



HUMAN RESOURCES DEPARTMENT

POSITION DESCRIPTION

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| TITLE: | Senior Signal Technician | LAST UPDATED: | January 13, 2016 |
| DEPARTMENT: | Engineering Services | JOB CLASS: | |
| REPORTS TO: | Traffic Signal Supervisor | FLSA DESIGNATION: | Non-Exempt |

Summary: Under general direction of the Traffic Signal Supervisor, the Senior Signal Technician will coordinate the daily activities and priorities of traffic signal installation and repairs for the City of Frisco. Will also install, repair and maintain traffic signals and assist with roadway lighting needs. Supervises assigned staff.

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:

- Prioritizes, assigns and monitors traffic signal repairs for assigned staff.
- Installs, troubleshoots and repairs traffic signal equipment.
- Inspects traffic signal equipment at operational intersections to ensure signals are operating as programmed.
- Responds to trouble calls on equipment malfunctions; identifies problem; repairs or replaces faulty equipment; documents trouble call and problem resolution.
- Routinely patrol streets to identify traffic signals that may need repair.
- Performs routine maintenance on traffic control devices and other equipment.
- Monitors the work of external contractors and ensures contract terms and specifications are met.
- Reads and interprets schematics, blueprints, and other diagrams; such as technical manuals, NEC and MUTCD.
- Replaces parts such as load switches, relays and flashers, and documents process.
- Trains staff on signal repair and safety practices and procedures.
- Makes recommendations and carry out plans with the approval of the supervisor.
- Maintains daily work records and work orders.
- Flags traffic and erects barricades, cones, and other warning devices.
- Implements safety procedures at job sites.
- Performs manual traffic and pedestrian counts.
- Assists in roadway lighting needs when necessary.

Other Important Duties:

- Must work on-call and overtime as required.
- Must live within 45 minutes of Frisco city limits.
- Travels to monitor work sites, and to attend meetings, conferences and training.
- 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 prioritizing and assigning the work of assigned staff.
- Skill in troubleshooting and resolving problems related to roadway lighting.
- Skill in reading blueprints or diagrams.
- 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 in related field and minimum of 5 years experience in the installation, maintenance, and repair of traffic control devices or equivalent combination of education and experience..
- Electrical Journeyman license is preferred.
- Experience with NEMA TS1/TS2 preferred.
- IMSA Level I Certification in Traffic Signals is required at time of hire.
- Must obtain IMSA Level II Field Certification within 6 months of employment.
- Must obtain IMSA Level II Construction Certification within 12 months of employment.
- IMSA Work Zone Safety or TEEEX course certificate.
- IMSA Roadway Lighting Level I or ability to obtain within 12 months of date of hire.
- IMSA Signal Inspector Certification or the ability to obtain within 12 months of date of hire.
- 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.

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 50 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
- Use of and maintain common hand tools and equipment such as a backhoe, concrete saw, jackhammer, rotary hammer, boom trucks, mechanical ditcher, etc.

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