

CITY OF HAMILTON

PUBLIC WORKS DEPARTMENT
(ENGINEERING SERVICES DIVISION – GEOMATICS & CORRIDOR MANAGEMENT SECTION
LOCATION – 77 JAMES ST. N., SUITE 320)

SPECIAL UTILITY PROGRAM TECHNOLOGIST - CUPE 5167

SUMMARY OF DUTIES

Reports to the Senior Project Manager of Corridor Management, under the Manager of Geomatics & Corridor Management, the position facilitates the creation, analysis, and maintenance of engineering drawings, Utility Permit applications, models, and technical reports; uses GIS applications to input, create, maintain, analyze, and manipulate corporate databases in relation to infrastructure management; apply statistical and mathematical calculations for the review of Utility Designs and Plans. It is the responsibility of the Geomatics Engineering Technologist to independently transform data and information into completed Special Utilities Program CAD and GIS system employing the requisite skills and knowledge.

GENERAL DUTIES

Process, analyze, and manipulate acquired raw survey data using Computer Aided Drafting (CAD) and data management software in order to produce engineering plans and technical reports to facilitate Capital Works project development.

Generates clash detection reports for conflicts in City's infrastructure.

Researches projects by utilizing registered plans, deeds, title information at the Land Registry Office, raw field data, survey notes, inspector's reports, large service plans, and other archived materials to generate engineering plans and models, technical reports, and Legal Survey Plans.

Creates, update, query, perform quality assurance and control checks on geospatial data using GIS computer applications and infrastructure management systems to maintain Corporate GIS utility and land databases.

Generates technical reports, thematic queries, and other detailed information in the form of tables and/or maps.

Record, analyze, verify, calculate, reconcile and define precise survey positions and measurements.

Develops and manage GIS solution and Dashboards.

Incorporates As-built and red-line markup in City of Hamilton record database.

Provides technical support, installation and training for engineering project and document management system (ProjectWise). Create and organize all Capital Projects within the system, create templates for other users, create user profiles with user permissions and restrictions to data access.

Measures and verifies legal and engineering project data on location. Co-ordinates additional data collection with field surveys staff for legal and engineering surveys.

Assists Project Managers and consultants in distribution of GIS related files, CAD files and engineering design support files for Special Utility Program applications

Liaises with Engineering Services and departmental contacts to ensure project deliverables are aligned with client's requirements.

Liaises between public and private sectors concerning City engineering and survey projects.

Assists staff in preparation of engineering plans and records.

Checks, comments on and approves engineering drawings and specifications submitted by private engineering consultant to ensure they conform to City standards and master plan. Examines engineering shop drawings submitted by contractors and forwards for approval.

Creates models/renderings and other visual aid materials for Upper Management to be used during public meetings, government gatherings, and media releases.

Operates print machines and microfilm reader printer.
Operate city vehicle.

Receives and answer inquiries from staff, other departments, consultants, external agencies, engineers, and general public.

Works in accordance with the provisions of applicable Health and Safety legislation and all City of Hamilton corporate and departmental policies and procedures related to Occupational Health and Safety.

Performs other duties as assigned which are directly related to the major responsibilities of the job.

QUALIFICATIONS

1. Demonstrated experience in Engineering and/or Civil Technology, Land Surveying, GIS, and/or Geomatics with extensive knowledge in drafting and modeling normally acquired by attaining a three year Diploma in Engineering Technology/Civil Technology, Geomatics/GIS Technology, and/or Surveying or an equivalent combination of education and relevant experience.
2. Proven knowledge of deploying and maintaining GIS databases, and previous experience in spatial analysis practices.
3. Previous experience working in a municipality will be considered an asset.
4. Knowledge of application of project management tools and best practices as endorsed by the Project Management Institute (PMI) or equivalent.
5. Proven knowledge of municipal design and infrastructure, including utility and right-of-way management. Proven knowledge in Legal Surveys procedures and Regulations.
6. Experience in a computerized office environment. Bentley Microstation experience is required. Knowledge of the City's CAD system, plotting and archiving systems is preferred.
7. Ability to express ideas effectively, verbally and in writing.
8. May require the use of private vehicle.
9. Must possess a valid Class "G" Driver's Licence.

THIS POSITION REQUIRES A VALID CLASS "G" DRIVER'S LICENCE AND PROOF THEREOF IS REQUIRED AFTER HIRE.

THE INCUMBENT SHALL COMPLY WITH ALL HEALTH AND SAFETY POLICIES AND PRACTICES FOR THIS POSITION AND THE WORKPLACE