

**MONTGOMERY COUNTY GOVERNMENT
ROCKVILLE, MARYLAND
CLASS SPECIFICATION**

**Code No. 004117
Grade 20**

TRANSPORTATION SYSTEMS TECHNICIAN LEADER I

DEFINITION OF CLASS:

This is skilled technical and lead level work involving the field and bench assembly, installation, wiring, testing, and *routine* maintenance and repair of traffic monitoring and traveler information equipment (e.g., traffic control cabinets, signal heads and school flasher assemblies, overhead and underground wiring and communications cable, microwave links, variable message signs, lane control and channelization devices, video cameras, traveler advisory radio system and related equipment). Contacts are primarily with the employees of the crew to which a position of this classification is assigned and employees outside the work unit and others (e.g., police), normally to pass and receive information which facilitates accomplishment of assigned duties and responsibilities. This class of work may entail some public service/assistance, but it is incidental to the primary focus of the work performed.

An employee in this class is responsible for leading and participating in the work of a crew assigned primarily to either traffic signal maintenance or the above-ground installation (overhead construction) of traffic control, monitoring and information dissemination equipment. The work of this class includes routine set-up, maintenance and repair of traffic signal control devices and related ATMS and FiberNet devices (e.g., video cameras, radio transmission equipment, fiber optic cable plant) which can be accomplished in the field or in a shop environment. Work assignments are received from the unit supervisor along with general shop priorities and time requirements identified; the employee must plan and coordinate daily work with crew members and, as required, with other crew leaders. Work is occasionally checked upon completion for compliance with intersection requirements as specified. Guidelines for accomplishing the work are established in the form of unit standard operating procedures, technical manuals, codes and references; from these sources the employee selects how best to accomplish the tasks. The complexity of the work is marked by the employee's application of technical knowledge and skills to a variety of equipment produced by different manufacturers. The purpose of the work is to ensure the safe, efficient installation and maintenance of field equipment supporting the Transportation System Technical Center's capital and operating projects and programs. The work is primarily performed outdoors in the midst of or adjacent to moving traffic, and from considerable heights (bucket truck). Strict observance of safety precautions and procedures is required at such times that the employee is working around high voltage electrical wires. An employee in this class must possess good strength and agility in order to, on an occasional basis, lift objects weighing between fifty (50) and one hundred (100) pounds.

EXAMPLES OF DUTIES: (Illustrative Only)

- Leads crew in the routine maintenance and repair of traffic control, traffic monitoring and traveler information equipment, including running trouble calls and conducting preventive maintenance on equipment.

- Leads crew in the construction, modification, installation, testing, overhaul, preventive maintenance and field and bench repair of a variety of complex computer based solid state, digital, electronic, electromechanical and microprocessor based traffic control equipment involving computer logic, solid state modular circuitry and related telephone and data communication.
- Leads crew in installation of overhead messenger wire, electrical cable, vehicle and pedestrian signal heads, and video surveillance cameras, working primarily from a "bucket" truck.
- Leads crew in installation of traffic signal poles and pedestals, pedestrian or vehicle signal heads, span cable, service and disconnect boxes, push buttons, electrical services, and overhead and underground communications cable, to include fiber optic cable.
- Leads crew in setup installation and maintenance of traffic signal control cabinets.
- Leads crew in assembly, installation, wiring and testing of traffic signal head and school flasher assemblies; overhead video cameras; radio transmission equipment; and wire connects vehicle detectors in controller cabinet.
- Leads crew in installation of overhead lane control and other overhead signs, video cameras, traffic advisory radio system equipment, banners, trail blazing signs, fiber optic signs and channelization devices from a "bucket" truck.
- Leads crew in testing of field connections for proper signal head illumination.
- Leads crew in repair of malfunctioning traffic signals.
- Coordinates the work of assigned crew with that of contractual employees performing installation, maintenance and repair.
- Ensures all installations are wired to conform to local electrical codes.
- Interprets wiring diagrams and schematics for installations and modifications of signal equipment.
- Instructs crew members in the use of construction tools and equipment and enforces safety regulations.
- Provides employee performance evaluation recommendations and other information concerning members of the crew.
- Provides technical training for staff, as required.
- Requisitions supplies and equipment.
- Prepares employee accident reports.
- Inspects traffic signal equipment installed under contract.
- Performs related duties as required.

KNOWLEDGE, SKILLS AND ABILITIES:

- Considerable knowledge of the National Electrical code (NEC) and the electrical aspects of traffic signal control devices, high speed data and digital devices and video cameras.
- Ability to install, repair and maintain telemetry equipment as applied to the interconnection of traffic control systems.
- Ability to read and interpret wiring diagrams and traffic signal installation drawings.
- Ability to detect and trouble-shoot traffic signal control electrical wiring problems.
- Ability to lead and train subordinate technical and skilled labor employees.
- Ability to understand and carry out technical oral and written instructions.
- Ability to perform work outdoors in all weather conditions at extended heights working from a "bucket" truck.
- Ability to communicate clearly and concisely, both orally and in writing.
- Must be free from color blindness.
- Ability to attend meetings and/or perform assignments at locations outside the office.

MINIMUM QUALIFICATIONS:

Experience: Four (4) years of journey level experience involving electrical wiring and intersection set up of traffic signal control devices and related equipment.

Education: Completion of High School supplemented by completion of either formal school or on-the-job training in electrical wiring or electronics appropriate to traffic signal control devices.

Equivalency: An equivalent combination of education and experience may be substituted.

Physical Abilities: Ability to independently lift, push and pull heavy pieces of equipment and tools occasionally weighing up to one hundred (100) pounds.

LICENSE:

- Possession and maintenance at all times of a Commercial Driver's License (CDL) from the applicant's state of residence appropriate to the equipment operated by an employee in this class.

Note: There will be no substitutions for this section.

PROBATIONARY PERIOD:

Individuals appointed to this class will be required to serve a probationary period of twelve (12) months.

Individuals promoted to this class will be required to serve a probationary period of six (6) months.

During the probationary period, performance will be carefully evaluated. Continuation in this class will be contingent upon successful completion of the probationary period.

MEDICAL EXAM PROTOCOL: Core II Exam with a Drug/Alcohol Screen.

Class Established: March, 1975

Revised: February, 1976

June, 1980

August, 1985

December, 1985

May, 1991 (M)

June, 1998 (M)

August, 2013

October, 2014

Formerly Titled: "Traffic Signal Technician II"