



## City of Irving Job Description

### Electrician

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<b>FLSA Status:</b>	Non-Exempt	<b>Job Department:</b>	Capital Improvement Program (CIP)
<b>Job Code:</b>	04342	<b>Reports To (Job Title):</b>	Facilities Section Chief

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#### PURPOSE

Lead and coordinate the following operations with an assigned section: (1) To plan, layout, install, and repair of wiring, electrical fixtures, apparatus, and control equipment (2) perform all assigned essential tasks listed under duties and responsibilities (3) provide personnel oversight and ensure crew safety.

#### ESSENTIAL DUTIES AND RESPONSIBILITIES

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

- Establish schedules and methods for performance of assigned outcomes, which includes planning and prioritizing work; Inspect work and facilities and corrects deficiencies when necessary.
- Assign work and provide lead coordination and project guidance to assigned staff; *as assigned*, provide feedback on performance and/or deficiencies, and participate in interviewing and hiring.
- Oversee the maintenance and repair of equipment within assigned functional area or workgroup.
- Maintain records of time, material, and equipment use, enter payroll information into City software and/or using automated work-order system, and review daily work sheets of jobs and materials used.
- Purchase necessary equipment and supplies according to City regulations.
- Ensure proper care of equipment, vehicles, and tools, which includes troubleshooting and diagnosing equipment malfunction and performing preventative maintenance and repairs.
- Ensure the safety of self and Facilities Maintenance Mechanics, which includes erecting appropriate work barricades; attending safety classes for first aid, defensive driving, and CPR; and, removing obstacles and barriers that present safety hazards to work crew and public.
- Provide, oversee, and/or coordinate the training of new hires and the cross-training of current employees.
- Prepare reports; Answer questions and provide information, which includes investigating requests and complaints.
- Respond to after-hours callback for emergency conditions.
- Perform related duties as assigned.

#### OTHER DUTIES AND RESPONSIBILITIES

***As assigned, perform service, installation, repair and maintenance duties related to the following:***

- **Control Circuits:** Energy Management Systems, thermostatic controls, variable frequency drives, damper controls, valve and pump controls, primary low voltage and line branch circuit controls for system operations of HVAC, electrical and fire protection equipment; also, HVAC, lighting, alarm, automatic door control, pumps, and fans.

- **Refrigerant Management:** Oversee the correct method of recording the installation, recovery and disposal and storage of all CFC, HCFC and HFC refrigerants used in all City facility HVAC and refrigeration equipment.
- **HVAC Service and Repair:** Diagnose the low and supply voltage electrical diagnosis and repair requirements, plumbing installation and repair and refrigerant installation, removal and repair requirements in chillers, VAVs, rooftop units, server room systems, heat pumps, package and split systems, automated valve systems, safety related devices such as electrical, pressure and temperature sensitive overloads or limits.
- **HVAC Equipment Installation:** Determine the correct size and install or supervise the installation of rooftop units, split systems, MRAC units, Wall Pack systems, mini-split systems water and air-cooled chillers, geothermal systems, gas and electric heating systems, boilers, pumps, valve assemblies and associated controls in a manner that meets Federal, State and Municipal codes to provide the correct temperature and humidity control for human comfort, equipment protection in critical and non-critical facilities, communication equipment, police property, and food and perishable storage.
- **Electrical wiring circuits:** Low voltage AC and DC, line voltage circuits 1 phase and 3 phase including 120v, 208v, 240v, 480v Delta and Wye circuits supply and branch circuits for remodel and/or new construction, all HVAC equipment, all electrical equipment including server racks, car chargers etc., devices including switches, receptacles, door controls, and light fixtures.
- **Transformers:** Control transformers for alarm systems, HVAC controls, and lighting systems, as well as, 1 phase and 3 phase transformers for service panels, pumps, and gate operators.
- **Panels, Disconnects, and Generator Transfer Switches:** Distribution and sub-panels, service disconnects, lighting panels, and transfer switches.
- **Gate operators:** Capacitors, solenoids, circuit boards, fuses, timers, AC and DC single and multiphase motors; also, transmissions, drive train assembly, and electric motors.
- **Lighting and Disposal:** Oversee the correct method of recording the recovery, storage and disposal of waste product associated with lighting, HVAC and fire protection including mercury and phosphorous infused lamps and thermostats, lead and/or fluid filled batteries, bitumen ballasts, oil and PCB laden capacitors and starters.
- **Lighting Panels:** Installation, repair and programming digital and mechanical relays, timers, circuit boards, internal and external wiring assemblies, and component hardware.
- **Generators:** Securing temporary emergency connections to critical facilities in case of power outages.
- **Solar Arrays:** Solar panel assessment for replacement, repair, alignment, monitoring, inverter assessment and monitoring.
- **Potable Equipment Installation:** Water heaters, water fountains, filtering systems, backflow (RPZ) valves, bathroom fixtures, showers and eye-wash stations, and all water piping.
- **HVAC Equipment:** Hand and automated valve assemblies, pumps and circulation equipment, chiller and boiler piping, condensate drains and piping, and venting assemblies, including direct and sealed combustion.
- **Non-Potable Equipment:** Pressure washers, lift station pumps, piping, valve assemblies and controls; also, fixed and portable pump assemblies including intake, discharge, drain guard and grate covers, roof and field drains, and sanitary sewer piping.
- **HVAC Maintenance:** Water treatments for bathroom appliances, sewer line treatment and/or rooting, piping assembly material assessment for repair, replacement or upgrades. Assure that all facility water supply backflow systems are tested annually and approved through the City's Environmental Compliance.
- **Construction and Estimating:** Estimate cost and material requirements as well as install and/or supervise the installation of all construction projects. This may consist of the design and installation of framing members, walls, windows and glass assemblies, doors, frames, storefronts, mechanical hardware, ceiling assemblies including finished drywall, grid and tiles, all types of flooring, lighting, electrical wiring and devices, communication wiring, wall finishing and cabinetry.
- **Flooring Installation and Maintenance:** Perform service, installation and/or repairs on all facility functions and all types of flooring, including masonry, wood, PVC, LVT, VCT, and carpets of all types.

