

## ENGINEERING TECHNICIAN (CIVIL)

DISTINGUISHING FEATURES OF THE CLASS: Under the direct supervision of higher level engineering staff, an incumbent of this classification performs non-professional engineering work as a general assistant in the planning, design, construction, maintenance and inspection of municipal projects. Supervision is not usually a responsibility of this class. Does related work as required.

### EXAMPLES OF WORK: (Illustrative Only)

Drafts and assists in drafting and reading technical specifications, plans and sketches for the design of municipal projects;

Uses a computer aided design (CAD) drafting system to prepare plans;

Prepares and assists in the preparation of cost estimates of materials, supplies and equipment for projects;

Inspects and assists in the inspection of civil engineering construction projects to assure correct materials are used, work is performed correctly, and projects are constructed according to specifications and plans;

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

Gathers information for progress reports on construction projects;

Maintains routine records relating to engineering projects;

Acts as a member of a survey party conducting field surveys and gathering assessment, appraisal, map and plan data;

Obtains survey data and performs routine 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: Good knowledge of surveying practices and theory; good knowledge of modern methods, techniques and machinery used in construction; working knowledge of drafting techniques; working knowledge of the practices of specification writing; working knowledge of construction estimating; working 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 processing, calendar, e-mail and database software; ability to read, write, speak, understand and communicate in English sufficiently to perform the essential tasks of the

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES (cont'd.): position; ability to follow oral and written instructions; initiative; resourcefulness; accuracy; reliability; good judgment; physical condition commensurate with the duties of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: Possession of a high school or equivalency diploma and either: (a) an Associate's Degree\* in Civil Technology or Construction Technology; or (b) two years of experience which involved working on the design, construction or planning of public works buildings and infrastructures.

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

\*SPECIAL NOTE: Education beyond the secondary level must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S. Secretary of Education.