



JOB CLASSIFICATION DESCRIPTION

MUNICIPAL DESIGN TECHNOLOGIST

DATE ESTABLISHED: DECEMBER 2020

Job Summary:

Reporting to the Manager of Development and Design, this is a technical position requiring both office and field assignments related to the field of civil engineering design, transportation, underground utilities and land development. Work involves a variety of civil engineering design and drafting municipal infrastructure for capital projects.

Primary duties and responsibilities:

- Produce design drawings related to the municipal infrastructure using computer aided drafting related to the maintenance, rehabilitation, replacement or new construction including creating base plans, preliminary and detailed design drawings issued for tender or for construction and as-constructed drawings.
- Coordinate with others (internal and external) to retain the necessary data required to generate design drawings such as surveyor, geotechnical consultant, environmental, archaeological, landscape architect, etc.
- Coordinate with internal and external stakeholders to obtain permits for construction.
- Prepare construction cost estimates.
- Assist Project Manager with tender documents and contract administration where required including administrating of pre-construction and progress meetings, issuing change orders and progress draws, conducting deficiency and final inspections, and completing project close-outs.
- Research and analyse functions related to transportation planning, operation and design.
- Collect field data for the production of engineering design drawings and plans
- Conduct site inspections to determine pipe grades and depths; review base plans by conducting field checks to ensure accuracy and completeness.
- Maintain manual and computerized records and databases, files, plans, base maps, and systems models; assist in the production and updating of related engineering drawings, maps, and statistical reports; produce cost estimates.
- Respond to enquiries and complaints from the public, outside agencies and other departments in person, by phone, and in writing.
- Liaise with and provide technical information and advice to staff, consultants and outside agencies regarding design requirements, pedestrian flow, cycling, traffic movement, on-street regulations, and bylaws.
- Review rezoning and development permit applications, building permit applications, and utility applications for compliance and functionality.
- Review engineering designs, and applications for rezoning, development permit, building permit, utility to ensure compliance with City standards and specifications.
- Provide technical advice and interpretation to applicants, contractors and professional consultants on design submissions and advise on required changes.

- Conduct site inspections to review the work of City crews and contractors to ensure compliance.
- Research, investigate, analyse and recommend solutions on transportation safety, design and operations issues, including collisions trends and occurrences for all transportation modes.
- Perform field investigations and calculations regarding transportation infrastructure safety, design and operations; calculate land design issues such as road grades, loading for traffic signal poles, sight and stopping sight distances, rainwater flow, and road drainage.
- Respond to enquiries and complaints from the public, other departments and staff by providing information on municipal services; update computerized files and records.
- Perform related duties as required.

Necessary Qualifications:

Knowledge:

- Considerable knowledge and application of the principles and techniques of civil engineering planning, design, estimating, project co-ordination and construction applicable to municipal design and construction.
- Considerable knowledge of current literature, trends and development in design and construction.
- Considerable knowledge of the principles of project management on construction projects; liaise with other departments and outside agencies as required.
- Considerable knowledge of the occupational hazards and safety requirements of the work.

Ability to:

- Produce civil engineering technical drawings for municipal roads and utility construction using manual and computer aided drafting techniques.
- Read and interpret engineering codes, standards and drawings.
- Operate word processing, spreadsheet and related specialty software such as Civil3D and engineering software.
- Organize and prioritize work.
- Maintain accurate records.
- Establish and maintain effective working relationships.
- Deal effectively with the public and outside agencies.
- Work safely on job sites.

Required Qualifications:

Diploma in Civil Engineering Technology. (Two (2) years)

Valid Class 5 BC Driver's Licence and good driving record.

Three (3) years of related experience in a local government.

OR an equivalent combination of education and experience may be considered.

Working Conditions:

This position involves outside work on a year-round basis.

The above statement is a general description of the principal functions of this job and is not a detailed description of all job duties.