

**CITY OF FONTANA
SENIOR TRAFFIC SIGNAL MAINTENANCE TECHNICIAN**

DEFINITION: Under general direction, provides lead work direction and guidance and performs skilled electrical and electronic maintenance duties in the installation, modification, maintenance, repair and adjustments of electrical and electronic traffic signals, traffic signal coordinated systems, and traffic signal communication systems within the Traffic Section of the Engineering Department. This position may exercise functional and technical supervision over assigned staff.

ESSENTIAL FUNCTIONS: The employee must have the ability to:

- Participate in evaluating the work done by signal contractors and evaluating the quality of contractor maintenance; assist in providing or coordinating staff maintenance training activity; work with the Supervisor/Manager to develop and implement labor and energy saving maintenance practices.
- Participate in the preparation of programs related to meeting the future traffic signal needs of the community addressing traffic signal concerns.
- Provide lead work guidance and direction, schedule and assist in assigning and reviewing the work of traffic signal maintenance personnel in the construction, installation, maintenance, inspection, diagnosis and repair of traffic signal systems.
- Assist in signal design by determining the quantity, quality and cost of materials; work with others to prepare plans and specifications related to major signal maintenance projects.
- Construct, install, maintain, inspect, diagnose malfunctions and repair traffic signal systems, including traffic sensing devices, traffic signal circuits, signal controllers, pre-emption systems, and closed loop traffic communication systems to include fiber optic and copper networks.
- Assist in establishing work standards, production controls and job priorities.
- Assist in the development of time and labor saving improvements to the signal system and signal maintenance records.
- Utilize computer for evaluating maintenance situation and transferring data to and from signal systems components in the field and office.
- Adhere to administrative and departmental policies and procedures.
- Establish and maintain cooperative working relationships with those contacted in the course of work.

THE ABOVE LIST OF ESSENTIAL FUNCTIONS IS NOT EXHAUSTIVE AND MAY BE SUPPLEMENTED AS NECESSARY BY THE EMPLOYER.

WORKING CONDITIONS: Position requires prolonged standing, walking on uneven and slippery surfaces, reaching twisting, turning, kneeling, bending, stooping, and squatting, crouching, grasping and performing repetitive hand movements in the performance of daily duties. Employees in this position may be required to lift, carry and/or push objects weighing twenty-five (25) pounds or more. The position requires near and far vision when inspecting or performing work. Incumbents work in all weather conditions, use cleaning and lubricating chemicals which may expose the employee to

fumes, dust and air contaminants, drive motorized vehicles, work around moving traffic and often work with constant interruptions. Incumbents are also required to climb ladders, as well as use power and noise producing tools and equipment.

EXPERIENCE AND TRAINING GUIDELINES

A combination of experience and training that would likely provide the required knowledge and abilities is qualifying. The employee must have the knowledge of:

- Econolite Traffic Signal Equipment, including ASC2 and ASC3 controllers
- TS-1 and TS-2 Specifications
- Cabinet wiring and malfunction diagnosis for Econolite equipment
- Maintenance procedures for traffic signals
- Maintenance equipment and maintenance supplies and tools
- Maintenance costs and maintenance operations
- Loop detection methods; loop types and preventive maintenance for loop detection systems.
- Video detection methods to include programming, troubleshooting, and the repair of various video detection systems.

Experience: Five years of direct experience in the installation, operation and maintenance of traffic signal equipment and control systems with a minimum of two years experience in a lead capacity that demonstrated the ability to coordinate with signal maintenance workers, co-workers, supervisors and outside contractors.

Education: Completion of the twelfth grade or equivalent; supplemented by college level classes in business administration or related field.

Licenses/Certifications: The incumbent assigned to this position must have the ability to become certified, within a three-month period, by Econolite Control Products, Inc., in the operation of Econolite traffic control equipment and in the wiring and diagnosis of the types of controller cabinets in use by the City.

Incumbent must possess a valid certification as a Level I Traffic Signal Technician through the International Municipal Signal Association or the ability to obtain within twelve months of employment.