

## **STREETLIGHT TECHNICIAN I**

### **JOB DESCRIPTION**

**Classification Responsibilities:** A Streetlight Technician I is responsible for performing skilled electrical work in installing and maintaining arterial, residential, and commercial streetlights. This position is also responsible for performing other duties as required, which include using a computer to update the maintenance management system as repair work is performed and completed.

**Distinguishing Features:** Initiative and independent judgment are sometimes required in the troubleshooting and repair work, although many outages entail lamp, or photocell replacement. Some pole installation and replacement work is physically strenuous, and the incumbent must be physically fit for bending, stooping, stretching, lifting, and carrying heavy equipment and materials. Incumbents are rotated among three types of assignments: arterial streets, residential streets, and construction. Most of the work is done in or near traffic having inattentive drivers. Hazardous conditions also involve working on fixtures up to 600 volts and in proximity to primary (high) voltage. Incumbents are subject to rotational stand-by and 24-hour call-out for emergencies and night-time assignments. The Streetlight Technician I works under the general supervision of a Streetlight Technician II. Employees may progress to this classification by non-competitive promotion upon meeting the specific criteria-based promotion requirements of performance and coursework. This class is FLSA nonexempt.

### **QUALIFICATIONS**

**Employee Values:** All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

**Minimum Qualifications Required.** Any combination of training, education, or experience equivalent to graduation from high school or GED. Considerable (3 - 5 years) work experience in electrical maintenance or construction, preferably in the installation and maintenance of high intensity discharge lighting (example: streetlights, parking lot lights, commercial and residential lighting).

**Special Requirements.** Must possess a valid Arizona Class B Commercial Driver's License (CDL) or Commercial Learner's Permit (CLP) by hire date. CLP holders must successfully complete the City's Entry Level Driver (ELD) training program, the Third Party Examiner (TPE) administered skills (driving) test, and obtain a valid Arizona Class B CDL within 150 days of hire or promotion date. Must obtain an air brake endorsement within six months after hire date. Must obtain an International Municipal Signal Association (IMSA) Work Zone Traffic Control Certification (or approved equal) within one year after hire date. Must live within a 20-mile radius of the intersection of Main Street and Greenfield Road within one year after employment date, and must maintain this residency requirement throughout the duration in the position.

**Substance Abuse Testing.** This class is subject to Department of Transportation (DOT) Federal Motor Carrier Safety Administration (FMCSA) drug and alcohol testing as outlined in 49 Code of Federal Regulations (CFR) Part 382.

**Preferred/Desirable Qualifications.** Computer knowledge including Word, Outlook, and Excel is desirable.

## ESSENTIAL FUNCTIONS

**Communication:** Communicates with the general public, other City employees, or others (contractors, vendors) in order to explain procedures, ask questions, or give instructions by radio, telephone, or in person. Produces written documents (daily time reports) in order to explain type and amount of work completed.

