



POSITION TITLE: ENGINEERING TECHNICIAN (LEVEL I, II, III)

DEPARTMENT: ECONOMIC GROWTH AND COMMUNITY DEVELOPMENT SERVICES

REPORTS TO: ENGINEERING/PROJECT SUPERVISOR

CATEGORY: PERMANENT, FULL-TIME, CUPE

UPDATED: SEPTEMBER 2019

HOURS OF WORK: 35 HOURS/WEEK

RATE OF PAY: \$31.67 – \$41.24/HOUR

CLOSING DATE: SUNDAY, MARCH 31, 2024

HOW TO APPLY: LOYALIST TOWNSHIP'S WEBSITE [CAREERS PAGE](#)

POSITION SUMMARY:

The Engineering Technician will provide engineering support services to the EGCDs Department and various Township Departments.

The Engineering Technician will be assigned a variety of tasks within the broad field of civil engineering and will perform an integral role with respect to the review, inspection and administration of infrastructure related to development activities and capital projects within the Township including roads, bridges, water and sewer projects as well as municipal facility projects of varying scope.

The Engineering Technician will be responsible for one or more construction projects including all phases of the work, such as preliminary and detailed cost estimates, layout, site inspection, complete construction records, quantifying measurements, quality control, preparation of progress and final payment certificates and providing as-built information and final drawings.

Simultaneously, the Engineering Technician will be responsible for one or more development projects including all phases of the process, such as the review of various development applications, drafting, interpretation and administration of planning approvals, quality control during construction and prior to assumption of the works, review securities requirements, review as-built information and final drawings.

The Engineering Technician works a 35-hour work week except during those periods of the year when construction and specialized projects require longer than normal working days.

Holidays will be dictated by the construction schedule and will not normally be approved during the summer construction season.

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.

EDUCATION, SKILLS & TRAINING

- Graduate of a community college with a 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 the ability to provide a driver’s record abstract.
- Must possess or obtain current First Aid and CPR certificates and have knowledge of the provisions of the Occupational Health and safety Act, including WHMIS.
- Clean criminal records background check (CPIC).

Level I

- Registered or eligible for certification as an Engineering Technician or Technologist by the Ontario Association of Certified Engineering Technicians and Technologists (OACETT);
- Competent oral and written communication skills and tact in meeting the public.
- Familiarity with recognized road, sewer and 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 CADD, GIS software and Access databases.
- Demonstrated ability to produce plan and profile drawings for both new works and reconstruction in AutoCAD.
- Demonstrated ability to effectively review and interpret engineering drawings.
- Research skills.
- Be an effective team member.
- 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.
- Able to perform engineering calculations including the establishment of grades, alignment control, and volumes of cut and fill; and
- Ability to develop knowledge of municipal development practices.

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.
- Thorough understanding of all legislation and safety practices associated with municipal construction and maintenance projects.
- Good working knowledge of recognized road, sewer and water design practices, Township and Ontario Provincial Standards and current construction practices and their application in the performance of the duties of the position.
- Basic level of competence in water treatment process and/or water distribution system operation and Township’s Drinking Water Quality Management System.

- Proficient level of competency to independently provide administrative, oral and written communication including the ability to draft accurate written technical reports and appropriate spreadsheets.
- Prepare payment certificates.
- Administer and supervise various projects simultaneously.
- Proficient oral and written communication skills and tact in meeting the public.
- 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 purposes.
- Develop 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; and
- Maintain horizontal communication linkages with the construction industry, suppliers, approval agencies, engineering consultants and Township staff.

Level III

- Must be certified as an Engineering Technician or Technologist by OACETT.
- Demonstrated excellent efficiency in reviewing drawing submissions for subdivisions, site plans and Township civil works; must be able to assess these drawings for their technical merits, and compliance with applicable standards, and be responsible for correspondence with other technical staff.
- Must have a complete understanding, of the methodology of and rationale for, stormwater, road, water and sewer design.
- Possess or have the skills to develop an intermediate level of competence in water distribution system inspection, secondary disinfection, related Township policies and appropriate recordkeeping techniques.
- Excellent oral and written communication skills and tact in meeting the public; and
- Excellent working knowledge of the recognized road, sewer and water design practices, Township and Ontario Provincial Standards and current construction practices and their application in the performance of the duties of the position.

