

JOB DESCRIPTION

TITLE: TRAFFIC SIGNAL TECHNICIAN

DEPARTMENT: Public Works

LEVEL: 13 (Subject to JE)

Position Last Evaluated: N/A Job Desc. Last Updated: N/A

JOB SUMMARY

Under the direction of the Manager, Roads & Traffic Services, the incumbent oversees the City's traffic signal inventory and related equipment, including assembly, installation, preventive maintenance, testing and repair. The position oversees contractors, and consultants engaged in the installation, construction, and maintenance of traffic signals and related electrical equipment.

TYPICAL DUTIES AND RESPONSIBILITIES

- 1. Assembles, installs, cleans, inspects and maintains traffic controllers and monitoring equipment.
- 2. Diagnoses and corrects malfunctions in the field. Diagnoses and repairs malfunctioning equipment, including traffic controllers, conflict monitors, crosswalks & solar pedestrian crosswalks signals, emergency pre-emption devices and related equipment.
- 3. Performs equipment evaluation and acceptance testing.
- 4. Performs annual preventive maintenance to traffic signal conflict monitoring equipment.
- 5. Maintains records and reports related to the maintenance and operation of the traffic control system.
- 6. Prepares cost estimates for traffic signal related projects.
- 7. Orders, stocks and tracks maintenance equipment and parts

TYPICAL DUTIES AND RESPONSIBILITIES cont.

- 8. Provides professional input on new designs and supervises construction and installation of new traffic signals and related devices.
- 9. Provides a resource for the Roads & Traffic Services section to support the maintenance of asset inventories and condition assessments for the Asset Management Program. Works closely with the Transportation Planning, Infrastructure Planning, GIS Groups, and Engineering Construction to ensure departmental coordination is achieved.
- 10. Provides contract administration for electrical contractors. This includes interpretation and enforcement of contract conditions and requirements, budget and cost administration and certification of invoices and contract payments.
- 11. Monitors and inspects contractors' work; evaluates their performance and ensures deficiencies are corrected.
- 12. Liaises with City staff, consultants, and private contractors and responds to public enquiries on all aspects of the City's traffic signal network and related equipment.
- 13. Completes verbal and written reports, and determines unit pricing for job costing and project estimates. Reviews and certifies post contract information for consistency, completeness, and accuracy. Keeps records of as-constructed projects.
- 14. Performs other related duties as required.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES

Good working knowledge of methods, practices, materials, tools, and equipment as they relate to the rehabilitation, construction, and maintenance of traffic signals and related equipment.

Good working knowledge of traffic signal operation and timing, basic survey methods and basic traffic counting methods.

Thorough knowledge of applicable acts, statutes and regulations (MVA, TAC guidelines, RTAC, MUTCD).

Knowledge of PC based traffic signal systems, corporate software applications and all applications relevant to roads, traffic services, and infrastructure management.

Ability to develop, implement and maintain accurate digital and written databases including ARC - GIS and related data.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES cont.

Considerable knowledge of Asset Management principals and experience with asset inventories and condition assessment procedures for roads and traffic services.

Considerable knowledge of budgeting and preparing cost estimates.

Demonstrated ability to interpret engineering, electrical, architectural, and survey plans, mapping, and aerial photographs, together with related data.

Demonstrated ability to learn and follow new technology, analyse and interpret test results, and solve technical problems.

Demonstrated ability to exercise independent judgment and action on a daily basis, provide solutions to problems and work with a minimum of supervision.

Ability to research, collect, manage, and analyse technical data and information, resolve complicated problems, and prepare clear and understandable communications for a variety of audiences.

Ability to oversee, plan, organize, problem solve and forecast time lines.

Possess excellent verbal and written communication skills, with the ability to establish and maintain effective working relationships with the public, contractors, engineers, and work crews in the field.

Ability to communicate with tact and discretion when dealing with or settling requests, complaints or clarifying information to customers.

MINIMUM TRAINING AND EXPERIENCE REQUIRED

Completion of Grade 12 or equivalent.

Possession of a valid interprovincial BC Certificate in Trades Qualification as an Electrician with a minimum of 3 years' of experience working with traffic control electronics.

Or an equivalent combination of education and experience.

Possession of a Valid Class 5 BC Drivers' License.

Must possess or be eligible to obtain IMSA Traffic Signal Certification (within 1 year).

Must possess or be eligible to obtain a Traffic Control Person Ticket (within trial period).

GENERAL STANDARDS

All employees shall take reasonable care to protect their health and safety, and the health and safety of other persons by becoming familiar with the Occupational Health & Safety (OH&S) Program, following established safe work procedures, using protective equipment, and asking for training if unfamiliar with work requested to perform.

Must be in good health and have sufficient physical strength and agility to perform required work activities of this position.

Contributes in maintaining a respectful, safe, and supportive work environment that embraces diversity and where everyone is treated with courtesy, dignity, and fairness.

Adheres to City policies and objectives.