



# CITY OF OMAHA CLASS SPECIFICATION

**CLASSIFICATION TITLE: ELECTRICIAN**

**BARGAINING UNIT:** [CIV BARGAINING](#)

**CODE NUMBER:** 6230

**PAY RANGE CODE:** [06135](#)

**REVISION DATE:** 9/28/17

## **NATURE OF WORK:**

This is manual labor involving the use of acquired skills related to the installation, maintenance, and repair of electrical systems and equipment at City facilities. Employees of the class may act as a lead worker and be required to operate automotive equipment. Work is normally performed with supervision.

**ESSENTIAL FUNCTIONS:** *(Any one position may not perform all the duties listed, nor do the listed examples include all the duties that may be performed in positions allocated to this class.)*

Inspects, tests, repairs, replaces, or installs new conduit and electrical wiring, fixtures, panels, controls, switches, limiting devices, motors, starters, vacuum tubes, solid state components, water heaters, furnaces, and air conditioner blowers.

Replaces lamps and repairs or replaces parts of fixtures or tower lights at ball fields, swimming pools, and tennis courts.

Replaces cutouts and makes splices to high voltage equipment (over 600 volts).

Monitors the condition and performance of auxiliary power systems and makes repairs as needed.

Reads and interprets sketches, wiring diagrams, blueprints, technical manuals, and design specifications.

Using a boom truck, replaces flags, poles, pulleys, and other equipment.

Works with event officials to ensure that electrical specifications are met.

Completes work orders and keeps records of time and materials needed.

Provides recommendations for the purchase of electrical equipment and supplies.

Maintains regular job attendance in accordance with a schedule established for the position by the supervisor.

Performs other related duties as assigned or as the situation dictates within the scope of this classification.

**REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:**

Knowledge of and ability to operate a computer or other technology using standard or customized computer or systems software applications appropriate to the assigned tasks.

Knowledge of electrical laws and theories as related to the installation, testing, and repair of electrical service.

Knowledge of the standard practices, techniques, materials, tools, and equipment of the electrical trade.

Knowledge of the types and capacities and use of electrical wiring, switches, controls, panels, and outlets.

Knowledge of city, state, and national electrical codes.

Knowledge of the correct safety procedures to use when working with electricity.

Skill in the use of tools, equipment, and materials used in the installation, maintenance, and repair of electrical service.

Ability to read and interpret electrical wiring diagrams, schematics, and plans.

Ability to use electrical test equipment and tools of the trade.

Ability to diagnose equipment for electrical problems.

Ability to understand oral or written instructions.

Ability to adhere to safety policies, procedures, and guidelines.

Ability to maintain effective working relationships with superiors, other city employees, members of the public, and contractors and their agents.

Ability to learn and adapt to advances in computer and electronics device technology and software.

**EDUCATION AND EXPERIENCE:** *(The knowledge, skills, and abilities above may be acquired through, but are not limited to, the following combination of education and/or experience.)*

High school graduation or its equivalent preferred

Two (2) years of experience as a journey level electrician in commercial/industrial.

## **SPECIAL QUALIFICATIONS**

Must hold a valid journey level electrician's license issued by the State of Nebraska and must be registered with the City of Omaha at the time of application.

Must possess a valid motor vehicle operator's license from the time of appointment.

Must possess a forklift operator's permit by the end of the probationary period.

**WORKING CONDITIONS:** *(The conditions herein are representative of those that must be met by the employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.)*

Work is performed both in and out of doors and in all weather conditions, amid high noise levels, moving machinery parts, and electrical currents, and in high places and in confined spaces.

