

# Engineering Technician/Technologist:Traffic and Capital Construction Permanent Full Time Job Posting #: 2024-17 Closing Date: Open Until Filled

The City of Owen Sound is seeking experienced and qualified applicants for the role of Engineering Technician/Technologist: Traffic and Capital Construction. This position is responsible for the performance of traffic controls including monitoring and maintaining the City's traffic signal system and equipment through a contract service provider. Duties also include system design, installation projects and troubleshooting. Other duties include traffic signage compliance. This position supports the City's capital and construction program by planning, managing and overseeing the design and construction of primarily traffic-related infrastructure (streetlights and traffic signal systems), and may support other capital projects related to roads and sidewalks, water distribution, wastewater collection, stormwater collection and drainage systems.



Owen Sound is a diverse and culturally rich community located on the southern shores of Georgian Bay in Southern Ontario, approximately two hours north of Toronto, and on the doorstep of the Bruce Peninsula. Owen Sound is the largest urban community in Grey and Bruce counties characterized by a magnificent harbour and bay, two winding rivers, tree-lined streets, an extensive parks system, and tree-covered hillsides and ravines.

Owen Sound is a place where you can stay active, indoors and out, in all seasons. Many of our most popular recreational sports, such as biking, hiking, golf, swimming, motorcycle touring, and ATV riding, take advantage of our geography and natural assets: gently rolling hills, protected forests and parkland, and waterways flowing into Georgian Bay. Winter doesn't have to put a halt to your outdoor fun. We have plenty of snow sports when the frost hits and snow flies, from skiing and snowshoeing to snowmobiling and skating. Prefer to exercise indoors? We have several sports

facilities to choose from, including a modern YMCA with indoor pools and ice rinks and the City is home to the OHL Owen Sound Attack hockey team.

The City of Owen Sound municipal offices are located in the City's historic downtown core. Urban convenience is reconciled with balanced lifestyle in this welcoming, vibrant and growing community. Enjoy visits to galleries, library, theatres, museums, festivals, local shopping and dining right outside the doors of City Hall.



### The successful candidate will have:

- Diploma in Civil, Construction or Environmental Engineering Technology.
- International Municipal Signal Association (IMSA) Traffic Signal Inspector Certification or willingness and ability to obtain is required.
- Certified Engineering Technician (C.Tech.) or Certified Engineering Technologist (CET) designation with membership in OACETT would be an asset.
- Minimum of Minimum 3 Years of related Engineering experience
- Minimum 1 year traffic control programming experience preferred.

## Additional Skills/Competencies/Requirements:

- Excellent computer skills including proficiency in Microsoft Office products, AutoCAD, asset management software (such as Citywide) and GIS software (ArcGIS).
- Proficient in traffic system modelling software (Trafficware Synchro Studio) and traffic system operating software (Aries).
- Effectively utilizes City GIS-based map viewer.
- Experience in capital asset management and costing systems for municipal engineering projects (roads and traffic systems, water, wastewater and stormwater infrastructure).
- Effective communication (verbal and written) skills that demonstrate an ability to deal with the public, consultants, developers, and City staff in an efficient, courteous and diplomatic manner.
- Thorough knowledge of municipal services and utilities (roads, traffic controls, sidewalks, water, sanitary, storm) and OPSS, OPSD and geometric design standards.
- Time management skills, prioritize workload while dealing with multiple demands to meet both long and short-term deadlines.
- Possess and maintain a valid Ontario Class "G" Driver's License, clean driving abstract and access to a reliable vehicle or access to reliable transportation.
- Able to utilize reflective reasoning to solve or recommend solutions to situations within the scope of responsibility through assessment of existing methods or procedures with a realistic understanding of the issues and the impact of the decision on the division or staff.

- Demonstrate professional and ethical responsibility to protect privacy, use confidential
  information appropriately, and treat sensitive situations with an appropriate degree of tact and
  discretion.
- Conflict resolution skills, including the ability to listen and de-escalate disputes.
- Experience in other infrastructure-related modelling software (i.e. InfoSWMM, WaterGEMS) is an asset.
- Experience in GIS (Geographical Information System) and infrastructure management systems using ESRI software is an asset.
- Experience using Cloudpermit is an asset.

