CLASSIFICATION TITLE: TRAFFIC SIGNAL SUPERVISOR I

BARGAINING UNIT: CIV MANAGEMENT  CODE NUMBER: 2260

PAY RANGE CODE: 14.1MC  REVISION DATE: 7/7/17

NATURE OF WORK:

This is a position assisting with the management of the Traffic Signal section staff and activities within the Traffic Division. Technical work responsibilities include the installation, maintenance, repair, planning, evaluation, and testing of traffic signal systems, traffic signal communication systems and methods, and their associated components. An employee in this classification exercises considerable independent judgment in the performance of duties, based on established practices and procedures, and may provide technical and general supervision, training, and mentoring for subordinate employees.

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.)

Assists with strategic input to management on technical and employee matters. Coordinates the general management of the Traffic Signal Section budgets and staff resources.

Supervises, counsels, and evaluates employees regarding appropriate work methods, safety precautions, and divisional policies. Assists in providing required training to section personnel.

Inspects assigned jobs in progress; confers with supervisors and subordinates concerning problems encountered.

Evaluates work requests from the public and resolves citizen complaints.

Monitors preventive maintenance of vehicles and equipment and recommends the replacement or repair of equipment.

Determines methods, materials, and parts necessary for the Traffic Signal section.

Coordinates the installation, upgrade, maintenance, and scheduled or unscheduled emergency repairs on traffic signal systems, traffic signal communications equipment, and their associated components.

Checks and makes pre-determined adjustments to traffic controller timing programs as indicated.
Uses computers to facilitate setup, programming, and troubleshooting of traffic signal controllers and associated components.

Programs traffic signal controllers to perform defined operations and signal timing functions.

Documents and compiles reports reflecting one’s own completed work as well as the work of subordinates.

Monitors the traffic signal communication system to report outages, faults, malfunctions, or other issues that may arise.

Maintains inventories and inventory records of equipment and materials, oversees their maintenance, determines the needs of each for assigned maintenance operations or projects, and recommends purchases to keep stock at adequate levels.

Works with supervisors, engineers, and contractors to plan, develop, evaluate, and deploy traffic signal and communication systems, including hardware, software, and other related components.

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

Knowledge of the operational limitation of all types of equipment used in the construction, repair and maintenance of the Traffic Signal section.

Knowledge of the occupational hazards present in the Traffic Signal section and the precautions necessary to prevent them.

Knowledge of the installation, maintenance, repair, and testing of traffic signal systems and their associated components.

Knowledge of the standard tools, materials, and practices used in electronic, electro-mechanical, and solid state equipment repair work.

Knowledge of the principles and applications of electrical theory.
Knowledge of the theories, principles, and applications of serial and IP communications via twisted pair copper wire, fiber-optic cable, and other transmission media.

Knowledge of the contents of the Manual on Uniform Traffic Control Devices.

Knowledge of pertinent and current innovations regarding traffic signals.

Knowledge of in-depth advanced traffic management systems.

Skill in troubleshooting activities for under and above ground vehicle detection devices.

Skill in the care and use of tool, equipment, and testing devices used by the Traffic Maintenance division.

Skill in making logical analysis of complex electrical systems and determining causes of malfunctions.

Ability to coordinate, plan, organize, and direct the progress of a large group of employees performing repair and maintenance duties.

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

Ability to interpret reporting of testing equipment to locate, identify, and analyze faults in traffic signal equipment.

Ability to modify, maintain, repair, or replace faulty traffic signal equipment.

Ability to maintain accurate and concise records and reports as well as the ability to interpret reports to be able to react and adjust work assignments as needed.

Ability to understand written or oral instructions.

Ability to communicate with other employees and the general public to direct work operations and to resolve citizen complaints.

Ability to read and interpret sketches, schematics, diagrams, prints, circuit diagrams, specifications, and area maps.

Ability to read and write the English language.

Ability to establish and maintain effective working relationships with fellow employees and the general public.
Ability to adhere to safety policies, procedures, and guidelines.

Ability to sit, stand and walk 51% to 75% of the time; climb, bend, stoop, squat, and kneel 26% to 50% of the time; and reach up to 25% of the time.

Ability to use up to twenty pounds of force to move objects up to 33% of the time, to use up to ten pounds of force to move objects from 34% to 66% of the time, and to use lesser amounts 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.)*

Associates degree in electronics, mechanical, computers, or digital electronic theory and repair

AND

Six (6) years of experience in electronic, mechanical, computers or digital electronic maintenance and repair work

OR

Twelve (12) years of experience in electronic, mechanical, computers or digital electronic maintenance and repair work.

**SPECIAL QUALIFICATIONS**

Must be able to transport oneself or coordinate transportation to sites throughout the city during the course of the work day.

Must obtain and maintain certification through the International Municipal Signal Association (IMSA) in Work Zone Safety, Traffic Signal Level I and II by the end of the probationary period.

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.)*

Depending on the assigned division, work may be performed outdoors in varying temperatures and weather conditions or inside amid normal conditions of humidity, fumes, odors, chemicals, and dust. Office oriented work often entails spending considerable amounts of time at a computer terminal. Work may involve exposure to motor vehicle and chemical fumes, as well as pollen, weeds and other
airborne allergens. Work may be performed near or with vibrating machinery, moving mechanical parts, manholes, and underground cables. Noise levels may require shouting in order to be heard. Work requires a considerable amount of driving. Conditions may also necessitate working in and around high traffic areas and in wet and muddy areas.

**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
- Oscilloscope
- Eprom Programmer
- Two-way Radio
- Fiber Communication Testing Tools
- Optical Time Domain Reflectometer (OTDR)

- Computer/Tablets
- Controller Test Equipment
- Copier
- Facsimile Machine
- Printer
- Telephone
- Service Van

Previous Revision Date(s):