**EQUIPMENT OPERATION:** *(Any one position may not use all of the tools and equipment listed nor do the listed examples comprise all of the tools and equipment that may be used in positions allocated to this classification.)*

Service Truck	Hand and Power Tools	High Reach Boom Truck
Power Bender	Forklift	Power Pipe Threader
Trencher	Tug Tractor	Generators
<u>Computer</u>	Electronic Locating Devices	
Scissor Lift High Reach Truck		
PLC Programming Equipment		
Electrical Measuring and Diagnostic Equipment		

Previous Revision Date(s): 9/24/92  
11/21/02  
04/30/09  
04/28/11  
9/26/13

**ELECTRICIAN-FACILITIES MANAGEMENT  
PHYSICAL REQUIREMENTS**

<b>Physical Requirements</b>	<b>EXAMPLES OF RELATED JOB DUTIES</b>	<b>Rarely 1-5%</b>	<b>Occasionally 6-33%</b>	<b>Frequently 34-66%</b>	<b>Continuously 67-100%</b>
Standing	Installing new electrical equipment, making electrical repairs onsite, or making electrical repairs at 38" shop table.		X		
Walking	Gathering tools, going to equipment that needs electrical service throughout the building, going from jobsite to jobsite.		X		
Sitting	Driving from jobsite to jobsite, working on computer or while working on equipment for long durations.		X		
Lifting	Raising and lowering objects up to 100 lbs.		X		
Carrying	Transporting an object up to 71 lbs. for a distance of up to 15 feet		X		
Pushing/Pulling	Pushing/Pulling an object up to 60 lbs. for a distance of up to 50 feet.		X		
Climbing	Getting on and off various vehicles, climbing stairs in buildings and climbing ladders.			X	
Balance	Working in confined areas, working on ladder, working on roof, working in crawl spaces.			X	
Stooping	Working under the hood of cars, doing computer work in trunk of police car, greasing swivels at various heights, replacing snowplow blade.		X		
Kneeling	Working on equipment at lower levels, servicing/wiring motors of HVAC units.		X		
Crouching	Working on equipment at lower levels, servicing/wiring motors of HVAC units.		X		
Reaching	Installing lighting fixtures, unlocking ladder mount at 81", working on ceiling wire.			X	
Hand Usage	Using tools, cutting material, servicing/installing wires.				X
Crawling	Accessing hard to reach areas or when entering ceiling crawl space at an average of 48" in height.		X		

**ELECTRICIAN-MISSOURI RIVER AND PAPIO WASTEWATER TREATMENT PLANTS  
PHYSICAL REQUIREMENTS**

<b>Physical Requirements</b>	<b>EXAMPLES OF RELATED JOB DUTIES</b>	<b>Rarely 1-5%</b>	<b>Occasionally 6-33%</b>	<b>Frequently 34-66%</b>	<b>Continuously 67-100%</b>
Standing	Working on electrical panels, replace/repairing control boxes.		X		
Walking	Accessing different parts of the facility and plant to perform repair and maintenance on electrical equipment. Also walking in the shop area when repairing various equipment.			X	
Sitting	Performing computer work, checking emails, and reviewing electrical plans.	X			
Lifting	Raising and lowering objects up to 105 lbs.		X		
Carrying	Moving equipment, parts and components to and from the work area to replace or repair electrical components.		X		
Pushing/Pulling	Pulling wire through conduit and other sites (largest wire 4.5 in circumference). The force will vary.		X		
Climbing	Stairs – to access various areas in the facility, to repair and replace electrical equipment. Ladder – to access J-boxes. Ramps – to access the various levels in the secondary building.			X	
Reaching	Replacing hot water pumps and when working on J-boxes in the ceiling.		X		
Stooping/Crouching	Working on outlets; J-boxes, gutters, and when accessing wires from the lower levels.		X		
Kneeling	Pulling wires and working on equipment from lower levels.		X		
Hand Usage	Utilizing various hand tools and electrical tools (current tester) to replace and repair equipment. Pinching and fine motor precise hand use when performing wiring, stripping, crimping, and when threading wire nuts.			X	
Crawling	Accessing the J-boxes that are found within various sites within the facility.	X			