The annual salary range for this position is \$71,671 - \$84,375 and the City offers a comprehensive employer paid Extended Health & Dental program and OMERS pension. To explore this opportunity further, we invite applicants to forward their resume and cover letter to:

Human Resources Manager
City of Owen Sound
E-mail: hrjobposting@owensound.ca

The City of Owen Sound is proud to be an equal opportunity employer, valuing and respecting diversity. We are committed to inclusive, barrier-free recruitment and selection processes. We will accommodate the needs of qualified applicants under the *Human Rights Code* and the *Accessibility for Ontarians Disabilities Act*, in all aspects of the hiring process, upon request. We thank all applicants for their interest; however, only those being considered for an interview will be contacted. In accordance with the *Municipal Freedom of Information and Protection of Privacy Act*, personal information is collected under the authority of the *Municipal Act* and will only be used for candidate selection.



## JOB DESCRIPTION

**Department:** Public Works & Engineering **Division;** Engineering

**Job Title:** Engineering Technician/Technologist: Traffic & Capital Construction

**Union:** CUPE 1189-00

**Direct Supervisor:** Manager of Engineering Services

Revision Date: March 2024

## **Position Summary and Scope:**

This position is responsible for the performance of traffic controls including monitoring and maintaining the City's traffic signal system and equipment through a contract service provider. Duties also include system design, installation projects and troubleshooting. Other duties include traffic signage compliance.

This position supports the City's capital and construction program by planning, managing and overseeing the design and construction of primarily traffic-related infrastructure (streetlights and traffic signal systems), and may support other capital projects related to roads and sidewalks, water distribution, wastewater collection, stormwater collection and drainage systems.

## **Duties and Accountabilities:**

#### **Traffic**

Maintenance, troubleshooting and operation of automated traffic controls in coordination with a contract service provider.

Data collection, review, analysis, and recommendation of solutions for identified traffic problems within the City.

Perform field inspections and traffic counts, undertake technical assessments, and make recommendations for signage and pavement marking installation, sightlines, road safety warrants and traffic operations in collaboration with other City staff.

Assist with the preparation of plans and contract specifications for traffic projects, administer contracts for these projects and provide progress reports.

Review, analyze, and provide recommendations for new developments regarding traffic impact studies, sight triangles, and entrance permits.

Review, design and provide recommendations for updates to signage and pavement markings for all transportation modes within the City.

Review and design of various intersection signalizations and timings.

Drafts and prepares plans for construction projects, particularly for legal intersection traffic signal design (MTO PHM-125 drawing).

Submission or assists in the submission of PHM-125 legal drawings for approval by MTO.

## Capital

Proactively manages assigned projects using project management best practices, fostering effective teamwork and communication, high standards of work quality, continuous learning, and maintenance of related data.

Ensures that project expenditures are controlled and maintained within approved budget limitations. Assists in the preparation of capital and operating budgets related to assigned projects.

Prepares and inspects drawings, engineering studies, specifications, plans and cost estimates as they pertain to assigned projects.

Secures all permits and approvals as may be required from external agencies.

Plans, investigates and prepares reports and recommendations concerning project problems of moderate complexity.

Assists in preparing and reviewing consultant Progress Payment Certificates and Tender Documents,

Holdback and Security releases and related items for capital construction projects and agreements.

## **General**

Provide excellent customer service and maintain confidentiality as per prevailing corporate policies and applicable legislation.

Respond to inquiries and concerns from the public, contractors, internal contacts and partner agencies regarding capital projects or traffic issues during regular working hours.

Produces engineering drawings utilizing AutoCAD (Civil 3D or LDD).

Maintains hardcopy and digital filing system and standards in accordance with the City's record management policies.

Works with the Geographical Information System (GIS) Specialist to ensure asset information is received in compatible format files for GIS (ESRI/ArcGIS).

Surveying and inspection for pre-engineering, servicing and construction projects using GPS survey equipment.

May assist with preliminary design and costing of roads, sanitary and storm sewers/drainage system and water mains.

Liaise with other City staff, outside agencies, upper-tier and neighbouring municipalities and utilities relating to the duties and accountabilities of the position.

