

# CITY OF HAMILTON

## **PUBLIC WORKS DEPARTMENT**

### **(ENGINEERING SERVICES DIVISION - INFRASTRUCTURE RENEWAL - LOCATION - 100 KING ST W.)**

#### **INFRASTRUCTURE PROGRAMMING TECHNOLOGIST - CUPE 5167**

#### **SUMMARY OF DUTIES**

Reporting to the Senior Project Manager (Infrastructure Programming), assist in establishing and achieving departmental goals and objectives through the effective and efficient use of financial and staff resources. Using a "best practices" approach, develop and deliver quality services in a timely and cost-effective manner.

Design and implement strategies to improve effectiveness and efficiency.

Possess a demonstrated record of strong interpersonal skills, customer focus, innovation/creativity, team advocacy, and be results oriented.

The area of specialty required for this position is relevant to linear water, wastewater, storm, road, bridge and structure infrastructure.

#### **GENERAL DUTIES**

Develop, implement and monitor various infrastructure management programs to ensure legislative compliance, service quality, and cost effective and timely service delivery.

Assist the Project Manager(s) in the development of capital budgets and programs related linear Water, Wastewater, Storm, Road, Bridge and Structure infrastructure systems, including where required consideration of Municipal Class Environmental Assessments, sub watershed studies, master drainage plans, secondary plans, and draft servicing plans.

Develop plans and policies for the acquisition, development, and implementation of surface and subsurface infrastructure management programs. Use data and best available information to make recommendations to the Project Manager(s) on project priorities, means of resourcing and related cost implications.

Assist the Project Manager(s) in day-to-day management of consultants, contractors, and internal resources to undertake and implement infrastructure assessments and studies related to existing infrastructure and growth impacts, with a focus on transportation infrastructure, stormwater management, water and wastewater infrastructure.

Prepare various technical reports relating to the programming of municipal infrastructure for various Committees of Council.

Interact with consultants and contractors on projects as required and review/comment on submissions.

Develop programs, projects and budget strategies related to municipal infrastructure systems (roads, bridges, retaining walls, roadway structures, water, wastewater, and stormwater). Make recommendations to the Project Manager(s) and Senior Project Manager on project priorities, means of resourcing and related cost implications.

Investigate, report, and make recommendations regarding new technologies to improve the quality and/or cost effectiveness of the City's infrastructure renewal programs.

Review and make recommendations on preferred options for new and existing infrastructure rehabilitation, replacement and construction practices.

Participate in multi-disciplinary studies, such as Class Environmental Assessments, Natural Heritage Assessments, and other project specific studies.

Liaise with other City departments for applications for municipal infrastructure extensions and modifications related to the Municipal Act, the Local Improvement Act, and the Development Charges Act as it impacts development proposals.

Liaise with external agencies such as Ministry of Natural Resources, Ministry of the Environment, Conservation and Parks, neighbouring municipalities, Conservation Authorities, and Stakeholder and Rights Holders groups.

Investigate issues and queries raised by Council, City staff and the public as channeled through the Project Manager(s).

Organize and represent the department at Public Consultation meetings.

Oversee and assign work of student(s).

Perform other duties as assigned which are directly related to the duties of the position.

### **QUALIFICATIONS**

1. Must be able to demonstrate a level of expertise related to the duties described above, normally acquired through one of the following programs:  
Civil/Transportation/Architectural/Construction/EnvironmentalEngineering Technology Diploma (3 year), or degree from a recognized college or university and related experience, or a combination of education and work-related experience; including seminars and training course relating to Infrastructure Management, Transportation/Urban Planning, Goods Movement or Demand Management.
2. Member of or be eligible for certification with relevant professional associations i.e., Ontario Association of Certified Engineering Technicians certification is preferred.
3. Demonstrated experience in one of the following: Civil, construction, architectural, or transportation engineering, with knowledge of municipal programs related to infrastructure systems (roads, bridges, roadway structures, water, wastewater, stormwater). Experience related to decision models, decision support systems, life cycle costing and their role in capital program development is an asset.
4. Proven knowledge of engineering and planning practices and trends to assist in the implementation of infrastructure management programs for the City of Hamilton, including knowledge of industry best practices in data collection and management, asset condition assessment and asset data analysis.
5. Knowledge of infrastructure condition grading systems and their significance in the best practice management of municipal infrastructure is an asset.
6. Knowledge of surface and subsurface asset components and the key factors relating to the best practices for lifecycle planning and programming.
7. Knowledge is required in planning, inspection, condition assessment, and programming of rehabilitation and capital works.
8. Strong working knowledge of Microsoft products such as Outlook, Word and Excel.
9. Knowledge/experience with software applications Infor/Hansen/Oracle, Microstation/CAD, ESRI/GIS, Asset Planner, Bridge Management System (BMS) would be an asset
10. Knowledge/experience on Project Management Institute guidelines related to skilled management of people, processes, and business priorities of professional projects would be an asset.
11. Must possess a 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.**