related to planning, design, construction, maintenance and inspection of municipal projects. The incumbent may function in a lead capacity over other technical staff, preparing and reviewing plans, estimates and specifications for municipal buildings and infrastructures. This level differs from the Engineering Technician (Civil) in that the tasks performed required advanced level skills and the position functions independently in carryout out complex assignments, whereas the Engineering Technician (Civil) performs more routine tasks, requiring entry-level skills. Supervision may be exercised over technical and/or clerical employees. Does related work as required.

EXAMPLES OF WORK: (Illustrative Only)

Reads, designs and drafts plans, sketches and specifications for municipal projects;

Gathers information and data that will be incorporated in public contracts related to construction projects;

Prepares cost estimates of materials, supplies and equipment for projects;

Prepares specifications and reviews of contracts and other related documents;

Supervises and inspects projects under construction to assure correct materials are used, work is performed correctly, and projects are constructed according to specifications and plans;

Supervises the preparation and maintenance of office records and reports;

Prepares written reports related to work assignments, including progress and inspection reports;

Maintains engineering maps, plans and records related to projects;

Leads and conducts field surveys and gathers assessment, appraisal, map and plan data;

Obtains survey data and performs engineering computations;

Uses computer applications or other automated systems such as computer assisted design (CAD) programs, spreadsheets, word processing, calendar, e-mail and database software in performing work assignments.

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Thorough knowledge of surveying practices and theory; good knowledge of the modern methods, techniques and machinery used in construction; good knowledge of drafting techniques; good knowledge of the practices of specification writing; good knowledge of construction estimating; good knowledge of computer assisted design (CAD) programs; ability to design and draft routine municipal projects; ability to read blueprints; ability to make routine engineering computations; ability to prepare sketches, maps, plans, graphs and charts; ability to collect, analyze, and interpret data; ability to effectively use computer applications such as GIS, computer assisted design (CAD) programs, spreadsheets, word

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES (cont'd): processing, calendar, e-mail and database software; ability to read, write, speak, understand and communicate in English sufficiently to perform the essential duties of the position; ability to follow complex oral and/or written instruction; tact; initiative; resourcefulness; accuracy, reliability; good judgment; physical condition commensurate with the duties of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: Graduation from high school or possession of a high school equivalency diploma and either: (a) an Associate's Degree* in Civil Technology or related field and one (1) year of experience which involved inspecting portions of construction projects, making construction cost estimates and calculations, surveying, designing or drafting of municipal infrastructure projects; or (b) three (3) years of experience as described in (a).

SUBSTITUTION: Satisfactory completion of 30 college credits towards a Bachelor's Degree* in Civil Engineering, Construction Engineering, Engineering Science, or a closely related field may be substituted on a year for year basis for the experience described in (a) above.

NOTE: Unless otherwise noted, only experience gained after attaining the minimum education level indicated in the minimum qualifications will be considered in evaluating experience.

*SPECIAL NOTE: Education beyond the secondary level must be from an institution recognized or accredited by the Board of Regents of the New York State Department of Education as a post-secondary, degree-granting institution.