

**SENIOR ENGINEERING TECHNICIAN****1. FUNCTION**

As a team leader under the general direction of the Manager of Engineering, the Senior Engineering Technician coordinates the day-to-day operations and provides support to the various functions of the Engineering Department. The position entails technical work in civil engineering technology, involving both field and office assignments, for municipal infrastructure projects: roads, sidewalks, curbs and gutters, waterworks, sanitary and storm sewers, park improvements, etc. The duties of this position include: review and preparation of construction drawings, surveys, cost estimates, inspection services, and liaison with contractors, other municipal staff, and the public. This position also assists with coordination of the department's work with other divisions and oversees the work of Engineering Technicians. Considerable independence, judgment and problem solving is required. Thorough knowledge of municipal engineering practices and procedures, materials, methods, and use of equipment is required.

**2. TYPICAL DUTIES**

- a) Plan, calculate, check, and execute engineering surveys (preliminary/topographical, detailed design and construction lay-out) for municipal infrastructure projects.
- b) Prepare conceptual, preliminary, and detailed computer-based designs for municipal infrastructure projects.
- c) Review engineering reports, designs and construction drawings related to development proposals and public utility services prepared by third party consulting engineers, architects, utility companies and others.
- d) Perform site inspections of construction projects involving municipal infrastructure to ensure conformance with municipal standards, identify inadequacies and deficiencies and direct remedial work.
- e) Determine engineering and servicing requirements, estimate quantities, and prepare detailed construction cost estimates for municipal projects and development proposals for site servicing.
- f) Liaise and provide information, technical advice and problem solving to municipal crews, contractors, consultants, utility companies, government agencies and the public.
- g) Assist with the preparation of Requests for Proposals (RFP's) for consultant engineering services. Obtain quotations and develop specifications and tender documents for the construction, inspection and maintenance of municipal infrastructure and the provision of services and equipment to the municipality. Undertake contract administration services.
- h) Prepare staff reports and correspondence as required.
- i) Operate survey instruments, GPS equipment, plotters/scanners, and other equipment.
- j) Assists with the coordination of departmental work with other municipal divisions and departments, outside agencies, consultants, contractors, and the public.
- k) As part of the Town's Asset Management Program, participate in short and long-range planning and development of projects and programs.

- l) Review and make recommendations for updating engineering and development related bylaws, policies, etc.
- m) Coordinate the work of Engineering Technicians and the Asset Management Technician, providing technical guidance and fostering the development of skills and learning opportunities within the department.
- n) Prepare communication plans for municipal construction projects, including construction notices, display boards, feedback surveys and schedules. Represent the Town when consulting with the public on proposed construction works.
- o) Coordinate the maintenance of a central filing system for plans, municipal service information, field books, reports, and related documents. Ensure all records related to the department are kept up-to-date.
- p) Coordinate the inventory, replacement and maintenance of survey equipment and supplies.
- q) Perform other related duties as required or assigned by the supervisor.

### **3. REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES**

- a) Thorough knowledge of the principles and practices related to civil engineering technology, including materials, methods and techniques applicable to municipal works and services.
- b) Thorough knowledge of engineering survey and drafting methods and techniques, including the use of computer drafting equipment and software, as well as the operation of robotic total station, data collector, precise level, GPS, and standard survey equipment.
- c) Working knowledge of relevant government legislation, bylaws, and regulations.
- d) Proficient use of networked computer and engineering design software (including AutoCAD, Civil 3D, and AutoTURN).
- e) Proficient use of Microsoft 365 and Adobe or Bluebeam products.
- f) Ability to read and interpret engineering plans and drawings.
- g) Ability to independently investigate and solve complex problems.
- h) Ability to effectively and efficiently plan, organize and manage projects to meet deadlines.
- i) Good written and oral communication skills.
- j) Interpersonal skills with the ability to apply judgment and tact in supervising and fostering positive working relationships with co-workers, external contacts, and the public.
- k) Ability to quickly become proficient in the use of municipal software; experience with Worktech and Tempest is highly desirable.

#### **4. REQUIRED TRAINING AND EXPERIENCE**

- a) Completion of a Diploma in Civil Engineering Technology.
- b) Minimum of 10 years' experience in civil engineering technology, preferably in a municipal environment. This includes experience in performing survey layout assignments, running total station surveys with data collector, as well as the design, installation and inspection of municipal works and services.
- c) Eligible for membership in the Society of Applied Science Technologists and Technicians of BC, as an Applied Science Technologist (AScT).
- d) Possession of a valid BC Driver's License (Class 5).

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