CITY OF HOUSTON

JOB DESCRIPTION

Job Code: 522.7

Job Title: **TRAFFIC SIGNAL TECHNICIAN II**

Pay Grade: 21

GENERAL SUMMARY:

Performs moderately complex, skilled electronic work in the design, installation, operation, maintenance and repair of traffic signal/control systems and data communications equipment/systems.

RESPONSIBILITIES:

- Designs, evaluates, installs, and maintains traffic signal/control systems and data communication systems/equipment. Makes recommendations for performance improvements.
- Assists in the identification and selection of new traffic equipment/components through collaboration of management, users, and vendors.
- Reviews sites and develops plans for installation; reviews specifications in detail and ensures electrical work and systems and traffic signal timing comply with City policies, procedures and codes, National Electrical Code (NEC) and the Texas Manual on Uniform Traffic Control Devices (TMUTCD).
- Diagnoses and resolves data communications system failures; and communicates and coordinates with management/vendors to solve problems with various types of data communications controls.
- Operates test equipment to isolate electronic system problems. Repairs and calibrates all components of traffic/signal/control systems or data communication systems.
- Responds to complaints and inquiries related to traffic signal/control systems and data communication systems.
- Designs and maintains cable layout logs.
- Installs wires, cables, poles, mast arms, cabinets, concrete foundations and other components/equipment.
- Maintains statistical reports on performance, project status and inventory
- May train and/or lead other traffic signal technicians in the installation and operation of traffic signal systems/equipment.
- May perform other duties as assigned.

SPECIFICATIONS:

KNOWLEDGE:

Requires a high school diploma or a GED.

SPECIFICATIONS: (continued)

CERTIFICATION/LICENSE:
Must have either an IMSA (International Municipal Signal Association) Level 2 Traffic Signal Technician Certification or a valid State of Texas Journey/Master Electrician License.

Requires a valid Texas driver's license and compliance with the City of Houston's policy on driving. May require a valid Commercial Driver's License (CDL).

EXPERIENCE:
Four years of electronic experience, with at least two of the years in traffic, are required.

An Associate's degree or higher in Electronics or field directly related to work being performed; OR a Journey/Master Electrician license may substitute for two years of the experience requirement.

COMPLEXITY:
Work requires the direct application of a variety of procedures, policies and/or precedents. Moderate analytic ability is required in applying guidelines, policies and procedures, and in adapting standard methods to fit facts and conditions.

IMPACT OF ACTIONS:
Errors in work could lead to significant expense and inconvenience. Work is typically performed under limited supervision with alternating periods of relative autonomy and general review. The supervisor generally plays a substantial role in setting objectives and organizing work.

SUPERVISION EXERCISED:

Direct Supervision:
May involve general scheduling and review of work as a "working supervisor" or lead person.

Indirect Supervision:
No indirect reports.

CONTACTS:

Internal Contacts:
Level of internal contact is primarily with professionals and supervisors. Interaction requires moderate tact and cooperation; e.g., scheduling and/or coordinating two personal calendars, resolving problems and/or obtaining necessary information.

External Contacts:
Level of external contact is primarily with lower-level service representative and vendors. Interaction requires moderate tact and cooperation; e.g., responding to questions which require some research to provide the correct answer.

PHYSICAL EFFORT:
The position routinely requires lifting of moderately heavy items, such as typewriters or records boxes (up to 40 pounds) and/or very long periods of walking on rough surfaces on a routine basis.

WORK ENVIRONMENT:
There are occasional minor discomforts from exposure to less-than-optimal temperature and air conditions. The position may involve dealing with modestly unpleasant situations, as with occasional exposure to office chemicals and/or extensive use of a video display terminal.

PHYSICAL SKILL:
Requires the ability to make closely coordinated eye/hand movements within very fine tolerance and/or calibration demands; or the ability to make rapid closely coordinated eye/hand movements on a patterned response space within somewhat fine tolerance demands; or the ability to make coordinated eye/hand movements within fine tolerances with large equipment as an extension of the worker.

MISCELLANEOUS:

All duties and responsibilities may not be included in the above job description.

JOB FAMILY:

Traffic Signal Apprentice
Traffic Signal Technician I
Traffic Signal Technician II
Traffic Signal Technician III
Traffic Signal Technician Supervisor

Effective: July 2025