- **Doors:** Swing and sliding systems with mechanical and electrically-initiated latches, lock-sets, hinges, panic hardware, closers locksets and keyed systems.
- **Wall and Ceilings:** The installation and finishing of materials, which includes paneling, drywall, masonry, acoustic materials, and suspended and track ceiling.
- **Wall covering:** Determine the requirements for paint, acoustic finishes, wall paper and vinyl finishes, masonry and wood applications.
- **Direct Contractors and Provides Estimates:** Direct contractors in areas of installation, service and repair of mechanical, electrical, plumbing and structural installations and facility upgrades; Provide accurate estimates for any construction project, installation, service and/or repair performed by Building Services.

## **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 1-5 employees.

## **FINANCIAL / BUDGETARY RESPONSIBILITY**

P-Card Purchases

## **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 a closely related field.

### **EXPERIENCE**

- At least two (2) years of experience at Journeyman Electrician level.

### **CERTIFICATES, LICENSES, REGISTRATIONS**

- Appropriate, valid state-issued driver's license, or the ability to obtain one, may be required.
- Journeyman Electrician License

## **KNOWLEDGE OF**

- **Electrical Code:** Proper techniques for installing, repairing, and modifying electrical systems.
- **Customer Service:** Principles and processes for providing customer and personal services including a desire to help customers regardless of their circumstance.
- **English Language:** The structure and content of the English language, including the meaning of words and grammar.
- **Maintenance Principles:** Processes involved in upkeep of property and equipment to optimum state of cleanliness, repair, and efficiency.
- **Construction Principles:** Materials, methods, and the appropriate tools to construct objects, structures, and buildings.

## **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.
- **Written & 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.

## **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**

Occasionally, this position interacts with vendors and all city departments.

## **EQUIPMENT AND PROPERTY**

This position utilizes various powered tools, hand tools, test equipment, gauges, etc. and an automobile.

## **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 is constantly required to lift up to 25 pounds and see. Frequently, s/he is required to balance, carry, climb, crawl, drive a vehicle, grasp, lift up to 100 pounds, listen, push or pull, reach, stand, stoop, talk, and walk. Occasionally, s/he is required to smell, sit, and/or lift over 100 pounds.

## **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 is frequently exposed to extreme vibrations, blood-borne pathogens, confining work spaces, dirty environment, electrical hazards, high precarious work places, improper illumination, moving mechanical parts, toxic or caustic materials, extreme temperature or weather conditions, and air contamination. The noise level in the work environment usually is moderate, though regularly s/he is exposed to noise. This job requires the employee to perform duties or make decisions directly affecting the safety of others.

\* 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.