Prepares reports and miscellaneous correspondence for City staff, consultants, developers, the public and occasionally Committees and Council.

# **Employee Health & Safety Responsibilities:**

Carry out work in a safe manner, preventing safety hazards to the incumbent and others.

Actively participate in all COS safety initiatives and training.

Report all hazards, incidents, accidents, near misses, injuries, or illnesses promptly to your supervisor; complete all requested documentation.

Follow all COS policies and procedures, as well as the Occupational Health and Safety Act.

See the Occupational Health and Safety Act Part III Section 28 for a detailed description of worker responsibilities.

# **Educational Requirements:**

**College Diploma or Equivalent** 

Details - Speciality, major etc.:

Diploma in Civil, Construction or Environmental Engineering Technology (two-year Technician programme with three-year Technologist programme preferred) is required

IMSA Traffic Signal Inspector Certification or willingness and ability to obtain is required.

Certified Engineering Technician (C.Tech.) or Certified Engineering Technologist (CET) designation with membership in OACETT would be an asset.

Degree in Civil Engineering from an accredited University and EIT or P.Eng registration with PEO would be an asset.

## Skills and Competencies at the working level:

Excellent computer skills – including proficiency in Microsoft Office products, AutoCAD, asset management software (such as Citywide) and GIS software (ArcGIS).

Proficient in traffic system modelling software (Trafficware Synchro Studio) and traffic system operating software (Aries).

Effectively utilizes City GIS-based map viewer.

Experience in capital asset management and costing systems for municipal engineering projects (roads and traffic systems, water, wastewater and stormwater infrastructure).

Effective communication (verbal and written) skills that demonstrate an ability to deal with the public, consultants, developers, and City staff in an efficient, courteous and diplomatic manner.

Thorough knowledge of municipal services and utilities (roads, traffic controls, sidewalks, water, sanitary, storm) and OPSS, OPSD and geometric design standards.

Time management skills, prioritize workload while dealing with multiple demands to meet both long and short-term deadlines.

Possess and maintain a valid Ontario Class "G" Driver's License, clean driving abstract and access to a reliable vehicle or access to reliable transportation.

Able to utilize reflective reasoning to solve or recommend solutions to situations within the scope of responsibility through assessment of existing methods or procedures with a realistic understanding of the issues and the impact of the decision on the division or staff.

Demonstrate professional and ethical responsibility to protect privacy, use confidential information appropriately, and treat sensitive situations with an appropriate degree of tact and discretion.

Conflict resolution skills, including the ability to listen and de-escalate disputes.

Experience in other infrastructure-related modelling software (i.e. InfoSWMM, WaterGEMS) is an asset.

Experience in GIS (Geographical Information System) and infrastructure management systems using ESRI software is an asset.

Experience using Cloudpermit is an asset.

# **Experience at the working level:**

**Previous Work-Related Experience** (# of years or months):

Minimum 3 Years of related Engineering experience

Minimum 1 year traffic control programming experience preferred.

## Positional on-the-job training required (# of weeks or months):

6 months experience required to learn City specific systems and infrastructure

## **Working Relationships:**

The Engineering Technologist works and interacts with the Public Works and Engineering Department staff as a whole. The incumbent must maintain excellent relations with service providers, contractors, and occasionally Committees of Council, the general public and various other government offices.

## **Independence of Decision Making:**

Has established policies & procedures Yes

Supervisor or lead hand usually available Yes

Problem solves within clear guidance and/or past practice Yes

## Physical Demands: Length of time/repetitions/weight in average working day.

Computer Use: 4 - 7 hours

Walking: 1-2 hours

Standing: up to 5 hours

Sitting: up to 7 hours

Lifting: up to 50 kg

Ladder Climbing: rarely

Exposure: Indoor Office Environment, outdoor work and construction sites involved.

Other: Click here to enter text.

## **Working Conditions:**

Hours of work: 35 hours per week

Shift length: 7 hours per day

Shift Schedule: Monday - Friday

Additional Comments:

# **Consequence of Errors:**

Errors could result in increased risk to public health and safety, increased liability to the Corporation and unnecessary or undue hardship to City departments, contractors or the public. Reputation and reliability of the Engineering Services Division and Public Works & Engineering Department could be compromised.