

## **SENIOR BUILDING MAINTENANCE WORKER**

### **DEFINITION**

Under minimal supervision, performs a variety of highly skilled journeyman level work including Low & High Voltage Electrical Systems, Equipment and Controls, HVAC&R (Heating Ventilation Air-conditioning and Refrigeration) and associated equipment, Building Automation, Fire Systems, Plumbing, Mechanical, Photovoltaic Systems, Security Systems, and Civil maintenance work in the operation, repair, and maintenance of County facilities, equipment and properties; includes County Detention Facilities; to perform skilled and unskilled general construction work; to provide lead direction and review work performed by subordinate staff on assigned projects; and to do related work as required.

### **DISTINGUISHING CHARACTERISTICS**

This is the advanced level Building Maintenance Worker classification. This class is distinguished from the Building Maintenance Worker I, II and III classes by its performance of more specialized knowledge and skills and its assignment as a lead worker in specialized projects. The Senior Building Maintenance Worker class in the Facilities assignment is responsible for advanced level knowledge in three or more of the skilled trades with some experience in all; HVAC&R, Building Automation, Fire Systems & Suppression Systems, Electrical, Mechanical, Plumbing, Photovoltaic Systems, Security Systems, Metal Fabrication/ Welding, as well as the performance of skilled and unskilled general building maintenance and construction work. Individuals in this class are required to possess a keen understanding of the latest building systems and technology to optimize systems efficiencies, including computerized control systems, and perform independent problem solving and innovative thinking to improve and enhance systems performance and deliver outstanding customer experience and satisfaction. This classification also requires the performance of more specialized and complex duties related to a specific skilled trade(s). Employees in this classification confer with the supervisor to establish priorities for assignments and activities. Incumbents may direct the work of contractors and staff as needed. An incumbent in this classification may be called after hours for emergency repair work.

### **REPORTS TO**

Facilities and Projects Manager and/or General Services Director

### **CLASSIFICATIONS DIRECTLY SUPERVISED**

May provide lead direction to staff as assigned, and to work furlough personnel, Inmates and contractors.

## **EXAMPLES OF ESSENTIAL DUTIES**

- Provides lead direction on specific projects as assigned and to work furlough personnel, inmates, or contractors; organizes and directs work.
- Performs preventive and periodic maintenance, installation, operation, repairs, overhaul, rebuilding, and troubleshooting of HVAC&R, Building Automation, Fire Systems & Suppression Systems, Electrical, Mechanical, Plumbing, Photovoltaic Systems, Security Systems, Metal Fabrication/ Welding, and as well as the performance of skilled and unskilled general building maintenance and construction work to County buildings, equipment, and properties;
- Installs, repairs, maintains, trouble shoots, operates, rebuilds and make adjustments to electrical systems including but not limited to electrical conduit and duct systems, relays, fixtures, ballast, motors, switches, outlets, cable, meters, distribution systems and substations, panels, circuits, pumps, controls, heating and air conditioning equipment, elevators, auxiliary power equipment, generators, switchboards, lighting systems and street lighting, circuits and circuit boards, fire alarms, security systems, airport runway lighting systems, transformers, plumbing and photovoltaic systems, pneumatic and electronic control devices, steam and/or hot water boilers, and pumps;
- Installs, repairs, maintains, trouble shoots, operates, rebuilds and make adjustments to ventilation systems, air compressors, emergency generators, and air conditioning equipment;
- Performs charging, evacuating, condenser cleaning and filter changes;
- Installs, repairs, maintains, trouble shoots, operates, rebuilds and make adjustments to HVAC&R systems, boilers, chiller, cooling towers, pumps, hydronic heating and cooling systems, heat exchangers, heat pumps, package air conditioners, refrigeration systems, adjusts burners and high and low water cut-out controls; performs casing repairs and safety valve overhauls, and includes all commercial/industrial central plant equipment.
- replaces pump couplings, motor bearings, and belts
- Installs, repairs, maintains, trouble shoots, operates, rebuilds and make adjustments to mechanical and plumbing systems,; variable air volume boxes, damper assemblies, actuators, air distribution, air compressors, sewage systems, storm water systems, wells, water heaters, grey water systems, backflow systems, die thread cutting, union and fitting replacement, , electro-mechanical security doors and intercom systems at County Detention Facilities.
- Participates in the general repair, remodeling and construction of County buildings and special projects; performs a variety of skilled and semiskilled work, including carpentry, masonry and concrete, painting, plumbing, electrical work, and alteration of buildings; installs electrical fixtures and assists with the inspection of buildings and facilities for needed repairs;

