

CLASSIFICATION NO. 468

Established: 4/99 Revised: 12/22

FLSA: Non-Exempt

**EEO: 7** 

# SUPERVISING ELECTRICIAN

### **CLASS CHARACTERISTICS**

Under direction, to provide indirect technical supervision of all electrical projects and activities through the County; perform skilled electrical work in the installation, alteration, maintenance and repair of electrical systems and equipment, including traffic signals, illumination, and communications; to oversee County and contracted personnel performing electrical installation, maintenance and repair; and to do other work as required.

## **DISTINGUISHING CHARACTERISTICS**

The County requires overall indirect supervision of electrical installation work which requires regular permitting, supervision and control of electrical installations, resolution of inspection deficiencies, and general oversight of jobs requiring a variety of electrical work subject to licensing, trade, codes, and regulatory standards. The Supervising Electrician may be assigned to any County department but has functional responsibility for all County work which requires installation permitting. Duties require planning, scheduling, inspecting, and evaluating the work of electrical and non-electrical trade personnel in any County Department and performing work in the field.

The Supervising Electrician is an advanced journey-level classification responsible for overseeing the installation of electrical systems, fixtures and equipment. Most assignments involve traffic control signals, street lighting systems, wastewater plants and pump stations, and County facility projects. The incumbent is responsible for obtaining required electrical permits for new installation; perform skilled electrical installation duties, and providing technical leadership for multiple installation projects involving electrical systems for adequate capacity, safety and code compliance.

The Supervising Electrician is distinguished from the Traffic Control Signal Electrician and Senior Building Maintenance Specialist which performs skilled electrical work in the installation, maintenance and repair of electrical projects but do not require a Supervising licensure nor have the authority to obtain electrical permits.

## **TYPICAL TASKS**

Duties may include but are not limited to the following:

- 1. Obtains required electrical installation permits as required by State Law and codes and inspects all installations performed under incumbent's supervising electrician's license; evaluates quality and safety of subcontractor and employee installations.
- 2. Acts as a lead worker as assigned in the installation, maintenance, management, and modification of electrical work for traffic signal systems and equipment, street lighting

systems and building electrical systems; assigns and checks work in process and completed work; provides assistance and training to assigned staff; may act as a project coordinator for traffic signal and infrastructure projects; maintains accurate records of all work associated with traffic signal systems and infrastructure; maintains current knowledge of new advances in traffic signal system, technology, and Intelligent Transportation systems and implement upgrades.

- Prepares and maintains accurate electrical repair and maintenance records and reports of all County electrical jobs requiring a permit; orders and/or purchases necessary repair materials, parts and components; documents compliance with local and national electrical codes.
- 4. Responds to installation complaints, deficiencies, "flags", and noncompliance notices for County electrical installations and modifications; advocates a County position on noncompliance issues; establishes and supervises a work plan to correct deficiencies.
- 5. Assists management in estimating and work and project costs, evaluating contact bids, choosing and requisitioning tools, parts, materials and suppliers, reviewing engineering plans, and scheduling of electrical work.
- 6. Performs journey level electrical work; installs, alters and maintains interior and exterior wiring systems, tests and maintains generators and Uninterruptable Power Source (UPS), electrical circuits, fixtures and equipment; interprets electrical schematics, sketches and specifications; tests continuity of circuits to ensure electrical compatibility and safety of components; diagnoses malfunctioning electrical equipment; tests circuits and electric components to locate broken connections and defective current-control mechanisms; detects, replaces and repairs defective parts or modules and electronic relays, switches and circuits to the modular and/or component level; may design small electrical systems.
- 7. Within Transportation Maintenance, may act as a project coordinator for traffic signal and infrastructure projects; maintains accurate records of all work associated with traffic signal systems and infrastructure; maintains current knowledge of new advances in traffic signal system, technology, and intelligent Transportation systems and implement upgrades.

### **REQUIRED KNOWLEDGE AND SKILLS**

<u>Thorough knowledge of:</u> Standard practices, methods, tools and materials of the electrical trade; local, state and national electrical codes; occupational hazards and safety precautions involving electrical work and exposure to moving traffic; electrical theory, methods, techniques; thorough knowledge of commercial electrical systems, generators, and UPS systems.

<u>Working knowledge of:</u> Maintenance techniques for traffic signals and signal controllers, lighting construction, building, and wastewater plants; electrical, electromechanical practices and theory, including solid-state; basic techniques of supervision; permitting procedure and requirements; electrical project and work documentation; electrical hazards and safety precautions.

<u>Skill to:</u> Oversee, train and lead the work of assigned staff; inspect and evaluate electrical work of staff and subcontractors; maintain and repair wiring and electrical systems and equipment; operate electrical testing and measuring devices; operate power and manual tools standard to electrical trade; understand and interpret drawings and specifications; prepare and maintain

accurate records and reports; understand verbal and written instructions; communicate effectively, both orally and in writing; establish and maintain effective working relationships with County staff, other agency personnel, subcontractors and the public; read and interpret traffic signal plans, fiber optic communication and copper interconnect plans and design specifications; perform load bank testing on generators and testing and maintenance of UPS systems.

## **WORKING CONDITIONS**

Duties require squatting, kneeling, crawling, lying down, bending, twisting, balancing, climbing, reaching forward/overhead and repetitive grasping, pinching and fine motor manipulation. Duties involve frequent exposure to electrical hazards, confined spaces, loud noises, exhaust fumes and dust, moving traffic, slippery and/or uneven surfaces, working at heights, and adverse weather conditions.

Within Water Environment Services, duties also require the ability to lift, carry and push up to 50 pounds, and pull 100 pounds.

Must be available for on-call emergency response to traffic signal and intersection warning beacon failures.

### MINIMUM QUALIFICATIONS

Minimum qualifications are used as a guide for establishing the minimum experience, education, licensure, and/or certifications required for employment in the classification. The following minimum qualifications are established for this classification. Additional minimum qualifications and special conditions may apply to a specific position within this classification and will be stated on the job announcement.

**Experience:** A minimum of three (3) years of related experience that would provide the required knowledge and skills to perform the responsibilities of this position.

#### Licenses/Certifications:

The following licensure/certifications are required at the time of hire.

General Supervising Electrician's License issued by the State of Oregon.

### PRE-EMPLOYMENT REQUIREMENTS

Driving is required for County business on a regular basis or to accomplish work. Incumbents must possess a valid driver's license. Incumbents must possess and maintain an acceptable driving record throughout the course of employment.

Positions within Water Environment Services must pass a pre-employment drug test.

Within Water Environment Services, employment is contingent upon passing a post-offer physical assessment. Accommodation requests will be reviewed on an individual basis in compliance with State and Federal legislation.

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