

CITY OF HAMILTON

PUBLIC WORKS DEPARTMENT **(ENGINEERING SERVICES – ROADS)**

PRE-DESIGN TECHNOLOGIST – CUPE 5167

SUMMARY OF DUTIES

Report to Project Manager (Preliminary Design & Special Projects). Originate and produce detailed geometric designs for preliminary road layouts.

GENERAL DUTIES

Originates and drafts functional design road plans and profiles to technical standards, using either conventional or computerized design and drafting tools/techniques.

Calculates horizontal and vertical alignments, draining profiles, and side entrance grades.

Assists in the identification of capital expenditures, property, and environmental impacts of proposed designs.

Assists in the identification of possible mitigative or remedial measures for design impacts of conflicts.

Products final preliminary design plan by incorporating all approved revisions.

Assembles base mapping, utility and property information, and other relevant design constraints, and produces a coordinated base plan.

Determines and requests supplemental survey information.

Originates and drafts technical and graphic displays for Committee, Environmental Assessment submissions, and public meetings.

Assists in examining and commenting on proposed development related accesses and road alterations with respect to road geometric standards and operational impacts.

Instructs draftsmen and surveyors in performance of alignments.

Maintains reference library of base mapping, plans, designs, and photographs.

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

QUALIFICATIONS

1. Diploma from a three year Community College course in an accredited Engineering Technologist's course in civil engineering or equivalent education and experience.
2. Previous experience in roadways and municipal design.
3. Able to assume responsibility to develop ideas into completed projects independently.
4. Experience in a computerized environment. Able to produce computerized design drawings. Knowledge of Lotus 123 and DBase. Working knowledge of Intergraph or equivalent is essential.

5. Must possess good verbal and written communication skills, including the writing of letters and reports.
6. Must be able to co-ordinate and relate well with professionals and non-professionals within and outside the organization.
7. Good working knowledge of estimating techniques, with good mathematics.
8. Must possess a Class "G" Licence with provision of a vehicle for use on the job.

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