- Operates hand tools, power tools, and operates heavy equipment
- Analyzes, plans, directs and participates in electrical maintenance including the support and design of County facilities and special projects
- Prepares oral and written reports, prepares cost estimates and a variety of documents
- Assures work is performed in accordance with the National Electric Code, Mechanical Code, Building Codes and current industry standards
- Performs troubleshooting, inspections, and diagnoses of electrical systems and components
- Installs, repairs, maintains, trouble shoots, operates, rebuilds and make adjustments to building automation systems, fire systems and monitoring systems, trend and data analysis, alarm parameters systems and scheduling, access and stand-alone controls and systems, smart thermostats, portable data collectors and space monitors. Conducts and coordinates necessary building and safety inspection meetings with other agencies
- Performs estimates for labor and material for specific jobs
- May provide training and coaching to employees in the Building Maintenance worker series
- Completes and maintains records and reports, and other related duties as assigned.
- Acts as supervisor in the supervisor's absence

## **SKILLS, KNOWLEDGE AND ABILITIES**

### Knowledge of:

- All pertinent federal, state and county laws, codes, rules, regulations and standards
- Basic principles of, lead direction, work coordination, training and safety practices
- Principles and techniques involved in public works construction methods, administrative tasks and materials
- Electrical, electronic, and construction practices, terms, methods
- Basic mathematical principles Pneumatic and direct digital control principles and strategies, computerized control systems
- Proficient use of electrical and electronic testing equipment
- Low pressure boilers, ventilating equipment, refrigeration equipment, absorption air conditioners, and mechanical building systems and equipment
- Carpentry, masonry/concrete, electrical, and plumbing trades
- Applicable provisions of building, electrical, and plumbing codes
- Industrial safety practices
- Plumbing, electrical, mechanical and photovoltaic systems in public buildings

- Methods and practices followed in the maintenance of tools, machinery, equipment, and preventative maintenance.
- Basic security systems as used in a detention facility
- Applicable computer software and skills

Ability to:

- Perform skilled and unskilled work in the maintenance and repair of County building, equipment and grounds
- Operate electrical and electronic testing equipment
- Interpret and apply pertinent federal, state and local laws, rules and regulations, and County policies and procedures
- Determine work priorities and effectively coordinate and schedule resources and staff to perform activities and projects within time limits.
- Understand and effectively interpret Building Codes, and other regulations and guidelines
- Instruct and train others
- Read and interpret maps, drawings, and engineering plans and specifications, architectural plans and construction related documents
- Prepare oral and written reports
- Establish and maintain cooperative working relationships with co-workers
- Install, repair, maintain, troubleshoot, operate, rebuild and make adjustments to HVAC, electrical, plumbing, mechanical, fire and security, and building automation systems.
- Recognize and locate conditions which require maintenance and repair work
- Use and care for hand and power tools utilized in the building trades including forklift and heavy equipment
- Follow written and oral instructions
- Perform arithmetic calculations at the level necessary for satisfactory job performance
- Work under stress and in emergency situations. Remain flexible in adapting to changes in priorities, assignments and other interruptions which may impact pre-established timelines and courses of action for completing projects

**TYPICAL PHYSICAL REQUIREMENTS**

Frequently stand and walk or crouch on narrow, slippery, and erratically moving surfaces; stoop, kneel, bend to pick up or move objects; physical ability to lift and carry objects weighing up to 100 pounds; possess normal manual dexterity and eye-hand coordination; possess corrected hearing and vision to normal range for the use with welders, OHM meters, amp-meters, carbon dioxide/monoxide testers, hand and power tools, heavy equipment, and a variety of building trades tools and equipment. Able to work in high places, including towers and poles, climb, stoop, and crawl in confined spaces.

**TYPICAL WORKING CONDITIONS**

Work is performed both in office and outdoor environments; some exposure to varying

temperatures and weather conditions; exposure to dust, steam, controlled and hazardous substances, pesticides, herbicides, gases and chemicals; working around electrical equipment including high voltage; confined spaces and high elevations; moving machinery parts; continuous contact with staff and the public. Work involves heavy lifting and other strenuous work, and traveling from site to site.

## **MINIMUM EDUCATION, TRAINING AND EXPERIENCE**

Any combination of training and experience which would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

Two years of experience as a journeyman electrician; and four (4) years of experience in ~~the~~ in three or more of the essential duties in commercial or industrial settings including one (1) year in the mechanical operation, maintenance, and repair of heating and air conditioning systems, low voltage systems and electrical control devices. Experience providing lead direction or work coordination with staff and contractors desirable.

Completion of a Heating/Air Conditioning Training Program will substitute for the one (1) year heating and air conditioning experience requirement

## **SPECIAL REQUIREMENTS**

- Possession of a valid California Driver's license issued by the California Department of Motor Vehicles.
- Preferred possession of/or ability to obtain a valid state contractor's license (C-4, C-7, C-10, C-20, C-38) or proof of successful graduation from a registered apprenticeship program. Demonstrated experience may be substituted for the required experience of a license or apprenticeship program.
- Underground tank and forklift certification required within (9) nine months of report of appointment.
- Must be willing to work after hours and/or evenings as necessary to respond to emergencies.