OTHER

Access to a personal vehicle for work-related purposes is a requirement of this position. Travel expenses (per kilometer) will be reimbursed in accordance with Township policy.

EXPERIENCE

Level I

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

Level II

Two to five years experience in the design and construction of municipal works projects as well as residential and non-residential developments with time spent as a lead construction inspector. Experience with projects within municipal facilities, water and wastewater facilities, water distribution systems, wastewater collection systems, road construction and road maintenance would be considered an asset.

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 and contract administration. Experience with projects within municipal facilities, water and wastewater facilities, water distribution systems, wastewater collection systems, road construction and road maintenance would be considered an asset.

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
<p>Competent:</p> <p>Has all necessary knowledge & skills and successfully applies them to jobs and tasks; not expected to handle complex tasks/issues</p>	<p>Proficient:</p> <p>Knowledge & skills frequently exceed requirements of current level and consistently achieves high results; expected to handle complex tasks/issues with assistance</p>	<p>Excellent:</p> <p>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</p>
<p>With Assistance:</p> <p>Requires supervision but trying to make suggestions, take action without direction and makes efforts to act independently;</p>	<p>With Limited Assistance:</p> <p>Makes suggestions, takes action without direction, and can act independently</p>	<p>With Little or No Assistance:</p> <p>Makes valuable and creative suggestions without being prompted; extremely successful outcomes as a result of independent actions</p>

Technical (Projects / Development)

- 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)
- Development Review
 - Assists with review of drawing submissions;
 - Effectively review drawing submissions (Levels II & III)
 - Assists with drafting development agreements
- Technical Knowledge
 - Understanding, methodology & rationale for utilities and road design; employ engineering standards (ie 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 CAD

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)
- Development Administration
 - Interpretation of development agreements
 - Detailed review of developments
 - Liaison with contractors/developers/consultants (Level II & III – able to deal with contentious issues)
 - Undertake testing and quality assurance controls
- Recordkeeping and Maintenance
 - Maintains corporate files in accordance with Township practices

General

- Communication
 - Written & oral communication and tact with the public
 - Clear & concise communication
 - Mediation and conflict resolution
- Legislative Knowledge
 - Understanding of relevant Acts, Regulations, By-laws, Standards & Policies
- Prioritization

- Ability to undertake multiple assignments at a time – increasing with each Level
- Supervision and Autonomy

Level I	Level II	Level III
Frequent supervision	Some Supervision	Limited supervision
Some work without assistance	Broad range of work without assistance	All work functions without assistance
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

WORKING RELATIONSHIPS:

Internal

Daily communication with personnel in other divisions / departments such as Utilities, Building, Planning, Customer & Community Services (Public Works and Recreation), Corporate Services (Admin, IT, Bylaw) and Business Services (Finance)

External

Frequent liaison with hired contractors, developers and consultants

Frequent dealings with the public investigating complaints / inquiries and resolving concerns / problems in the field through personal contact

WORKING CONDITIONS:

- Will be working in an office setting frequently. May be seated for extended periods (2-3 hours) but with the ability to take breaks.
- Frequent and regular local travel required. Access to a reliable personal vehicle, insured for work purposes, is 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.
- Additional hours beyond the normal working day due to project demands, may be required.
- 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.

Loyalist Township values a diverse workforce and looks to attract and retain people who will work together to provide excellent service to our residents, visitors, business partners, and each other. If you are looking for a rewarding opportunity to work with a team of professionals dedicated to promoting the quality of life and prosperity of our community, come join us!

In accordance with the Accessibility for Ontarians with Disabilities Act, Loyalist Township is pleased to accommodate the individual needs of applicants with disabilities within the recruitment and selection process. Please contact the Human Resources team at hr@loyalist.ca or 613-386-7351 ext. 149 if you require accommodation.