STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
CALTRANS ELECTRICIAN II	05/Maintenance/South Region	
WORKING TITLE	POSITION NUMBER	EFFECTIVE DATE
Caltrans Electrician II	905-660-6924-xxx	

As a valued member of the Caltrans team, you make it possible for the Department to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. Caltrans is a performance-driven, transparent, and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation and teamwork.

GENERAL STATEMENT:

This position is considered the full journey level for this class. Under the direction of a CALTRANS Electrical Supervisor, the Incumbent is responsible for the installation, maintenance and repair of electrical and electronic devices associated with State Facilities. This position requires the operation of light trucks, personnel hoists, vans and automotive vehicles. Incumbent may drive heavy trucks, if properly licensed. With training and certification where necessary, incumbent may be required to operate equipment such as trenchers, backhoes, forklifts, air quality monitors, hoists and cranes. Incumbent must be able to work nights, weekends, odd shifts, and respond to trouble calls. Incumbent will be required to do heavy manual labor such as but not limited to: moving heavy items, lifting, carrying, digging, and shoveling.

TYPICAL DUTIES:

Percentage	Essential (E)/Marginal (M)[1]	Job Description
60%	E	Incumbent will be required to construct, maintain, troubleshoot and repair traffic signal systems, changeable message signs, flashing beacons, extinguishable message signs, ramp metering systems, traffic count equipment, video surveillance and detection equipment, highway advisory radio equipment, building electrical systems, pumping plants, scale house systems, rest area systems and highway lighting equipment. Incumbent may be required to work on and around high voltage equipment up to 600 volts (high voltage equipment is disconnected from source and locked out prior to work being performed on systems).
20%	E	Incumbent will be required to inspect and operate equipment utilized in the performance of electrical work associated with state facilities. Equipment will include, but not be limited to, light trucks, personnel hoists, trenchers, backhoe, forklift, pavement saw, pipe threading equipment, conduit benders, voltage meters, resistance meters, amperage meters, high potential tester, hot-sticks, power monitoring equipment, air quality monitoring equipment, manual digging tools, electrical hand tools and battery test equipment.
15%	E	Incumbent will be required to make materials acquisition requests, cost estimates and repair time projections. Incumbent may be required to attend meetings pertaining to state electrical facilities and provide concise, accurate reports regarding issues discussed. Incumbent will be required to maintain work logs, daily time keeping and maintenance records, and enter data in a computerized database. Incumbent will be required to attend state provided training classes, pertinent to the maintenance activities associated with state facilities and achieve certification status where necessary.
5%	M	Incumbent may be required to remove graffiti from light poles, cabinets and other electrical facilities. Incumbent may be required to clean and paint electrical facilities. Incumbent may be required to wash state owned vehicles. Incumbent may be required to independently load and unload materials and equipment into a state vehicle or building.

[1]ESSENTIAL FUNCTIONS are the core duties of the position that cannot be reassigned.
MARGINAL FUNCTIONS are the minor tasks of the position that can be assigned to others.

SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS

Incumbent may function in a lead worker capacity when working with less experienced electrical personnel.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge: Safety precautions and work procedures required in the maintenance and installation of traffic signal systems, stationary bridge systems, movable span bridge systems, building code, highway information systems, highway

lighting systems, pump plants and rest areas.

Abilities: Make rough sketches and drawings related to electrical work. Read and interpret standard plans, specifications, schematics, maintenance manuals and manufacturer requirements. Estimate, order and install materials and generate written work reports. Troubleshoot and repair state facilities. Work independently, but be able establish effective communication and cooperation with other personnel assigned to a project. Inspect and write detailed reports regarding electrical projects. Instruct unskilled and semiskilled assistants. Act as a lead worker. Establish a safe work environment.

Analytical Requirements: Utilize progressive and logical troubleshooting techniques in the repair of electrical and electronic devices. Understand electrical diagrams, charts, technical sheets, oral and written instructions. Interpret electrical codes as they pertain to state electrical facilities. An effective understanding of electrical and electronic formulas as they pertain to state facilities. Must have the ability to think critically and take an effective course of action.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Errors in judgment, decision-making and trouble shooting skills could affect public safety or result in tort liability for the department. The work environment could also be rendered unsafe for employees involved in the project.

PUBLIC AND INTERNAL CONTACTS

Incumbent will routinely contact or interact with other CALTRANS personnel, contractors, engineering consultants and the general public. These contacts may take the form of verbal or written communications relating to the assignment.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Physical: Incumbent must be physically capable of utilizing writing instruments, hand tools, manual digging tools and electric tools. Incumbent may be required to bend, stoop, twist, power grasp, use fine manipulation, stand, sit, squat, lift and pull during performance of their duties. Incumbent must have good balance for walking on uneven surfaces, climbing ladders, climbing scaffolding and working on other structures associated with state facilities. Incumbent should have visual and color acuity adequate for performing the essential functions of the job.

Mental: Incumbent must be capable of understanding and performing the essential functions of the job in a reasonable and prudent manner, using logic and deductive skill to provide an end product that is safe and usable.

Emotional: Incumbent must have capacity for stable and reasonable interaction with supervisors, fellow workers and the general public during the performance of their duties.

WORK ENVIRONMENT

The CALTRANS Electrician may work under various climates and conditions. Work may be performed inside of climate controlled buildings, but most operations will take place alongside, over or upon state highways and right of way. The incumbent will be exposed to noise, inclement weather, dirt, odors, uneven surfaces, heights up to 50 feet above pavement or water, confined spaces, concrete products, cleaning solvents, high speed traffic conditions and moving construction equipment. The incumbent must be willing to work odd hours, nights, and weekends and be available for trouble call outs. May be required to work out of town with extended overnight stays.

I have read, understand and can perform the duties listed above. (If you believe you may require reasonable accommodation, please discuss this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the hiring supervisor who will discuss your concerns with the Reasonable Accommodation Coordinator.)

EMPLOYEE (Print)

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EMPLOYEE (Signature)	DATE

I have discussed the duties with, and provided a copy of this duty statement to the employee named above.

SUPERVISOR (Print)

SUPERVISOR (Signature)	DATE