



HUMAN RESOURCES DEPARTMENT

**POSITION DESCRIPTION**

<b>TITLE:</b>	<b>Roadway Lighting Technician</b>	<b>LAST UPDATED:</b>	April 8, 2014
<b>DEPARTMENT:</b>	Engineering Services	<b>JOB CLASS:</b>	
<b>REPORTS TO:</b>	Senior Roadway Lighting Technician	<b>FLSA DESIGNATION:</b>	Non-Exempt

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**Summary:** Under general direction of the Senior Roadway Lighting Technician, the Roadway Lighting Technician will install, repair and maintain street lights, school zone flashers and lighting that is part of the TxDOT continuous highway lighting system. Also performs Signal Technician responsibilities when necessary.

*The intent of this position description is to provide a representative summary of the major duties and responsibilities performed by incumbent(s) in this position. Incumbent(s) may not be required to perform all duties in this description and incumbent(s) may be required to perform position-related tasks other than those specifically listed in this description.*

**Essential Job Functions:**

- Maintains repairs and replaces street lighting systems.
- Responds to service calls on malfunctioning roadway lights.
- Troubleshoots lighting malfunctions; identifies problems; repairs or replaces faulty equipment.
- Inspects the TxDOT continuous highway lighting system to ensure conformance with electrical and safety codes.
- Performs preventative maintenance on electrical circuits and fixtures to detect electrical hazards.
- Reads blueprints and electrical diagrams and ensures that proper City permits are acquired.
- Routinely patrol streets to identify roadway lighting that may need repair.
- Flags traffic and erects barricades, cones, and other warning devices.
- Implements safety procedures at job site.
- Responds to service calls on equipment malfunctions; identifies problem; repairs or replaces faulty equipment; documents trouble call and problem resolution.
- Activates traffic control devices and other equipment upon completion of installation.
- Performs routine maintenance on traffic control devices and other equipment.
- Maintains records as required to document maintenance history, service calls and solutions.
- Reads and interprets schematics, blueprints, and other diagrams; such as technical manuals, NEC and MUTCD.
- Performs manual traffic and pedestrian counts.

**Other Important Duties:**

- Travels to work sites, and to attend meetings, conferences and training.
- Must work on-call and overtime as required.
- Must live within 45 minutes of Frisco city limits.
- Performs other related duties as assigned.
- Regular and consistent attendance for the assigned work hours is essential.

**Required Knowledge and Skills:**

- Knowledge of City policies and procedures.
- Knowledge of pertinent federal state and local laws and ordinances pertaining to roadway, lighting and traffic signal operations.
- Knowledge of electrical codes, electronic circuits and circuit logic.
- Knowledge of TxDOT work zone safety requirements and procedures.
- Knowledge of the common principles, practices, equipment, materials and methods used in the installation and maintenance of traffic control devices.
- Knowledge of computers and computer related software.
- Skill in reading blueprints or diagrams.
- Skill in troubleshooting & resolving problems related to electronics
- Ability to maintain accurate and complete records.
- Ability to communicate effectively verbally and in writing.
- Ability to change ballast, capacitors, bulbs, and fuses in roadway lighting.
- Ability to work with voltages that vary 120/240, 240/480 & straight 480.
- Effective oral and written communication skills.

**Preferred Education, Experience, and Certifications:**

- Associates degree from Technical/Trade School in a related field **and** Electrical Journeyman's license (preferred (registered in Texas).
- IMSA Roadway Lighting Level I or ability to obtain within 12 months of date of hire (TEEX course certification will be considered).
- IMSA Work Zone Safety or ability to obtain within 6 months of date of hire (TEEX course certification will be considered).
- Must pass a pre-employment drug screening, background check and post offer physical agility exam.
- Must possess State of Texas Class A CDL Drivers License within 6 months of employment.

*Applicants with preferred Journeyman's license will need to meet the following additional requirements:*

- High School Diploma or GED plus minimum or equivalent combination of education and experience.
- Must have IMSA Level I Certification in Traffic Signals or the ability to obtain within 12 months of date of hire (equivalent TEEX course certifications will be considered).

*Applicants without Journeyman's license will need to meet the following additional requirements:*

- High School Diploma or GED plus minimum three (3) years experience in the installation, maintenance and repair of traffic control devices with NEMA TS1/TS2 preferred; or equivalent combination of education and experience.
- Must have IMSA Level II Field Certification in Traffic Signals or the ability to obtain within 12 months of date of hire (equivalent TEEX course certifications will be considered).
- Must have IMSA Level II Construction Certification in Traffic Signals or the ability to obtain within 12 months of date of hire (equivalent TEEX course certifications will be considered).

**Environmental Factors and Conditions/Physical Requirements:**

- May be subject to bending, reaching, kneeling and lifting such as repairing or replacing equipment.
- May be subject to exposure to extreme weather conditions, hazardous chemicals and fumes, infectious diseases, air and water borne pathogens, snakes, insects, and wild life common to municipal water and sewer pump and lift station facilities and underground utilities.
- Work in high voltage areas, and at heights up to 50 feet.
- Lifts objects such as signal heads, cabinets, controllers, poles, mast arm signs, generators, tools and materials weighing up to 100 lbs.
- Climb up and down from the back of trucks and man lift devices, reaches above head to change out signal aerial equipment, digs and works in ditches and bore pits.

**Equipment and Tools Utilized:**

- Equipment utilized includes personal computer, copier, calculator, fax machine, 2-way radio, cellular telephone, heavy equipment, power and hand tools, and department vehicles.
- Use a variety of standard electronic and electrical testing instruments and tools including traffic monitor tester, load switch flasher and flash transfer analyzer, NEMA TS1 and TS2 controllers, NEMA conflict monitors, loop inductance meter, line locator, and volt-ohm meter
- Operates a computer or terminal to monitor and input instructions in to traffic control devices, ballast tester.

*Approved By:*

Signed by Brian Moen  
Brian Moen, Assistant Transportation Director – Engineering Services

02/19/2013  
Date

Signed by Lauren Safranek  
Lauren Safranek, Director of Human Resources

02/19/2013  
Date