**Manual/Physical:** Installs, replaces, or adjusts filters, light bulbs, screws, bolts, washers, luminaires, poles, and associated streetlight equipment to adjust, maintain, and install streetlight equipment. Installs various streetlight equipment at specified locations measuring pole height, bolt diameter, and distance from curb. Schedules an efficient daily route. Counts, inspects, and inventories items in stock in shop areas. Maintains and installs streetlight luminaires (at heights greater than ten feet) by way of a one, or two-man bucket truck. Reaches streetlight luminaires, tree branches, and overhead lines at elevated levels in order to install, repair, and adjust streetlight luminaires and poles; trims and cuts tree branches; connects, disconnects, or adjusts overhead conductors. Operates boom/auger truck, bucket truck, platform truck, or dump truck requiring a valid Arizona Class B CDL to elevate, dig foundations, lift poles, and haul dirt, or rock. Operates 1/2-ton to 1-ton pickup trucks as a backup vehicle for construction or maintenance operations. Operates power-driven machinery such as: jackhammer, tamper, drills, grinder, trencher, cement mixer, vibrator, or generator to perform various construction duties. Uses common hand tools such as: hammer, saw, screwdriver, ratchets, wrenches, taps, dies, pliers, cutters, and crimpers to adjust, install, or maintain streetlight luminaires, poles, and other various equipment. Cleans work area using broom, mop, shovels, and rakes. Cleans equipment trucks, hand tools, power equipment, streetlight poles, and luminaires using appropriate materials. Moves debris, dirt, concrete, rocks, tree, and bush branches from one place to another using a shovel, rake, or other tools to remove excess material, landscape areas, and fill in holes. Moves heavy objects such as: poles, luminaires, cabinets, pads, pull boxes, conduit, etc., weighing 90+ pounds short, or long distances using a cart, or other aid to assist in moving materials from one location to another. Moves light objects such as: lamps, lenses, starters, luminaires, conduit, underground locator, etc., weighing 20 pounds or less to complete stocking trucks, move material from one location to another, or to locate underground equipment. Sets up or removes barricades, traffic cones, or similar objects to provide traffic control on work sites. Digs up ground, ditches, or holes (to a depth of eight feet) using auger, spade, or digging bar to install foundation, pull boxes, cabinets, pads, or poles. Operates auger/boom truck to dig holes for new pole bases, or direct burial poles, and to lift and place, or remove streetlight poles. Works in a variety of weather conditions adjusting, maintaining, and installing various streetlight equipment. Mixes cleaning fluids or similar solutions, paints, soaps, and graffiti remover to clean, or paint various streetlight equipment. Works with cleaning fluids and chemical agents, pesticides, insecticides, paints, or similar solutions using routine protective equipment (gloves and eye protection) to clean or paint streetlight equipment, or vehicles. Draws maps or diagrams to provide information to supervision as to location of equipment or work completed. Observes, inspects, or monitors vehicles, lifts, meters, damaged poles, or gauges to determine compliance with prescribed operating or safety standards. Works with electrical wires to install electrical wiring and distinguishes between color markings for tape and Blue Stake markings. Uses graphic instructions such as blueprints, schematic drawings, and layouts in order to properly locate, install, and repair streetlighting equipment. Detects hazardous situations through vehicle warning devices, and audible traffic sounds. Uses precautionary work methods, and safety equipment in working with electrical hazards. Meets scheduling and attendance requirements.

**Mental:** Prioritizes own work, streetlight repairs, accidental damages, and knockdowns. Reviews the work products by comparing written specifications, or standards to ensure conformance. Maintains

computerized records of streetlight installations and maintenance work. Learns job-related material through on-the-job training regarding specific procedures and standards for installing and maintaining streetlight equipment. Analyzes data meter, and gauge readings in order to make recommendations regarding voltages, amperages, pressures noted, and corrective measures needed.

**Knowledge and Abilities:**

Knowledge of:

the methods, materials, and equipment used in installing and maintaining lighting systems;  
the occupational hazards and safety precautions of the electrical trade; and  
electrical theory.

Ability to:

perform skilled work in the installation, repair, and maintenance of streetlights;  
operate auger/boom truck to dig holes for new pole bases or direct burial poles, and to lift and place, or remove streetlight poles;  
dig holes to a depth of eight feet with hand tools when the auger cannot be used (example: space constraints and possible damage to private property);  
construct and install control panels for contactor service cabinets;  
troubleshoot lighting fixtures by applying a logical testing sequence (example: beginning with covering the photocell, then using a mercury vapor light, which requires less voltage, and finally checking the fuses in the hand hole, and checking the ballast, etc.), and by using such equipment as volt, amp, and ohm meters;  
use precautionary work methods and safety equipment in working with electrical hazards;  
maintain a high volume of work output with minimal supervision;  
use computer programs such as Outlook, Word, and Excel; and  
establish and maintain effective working relationships with management, coworkers, and the general public.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

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EEO-Tech

JOB FCTN-TEC

INCREMENTS 63-200

PAY GRADE: 45

IND-6325

SWORN-No