

## **ELECTRICIAN**

### **DEFINITION**

Under general supervision, performs skilled electrical work, including maintenance, repair, installation, alteration, and construction of District buildings, systems, and equipment.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from the Assistant Director, Facilities Planning & Management and technical and functional supervision from the Electrician.

### **CLASS CHARACTERISTICS**

This is the journey level in the electrician class series and is responsible for performing electrical maintenance and repair duties at District buildings and facilities required to ensure that all are maintained in a safe and effective working condition and provide the highest level of safety for District and public use. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. Incumbents in this class may also assist other trades on an as needed basis. This class is distinguished from the Lead Electrician in that the latter is responsible for technical and functional supervision of assigned electrician staff and is capable of performing the most complex duties assigned to the function.

### **EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only)**

- Repairs, installs, tests, services, and maintains electrical systems, including conduit, wiring, light and power circuits, motor appliances, generators and switches; ensures compliance with building codes applicable to the electrical trade.
- Plans, organizes, and lays out assigned tasks; interprets electrical plans, diagrams, blue prints, sketches, and specifications; works from verbal and written instructions and work orders to install and test electrical systems or equipment.
- Operates a variety of specialized equipment, including meters, testers, soldering irons, wire pullers, conduit benders, lifts, drills, and various other hand and power tools; drives a vehicle to perform work.
- Installs and tests interior and exterior wiring for equipment and appliances; assembles and repairs lighting fixtures, wiring and controls; installs, and repairs sockets, capacitors, bulbs and other lighting parts, wiring and assemblies; repairs scoreboards and field lighting systems as needed; installs new electrical systems and equipment, including ballasts.
- Performs preventive maintenance on District-wide electrical panels; checks and services circuit breakers, distribution panels, and transformers; replaces parts as needed.
- Troubleshoots electrical problems and investigates and repairs electrical failures.
- Installs interior and exterior wiring for equipment and appliances.
- Wires new and altered buildings, replaces fuses, and assembles and repairs lighting fixtures and field lighting systems.
- Responds to elevator service calls; inspects and verifies safe and proper operation of electrical systems; requests elevator service mechanics, when required.
- Estimates labor, material, and equipment needed for assigned projects; monitors inventory levels of materials and equipment; orders, receives, and maintains inventory of materials and equipment as needed.
- Records and maintains work and material records.
- Observes safe work methods and makes appropriate use of related safety equipment as required.

- Maintains work areas in a clean and orderly condition, including securing equipment at the close of the workday.
- Provides needed information and demonstrations concerning how to perform certain work tasks to new employees.
- Assists other District employees with various projects including carpentry, plumbing, and HVAC, as well as, other maintenance areas by performing skilled, semi-skilled, and unskilled duties, **on an as needed basis**.
- Learns and applies emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
- Performs other related duties as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

- Principles, practices, methods, equipment, materials, and tools used in electrical maintenance and repair of District electrical systems, including applicable electrical codes.
- Safe application, operation, and maintenance of tools and equipment used in the electrical trade.
- Applicable federal, state, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Occupational hazards and safety equipment and practices related to assigned area of responsibility.
- Standard office practices and procedures, including the use of standard office equipment and basic record-keeping.
- Safe work practices, including safe driving rules and practices.
- English usage, spelling, vocabulary, grammar, and punctuation.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, students, and District staff, including individuals of various ages, disabilities, socio-economic and ethnic groups.

### **Skills & Abilities to:**

- Perform a variety of complex technical tasks related to electrical installation repair and maintenance work.
- Perform basic preventative maintenance of electrical equipment and systems.
- Skillfully and safely operate a variety of equipment and power and hand tools used in the electrical field.
- Troubleshoot electrical problems.
- Determine materials, costs, and supplies required for electrical repairs and maintenance projects; recommend purchases.
- Read, understand, apply, explain, and ensure compliance with applicable federal, state, and local policies, procedures, laws, and regulations.
- Understand and follow written and verbal directions, instructions and safety rules and procedures.
- Maintain accurate logs, records, and basic written records of work performed.
- Operate modern office equipment including computer equipment and software programs.
- Read and interpret construction drawings, specifications, plans, manuals, diagrams, blue prints, and technical regulations.
- Use math applicable to the electrical trade ex. basic math, algebra, geometry, trigonometry and physics.
- Operate a truck, tow equipment and observe legal and defensive driving practices.
- Organize own work, set priorities, and meet critical time deadlines.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Understand scope of authority in making independent decisions.

- Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**Education and Experience:**

*Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:*

Equivalent to the completion of the twelfth (12<sup>th</sup>) grade and three (3) years of experience in journeyman level electrical maintenance and repair work.

**Licenses and Certifications:**

- The incumbent may periodically be required to travel to a variety of locations. If required to operate a vehicle in the position, employees must demonstrate possession of a valid California Driver's License.
- A certification as a qualified journey level electrician from an approved institution is desirable.

**PHYSICAL DEMANDS**

Must possess mobility to work in and around District buildings and facilities, to operate a motor vehicle and drive on surface streets; strength, stamina, and mobility to perform light to medium physical work, to work in confined spaces and around machines, to climb and descend ladders, and to operate varied hand and power tools and equipment; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone or radio. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate above-mentioned tools and equipment. Positions in this classification bend, stoop, kneel, reach, and climb to perform work and inspect work sites. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds, or heavier weights with the use of proper equipment.

**ENVIRONMENTAL ELEMENTS**

Employees work in and around buildings and facilities and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with staff and/or public and private representatives and contractors in interpreting and enforcing departmental policies and procedures.