



JOB DESCRIPTION

POSITION TITLE:	TECHNICIAN/OPERATOR (LEVEL I, II, III)
REPORTS TO:	PUBLIC WORKS TECHNICAL SUPERVISOR
CATEGORY:	PERMANENT, FULL-TIME, CUPE
UPDATED:	MARCH 2023

POSITION SUMMARY:

This role is an integral part of service delivery to the residents of Loyalist Township and contributes to the achievement of our Strategic Plan. The purpose of this position is to provide technical support services to the Public Works Division, and other divisions and departments across the Township.

The Technician/Operator performs a wide variety of civil engineering and public works maintenance work, including the review, inspection and administration of infrastructure related to capital and maintenance projects.

This position performs the duties of an Operator that is crucial for our winter control operations, involving the operation of snow clearing equipment during weather events which may extend beyond the regular workday. Therefore, the successful candidate is part of the on-call rotation throughout the winter months for response to storm events.

EDUCATION, SKILLS & TRAINING

- Civil Engineering Technician or Technologist diploma or equivalent combination of relevant education and experience.
- Must possess and maintain a valid Class “G” driver’s license with an acceptable driver’s abstract
- A ‘DZ’ driver’s license or the ability to obtain one is also required.
- Access to a reliable personal vehicle with proper insurance for work purposes is required.
- Must possess or obtain First Aid and CPR certificates and have knowledge of the provisions of the Occupational Health and safety Act, including WHMIS.
- An acceptable criminal records background check (CPIC) is required.
- Good organizational, verbal, and written communication skills.
- Good interpersonal skills, with the ability to act with integrity in a diverse and inclusive workplace
- Good analytical, research, and problem-solving skills, with the ability to utilize computer systems to perform work.
- Ability to adapt to change and demonstrate flexibility and resiliency, with a continuous improvement mindset.
- Self-motivated with an ability to maintain current knowledge and skills.
- Ability to meet a high level of customer service excellence.
- Ability to adhere to government legislation, operating manuals, Township policies/procedures and departmental guidelines.

Level I

- Registered or eligible for certification as an Engineering Technician or Technologist by the Ontario Association of Certified Engineering Technicians and Technologists (OACETT).
- Working knowledge in the use of survey technology up to and including use of total station, GPS survey technology and downloading of data for design and layout purposes.
- Familiarity with recognized road, waste management and storm water design practices, Township and Ontario Provincial Standards and current construction practices and their application in the performance of the duties of the position.
- High degree of computer literacy essential, specifically with Microsoft Word & Excel software and internet communications; familiarity with and aptitude for working with CAD, GIS software and Access databases.
- Demonstrated ability to create drawings and sketches for public works related projects utilizing AutoCAD.
- Demonstrated ability to effectively review and interpret engineering drawings.
- Able to perform engineering calculations including the establishment of grades, alignment control, and volumes of cut and fill.
- Knowledge of winter control operations including Minimum Maintenance Standards (MMS) is considered an asset.
- Operation of snow clearing equipment including but not limited to sidewalk plows and plow trucks is considered an asset.

Level II

- Must be certified as an Engineering Technician or Technologist by OACETT.
- Strong comprehension of recognized industry standards and best practices for civil construction and infrastructure maintenance as well as MMS.
- Thorough understanding of all legislation and safety practices associated with construction and maintenance projects.
- Good working knowledge of recognized road, storm sewer and stormwater management design practices, Township and Ontario Provincial Standards and current construction practices and their application in the performance of the duties of the position.
- Proficient level of competency to independently provide administrative, oral and written communication including the ability to draft accurate written technical reports and appropriate spreadsheets.
- Administer and supervise various projects simultaneously with both private contractors and municipal staff.
- Proficient in the use of all levels of survey technology up to and including proficient use of total station, GPS survey technology and downloading of data for design and layout purposes.
- Maintain horizontal communication linkages with the construction industry, suppliers, approval agencies, engineering consultants and Township staff.
- Thorough understanding of surveying.
- Perform various inspections including lot grading, applications for new entrances, signage issues, drainage issues excavation permits and municipal consent requests.
- Assisting the supervisor with capital roads projects and solid waste operations issues; this may include acting as a lead hand coordinating crews on projects.
- Inspect and coordinate maintenance of the Township's storm water system including storm water treatment facilities and oil grit separators.

- Working knowledge of winter control operations including Minimum Maintenance Standards (MMS).

Level III

- Must be certified as an Engineering Technician or Technologist by OACETT.
- Demonstrated efficiency in completing a public works operational review of drawing submissions for subdivisions site plans and Township civil works; must be able to assess these drawings for operational issues and be responsible for correspondence with other technical staff.
- Proven ability to run multiple projects simultaneously.
- Proven ability to identify issues in the field and determine suitable solutions for supervisor approval before work is halted.
- Must have a complete understanding of the methodology of and rationale for, stormwater, and road design.
- Excellent working knowledge of the recognized road and storm sewer design practices, Township and Ontario Provincial Standards and current construction practices and their application in the performance of the duties of the position.
- Ability to maintain effective working relationships, maintain confidentiality, demonstrate strong mediation, and conflict resolution skills, and ability to act with tact and diplomacy when interacting with staff, the public and external agencies, particularly during difficult and politically sensitive situations.
- Ability to act as a lead hand coordinating crews on projects, and others support and assist Assisting the supervisor with capital roads projects and solid waste operations issues.
- Inspect and coordinate maintenance of the Townships storm water system including storm water treatment facilities and oil grit separators.

