City of Irving Job Description

Senior Traffic Signal Technician

FLSA Status: Non-Exempt  Job Department: Traffic & Transportation
Job Code: T412  Reports To (Job Title): Traffic Signal Supervisor

PURPOSE

To lead and manage small teams and perform skilled work on the installation, operation, and maintenance of electrical, electronic, and digital controlled traffic signals and roadway lighting systems.

ESSENTIAL DUTIES AND RESPONSIBILITIES

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily.*

- Manage the work of teams maintaining and constructing traffic signals.
- Maintain the Advanced Transportation Management System, cameras and networking systems.
- Oversee the replacement and repair of freeway lighting systems.
- Train workers on technical tasks and new systems.
- Maintain the wireless network and network equipment at all signals.
- Remove obsolete equipment and make recommendations for replacement.
- Keep database of all signals and work performed or required.
- Troubleshoot traffic signal control devices, systems, and auxiliary equipment including traffic controllers & cabinets.
- Perform complex repairs to analog, digital, electronic, electrical, electromechanical, and mechanical signal equipment.
- Participate in preventive maintenance programs to minimize future problems and keeps the traffic signal system in optimum operating condition.
- Design, test, and diagnose electrical and electronic traffic signal controls equipment and devices.
- Perform related duties as assigned including cross training.

OTHER DUTIES AND RESPONSIBILITIES

- Respond to after-hours call back for emergency conditions as necessary.
- Identify and locate utilities and other work hazards.
- Attends and participate in continuing education seminars and classes.

SUPERVISORY RESPONSIBILITIES

Functional and Technical Supervision - Regular responsibility for giving direction and guidance to employees as a lead worker, project manager or internal advisor. As an ongoing part of the position, the employee can expect to supervise approximately 2 employees.
FINANCIAL / BUDGETARY RESPONSIBILITY
City issued P-Card to purchase supplies and materials.

QUALIFICATIONS:
The requirements listed below are representative of the knowledge, skill, and/or ability required.*

EDUCATION
- Equivalent to an Associate’s degree from an accredited college or university with major course work in electronics or a closely related field.

EXPERIENCE
- Two (2) years of experience in the installation, maintenance, and repair of electronic and digital signal control devices.

CERTIFICATES, LICENSES, REGISTRATIONS
- Valid Texas Commercial Driver’s License Class A.
- IMSA or TEEX Work Zone Safety Certification
- IMSA Traffic Signals Level I Certification
- Roadway Worker Protection Certification would be beneficial.

KNOWLEDGE OF
- English Language: The structure and content of the English language, including the meaning of words and grammar.
- Texas Manual Uniform on Traffic Control Devices (TMUTCD)
- Maintenance Principles: Processes involved in upkeep of property and equipment to the optimum state of cleanliness, repair, and efficiency.
- Customer Service: Principles and processes for providing customer and personal services including a desire to help customers regardless of their circumstance.
- Computers and Electronics: Electric circuit boards, processors, chips, and computer hardware and software.
- Computer Networks: Various hardware and software necessary to build a functional network, including routers, switches, firewalls, hubs, wiring, programming, and how TCP/IP packets flow through the system.
- Electrical Code: Proper techniques for installing, repairing, & modifying electrical systems.
SKILLS AND ABILITIES IN

- Accuracy: Paying attention to detail in dealing with numbers, words, and ideas.
- Active Learning: Working with new material or information to grasp its implications.
- Active Listening: Listening to what others are saying and asking questions as appropriate.
- Cooperation: Establishing and maintaining positive working relationships with those contacted in the course of work.
- Functional Supervision: Motivating, developing, and directing people as they work.
- Management of Material Resources: Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work.
- Service Orientation: Actively looking for ways to help people.
- Direction and Instructional Comprehension: Interpreting a variety of instructions furnished in written, oral, diagram, or schedule form.
- Sequencing: Correctly follow a given rule or set of rules to arrange things or actions.
- Written and Oral Expression: Communicating information and ideas in writing, as well as through speech, so others will understand.
- Oral Comprehension: Listening to and understanding information and ideas presented through spoken words and sentences.
- Prioritization: Selecting, from multiple options, activities to achieve a goal.
- Reading Comprehension: Reading and interpreting documents.
- Self-Management: Working independently and without supervision.

GUIDANCE RECEIVED

On-going Instructions and Range of Procedures
Follows a range of established procedures, work methods and direct instructions. Must determine which procedure or method applies to each task or assignment and has some flexibility about the sequence of work. Issues outside of specific instructions and procedures are referred to supervisor or more senior position.

CONTACTS

This position occasionally works with contractors and vendors.

EQUIPMENT AND PROPERTY

This position operates equipment in signal installation, such as: dump trucks, air compressors, jackhammers, trenchers, backhoes, bucket trucks, pole trucks, and forklifts.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.*

The employee constantly is required to balance, drive a vehicle, grasp, handle, feel, listen, see, smell, talk, and/or walk. Frequently, s/he is required to carry, climb, lift up to 50 pounds, push, pull, sit, stand, and/or stoop. Occasionally, s/he is required to lift over 100 pounds and/or kneel.
WORK ENVIRONMENT
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.*

The employee regularly is exposed to extreme vibration, confining work space, dirty environment, electrical hazards, extreme temperatures or weather conditions, high and precarious work spaces, improper illumination, moving mechanical parts, and/or hazardous traffic conditions. This job requires the employee to make decisions directly affecting the safety of others. The noise level in the work environment is usually moderate.

* Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Note: A class specification is a general listing of duties, responsibilities, knowledge, skills, and abilities required of an incumbent assigned to a particular class of work. There may be one or multiple positions assigned to a single classification; therefore, the class specification lists those work attributes that are common to every incumbent in the class.