CLASSIFICATION TITLE: TRAFFIC SIGNAL TECHNICIAN I

BARGAINING UNIT:  CIV BARGAINING       CODE NUMBER:  6860
PAY RANGE CODE:  10120       REVISION DATE:  3/30/17

NATURE OF WORK:

This is journey level work involving the installation, maintenance, repair, and testing of traffic signal systems and their associated components in the shop and in the field. The incumbent receives work assignments orally or through written work orders and perform duties in cooperation with others in the same classification or under the direction of a Traffic Signal Technician II or other level of supervisor. The incumbent may oversee and participate in the work of subordinates. An employee in this classification exercises independent judgment in the performance of their duties based upon established practices and procedures.

ESSENTIAL FUNCTIONS:  (Any one position may not perform all the duties listed, nor do the listed examples include all the duties that may be performed in positions allocated to this class.)

Installs, upgrades, maintains, and performs scheduled, unscheduled, and emergency repairs on traffic signal systems, traffic signal communications equipment, and associated components.

Checks and makes pre-determined adjustments to traffic controller timing programs as indicated.

Uses computers and mobile devices to investigate problems with traffic signal controllers and associated components.

Locates and marks the location of underground cables.

Maintains and repairs assigned tools and equipment.

Documents and compiles reports on work completed.

Maintains regular job attendance in accordance with a schedule established for the position by the supervisor.

Performs other related duties as assigned or as the situation dictates within the scope of this classification.
REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of the standard tools, materials, and practices used in electrical equipment repair work.

Knowledge of the basic principles of serial and IP communication via twisted pair copper wire, fiber optic cable, wireless, and other transmission media.

Knowledge of the use of electrical and electro-mechanical testing equipment.

Knowledge of the principles of electricity and electronics.

Knowledge of the hazards and safety precautions necessary in working with and around electricity.

Knowledge of the hazards and safety precautions necessary in working within and around active traffic in the field.

Knowledge of and ability to operate a computer or other technology using standard or customized computer or systems software applications appropriate to the assigned tasks.

Skill in the maintenance and use of assigned tools, equipment, and testing instruments.

Skill in the logical analysis and troubleshooting of complex electrical and electronic systems.

Skill in the installation and repair of under and above ground vehicle detection devices.

Ability to learn and adapt to advances in computer and electronics device technology and software.

Ability to establish and maintain effective working relationships with fellow employees and members of the general public.

Ability to read and interpret sketches, schematics, wiring and circuit diagrams, prints, specifications, and construction plans.

Ability to use standard tools of the construction trade and to operate heavy equipment used in the repair and installation of traffic signals.

Ability to form and pour concrete traffic signal foundations.

Ability to discern colors, especially wiring color codes.

Ability to understand written or oral instructions.

Ability to adhere to safety policies, procedures, and guidelines.
Ability to stand and bend from 76 to 100% of the time; to stoop, squat, kneel, pull, and lift from 51 to 75% of the time; to climb, reach, balance, crouch, walk, and push from 26 to 50% of the time; and to crawl, type, and sit up to 25% of the time.

Ability to use up to fifty (50) pounds of force to move objects up to 33% of the time; to use up to twenty (20) pounds of force to move objects from 34 to 66% of the time; and to use up to ten (10) pounds of force to move objects from 67 to 100% of the time.

**EDUCATION AND EXPERIENCE:** (The knowledge, skills, and abilities above may be acquired through, but are not limited to, the following combination of education and/or experience.)

High school graduation or its equivalent

AND

Completion of coursework in Electric, Electronic, Computer Hardware, Communication Infrastructure and Repair

AND

Two years (2) of experience in electric, electronic, mechanical and computer hardware repair work.

**SPECIAL QUALIFICATION**

Must possess a valid Class “B” Commercial Driver’s license with “N” and air brake endorsements by the end of the probationary period.

Must obtain and maintain certification through the International Municipal Signal Association (IMSA) in Work Zone Safety and Traffic Signal Technician Level I prior to progressing to step C.

Must acquire and maintain a 2nd Grade Hoisting and Portable Engineering Certificate by the end of the probationary period.

**WORKING CONDITIONS:** (The conditions herein are representative of those that must be met by the employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.)

Work is performed both indoors and outdoors in all weather conditions. At times incumbents may be exposed to extremes in heat, cold, and humidity, in high places or confined spaces, in conditions such as smoke, dust, mists, gases, high noise levels, and in heavy traffic.

**EQUIPMENT OPERATION:** (Any one position may not use all of the tools and equipment listed nor do the listed examples comprise all of the tools and equipment that may be used in positions allocated to this classification.)

High Reach Boom Truck with Hoist  Computer/Tablets  Hand Tools
Electronic Testing Instruments  Service Van
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<th>Traffic Signal Controllers</th>
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Previous Revision Date(s):  
3/25/93  
5/28/98  
9/30/04  
6/17/10