

City of Fort Worth, Texas

Job Description

Classification Title	Signal Systems Technician II		
Job Code:	ST5470	Job Family:	Service Trades
Pay Grade:	509	Date Created:	12/31/15
FLSA Status:	Nonexempt	Date Revised:	08/01/2026

GENERAL SUMMARY

Performs a variety of technical tasks in the installation, maintenance and repair of traffic signals systems and street lighting systems attached to traffic signals. Leads, oversees and participates in complex work of employees.

ESSENTIAL DUTIES & RESPONSIBILITIES

The intent of this job description is to provide a representative summary of the major duties and responsibilities performed by incumbents of this job. Incumbents may be requested to perform job-related tasks other than those specifically presented in this description.

1. Installs and troubleshoots traffic signals and streetlight circuits that are attached to traffic signals.
2. Performs preventive maintenance which includes participating in the use, care, repair, and operation of traffic signals and/or street lighting circuits attached to signals.
3. Installs and maintains electronic and traffic signal equipment such as audible pedestrian button, wireless communication, 210 and 2018 conflict monitors, etc.
4. Tests, diagnoses and maintains various electronic equipment related to traffic signals and communications.
5. Trains assigned employees in their areas of work including safety methods, procedures and techniques.
6. Reads and understands blueprints specifically related to the installation of traffic signals systems.
7. Handles secondary electrical feed that power traffic signals on metal or wood poles.
8. Controls pedestrians and traffic while installing signals and/or lighting using cones and barricades.
9. Performs data entry of daily work ticket assignments into the ITSM system and/or other computer software.
10. Ensures adherence to safe work practices and procedures.
11. Operates bucket truck to repair malfunctioning traffic signals.
12. Provides on-call and emergency call back duty.
13. Performs other duties as required.

14. Adheres to assigned work schedule as outlined in the Department and City attendance policies and procedures; ensures all behaviors comply with the City's Personnel Rules and Regulations.

KNOWLEDGE, SKILLS & ABILITIES

- **Knowledge of:**
 - Operations, services and activities of traffic signal and street lighting systems.
 - Principles of lead supervision and training.
 - Methods and techniques of electrical systems and basic principles of electronics.
 - Operational characteristics of traffic signals and street lighting equipment and tools.
 - Occupational hazards and standard safety practices.
 - Analysis and interpretation of blueprints and drawings.
 - Common test equipment such as volt – ohmmeters, oscilloscopes, integrated circuit chip testers and specialized test equipment for traffic controllers (conflict monitors, voice coax and video communication media).
- **Skill in:**
 - Planning and prioritizing.
 - Observation and decision-making.
 - Organization and time management.
- **Ability to:**
 - Maintain, operate and instruct employees in the operation of various specialized tools used in maintaining traffic systems.
 - Assist supervisory staff in performing the more difficult maintenance and repair on traffic signals and street lighting systems.
 - Program traffic signal controllers, detection systems, radar, and other related devices.
 - Operate a variety of traffic signal and street lighting maintenance and repair equipment in a safe and effective manner.
 - Operate computer and software systems.
 - Perform analysis of blueprints; circuit schematics and related traffic services drawings.
 - Test, diagnose and repair electronic circuitry.
 - Work independently in the absence of supervision.
 - Understand and follow oral and written instructions.
 - Communicate clearly and effectively, both orally and in writing.

MINIMUM JOB REQUIREMENTS

High school diploma/GED with additional specialized training in traffic signal systems and/or electrical wiring and three years of increasingly responsible electronic and/or electrical experience in the repair and maintenance of electronic equipment and/or traffic signal and street lighting systems.

OTHER REQUIREMENTS

Possession of Class “B” Commercial Driver’s License or ability to obtain within six (6) months of hire date.

Possession of or ability to obtain IMSA (International Municipal Signal Association) Traffic Signal Technician Level 1 certificate within 12 months of hire date.

When position requires operation of a Commercial Motor Vehicle (CMV) with a CDL class A, B, or C, must meet English Language Proficiency (ELP) during the Driver Qualification (DQ) process in accordance with 49 CFR 391.11(a), 49 CFR 391.11(b)(2).

WORKING CONDITIONS

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Depending on assignment, positions in this class typically require touching, talking, hearing, seeing, grasping, standing, stooping, kneeling, crouching, reaching, walking, repetitive motions, climbing, balancing, pushing, pulling and lifting; depending on assignment. Incumbents may be exposed to moving mechanical parts, odors, dusts, poor ventilation, chemicals, oils, extreme temperatures, inadequate lighting and intense noises.

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

Medium work – Depending on assignment, positions in this class typically exert up to 50 pounds of force occasionally, up to 20 pounds of force frequently, and/or up to 20 pounds of force constantly having to move objects.