EXPERIENCE

Level I

Experience with civil engineering design and drafting, heavy (civil) construction, residential development, land surveying, construction, municipal utilities inspection and/or a working knowledge of MMS would be considered an asset.

Level II

Two to five years' experience in the design and/or construction of municipal works projects as well as residential and non-residential developments with time spent as a lead construction inspector or gradesperson. Experience with projects in, road construction and road maintenance. Experience with winter control operations and understanding of Minimum Maintenance Standards.

Level III

Minimum of five years' experience in the design, construction and administration of municipal capital and development projects as well as residential and non-residential developments with time spent as a lead construction inspector or gradesperson and contract administration. Experience with projects in road construction and road maintenance. Experience with winter control operations and understanding of Minimum Maintenance Standards

KEY RESPONSIBILITIES AND DUTIES:

Where it is not explicitly stated, it is expected that each level can undertake all requirements of the previous level(s) as well as what is listed under the requirements for that position. The following key responsibilities and duties apply to all three levels of Technician, but each level is expected to achieve a different minimum standard:

Level I	Level II	Level III
Competent: Has all necessary knowledge & skills and successfully applies them to jobs and tasks; not expected to handle complex tasks/issues.	Proficient: Knowledge & skills frequently exceed requirements of current level and consistently achieves high results; expected to handle complex tasks/issues with assistance.	Excellent: Knowledge and skills far exceed requirements of current level and are expertly applied to jobs and tasks, achieving excellent results; expected to handle complex tasks/issues.
With Assistance: Requires supervision but trying to make suggestions, take action without direction and makes efforts to act independently.	With Limited Assistance: Makes suggestions, takes action without direction, and can act independently.	With Little or No Assistance: Makes valuable and creative suggestions without being prompted; successful outcomes from independent actions.
Frequent supervision	Some supervision	Limited supervision
Most work reviewed prior to finalization	More difficult tasks reviewed prior to finalization	Little review of work tasks with few comments expected
Not authorized to deviate outside standards	With prior approval - authorized to discuss alternative solutions and make changes on limited basis	With prior approval, authorized to discuss alternative solutions and make changes on limited basis

Technical (Projects / Development)

Work includes construction and/or maintenance of roads and bridges, stormwater facility projects, and technical support for landfills operations. For construction, this includes all phases of the projects, such as preliminary and detailed cost estimates, layout, inspection, complete construction records, quantifying measurements, quality control. Generally, the technical work includes:

- Design Drafting
 - Full design of construction drawings & subsequent as-built drawings.
 - Procure (Level III only) and support sub-consultants (all levels).
 - Provide information and/or complete permit/approval applications.
- Project Estimates
 - Project estimates including quantity calculations, increasing project complexity at each level.
- Project Inspection
 - Interpretation of construction contracts and drawings.
 - Detailed project reviews during construction.
 - Liaison with contractors/consultants.
 - Testing & quality assurance controls.
 - Provide accurate quantities for payment.
 - Enforce construction standards and contract compliance.
- Technical Reports
 - Write technical reports for straightforward topics such as procurement, project status, simple design & simple development issues.
 - Write technical reports for complex topics (Level III only).

- Technical Knowledge
 - Understanding, methodology & rationale for utilities and road design; employ engineering standards (i.e. Loyalist Township Technical Standards, OPSS etc. and best practices)
 - Foresee and interpret interactions between systems and between new and existing infrastructure in simple projects (complex projects – Levels II & III)
 - Accurate engineering calculations
 - Drafting in AutoCAD and Civil 3D.

Administration

- Procurement Documents
 - Assist in development of documents or undertake full sections or complete comprehensive documents depending on Technician Level.
- Capital Project Administration
 - Provide all information to support project administration (and complete project administration - Level II & III).
 - Monitor and track Township's traffic count program and electronic speed signs.
 - Undertake testing and quality assurance controls.
- Recordkeeping and Maintenance
 - Maintains corporate files in accordance with Township practices.
 - Conduct annual and/or ongoing tracking operations such as traffic counts, municipal consents, road condition ratings, fuel inventories.
 - Provide pertinent records for inclusion in the Township's GIS files and possess the ability to access files in ArcView format and to assist with updating data periodically.

WORKING RELATIONSHIPS:

Internal

Daily communication with personnel within Public Works and in other divisions/departments such as Economic Growth and Community Development (Engineering, Utilities, Building, Planning), Corporate Services (IT, Bylaw) and Finance.

External

Frequent liaison with hired contractors and consultants. Frequent dealings with the public investigating complaints/inquiries and resolving concerns/problems in the field through personal contact.

WORKING CONDITIONS:

- Some work in an office setting. May be seated for extended periods (2-3 hours) but with the ability to take breaks.
- Frequent and regular local travel required.
- Frequent and regular outdoor work in various and changing weather conditions that include but is not limited to snow, rain, hot and cold temperatures, and wind.
- This position has a 40-hour work week except during those periods of the year when construction, winter control and specialized projects require longer than normal working days.
- Occasionally may be required to attend meetings, programs, seminars, events which may take place at differently facilities, requiring travel.
- Occasional moderate physical exertion.

- Work may include locations with exposure to sensory elements including waste materials and smells.

The job description reflects the primary duties and responsibilities of this position and should not be construed to describe in detail all duties and responsibilities of the job.