

ELECTRICIAN

Definition:

Under general supervision, performs journey level work in the installation, trouble shooting, repair and maintenance of a variety of electrical wiring systems and equipment to include HVAC equipment and performs related work as required.

Essential Duties and Responsibilities:

The essential duties and responsibilities of the class include the following:

Installs new wiring for electric meter services, switches, conduits, panels, lighting, motors and controls.

Installs electric meters, switches and a variety of electrical items to include switchboards and other electrical control equipment.

Locates electrical system defects such as short circuits and removes, replaces or repairs worn or defective wiring, outlets and fixtures.

Performs preventative maintenance on electrical equipment.

Performs maintenance on switches, panels, pumps, wells and other motors, generators, light and power circuits including street lighting systems, conduit and duct systems, telemetering equipment and other types of electrical lighting and power equipment.

Performs electrical installation and maintenance of heating and air conditioning equipment.

Performs safety evaluations of various portable and stationary electrical equipment and makes repairs as needed.

Installs and removes radios in mobile units and maintains and repairs auxiliary power units.

Maintains and trouble shoots various water level controls at various City locations to include underpasses, sump pumps, City pools and wells.

Installs new wiring for communication/data lines and performs maintenance on lines/wiring installed.

Trouble shoots locking door devices such as automatic door locks and openers, automatic gates and/or various latching devices.

Services and repairs electrical equipment including the replacement of bearings in electrical motors.

Trouble shoots and repairs electronic equipment and related components as assigned.

Maintains and trouble shoots emergency management systems including analog and digital devices for the control of heating, ventilation and air conditioning equipment.

Performs trouble shooting, repair and maintenance of airport runway and taxi lighting.

Cleans and cares for tools used on the job.

Operates a variety of equipment.

Records service/repair information and details.

Drives a vehicle on City business.

Other Duties and Responsibilities:

Performs other projects/tasks as assigned.

Assists in the evaluation of needs and materials for individual assignments.

Class Characteristics:

The Electrician is a single incumbent trades class at the journey level within the Maintenance Services Department with duties primarily related to the maintenance and repair of HVAC equipment and the trouble shooting and repair of electrical problems.

Contacts and Relationships:

The Electrician has the majority of their interaction within the Maintenance Services Department although contact with other City employees, contractors, engineering firm staff, inspectors, vendors and the public will occur during the course of certain work assignments.

Qualification Guidelines:

The knowledge and abilities which are required to perform the duties and responsibilities of this class are as follows:

Knowledge of:

Applicable electrical codes and electrical safety orders of the State Industrial Accident Commission.

Electrical terms, materials, methods of repair, machinery and equipment.

Safety precautions and practices necessary when working with electricity.

Applicable building and safety codes.

Ability to:

Perform electrical maintenance and repair work such as installing and wiring service panels and subpanels and repairing defective wiring.

Perform electrical installation and maintenance on heating, ventilation and air conditioning equipment.

Work from plans, detailed drawings and schematics.

Understand and carry out oral and written directions.

Read and write at the level required for successful job performance.

Establish and maintain effective relationships with those contacted in the course of work.

Communicate effectively orally.

Lift and move heavy objects safely.

Exercise independent judgment.

Write basic reports and transfer data from one form to another.

A typical way to obtain the knowledge and abilities is as follows:

Education: Graduation from high school.

AND

Experience: Three years of journey level experience in various types of electrical installation and repair.

Physical Tasks and Working Conditions Include the Following:

Work is performed indoors and outdoors on site. When work is performed outdoors, there is full exposure to the elements. The incumbent stands and walks on level and uneven/slippery surfaces, sits, kneels, crouches, twists, climbs, reaches, bends, crawls and pushes, pulls, grasps, lifts and carries items weighing 75 pounds or less. The incumbent occasionally works at a height of 45 feet from the ground when in the bucket of a truck designed for street lighting repairs. The incumbent uses a variety of hand and power tools and drives a vehicle on City business and may be exposed to grease, oil, vehicle emissions, solvents, chemicals, dust, electrical hazards, mechanical hazards and vehicle traffic. An incumbent must be able to meet the physical requirements of the class and have mobility, vision, hearing, sense of smell and dexterity levels appropriate to the duties to be performed.

Special Requirements:

Valid and appropriate California Driver's License and acceptable driving record at time of appointment and throughout employment in this position.

Appropriate equipment certification as required by applicable laws.

Must be able to work a flexible schedule to accommodate City needs and must be available for callbacks.

Fair Labor Standards Act Designation: Non-exempt.

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