

POSITION DUTY STATEMENT

PM-0924 (REV 9/2013)

CLASSIFICATION TITLE CT Electrician II	OFFICE BRANCH/SECTION 11/Maintenance/ East Region	
WORKING TITLE CE II - Tosnet/Desert Electrical	POSITION NUMBER 911-610-6924-	EFFECTIVE DATE

As a valued member of the Caltrans team, you make it possible for the Department to improve the mobility across California by being innovative and flexible; reporting to work as scheduled; working cooperatively with team members and others; and treating others fairly, honestly and with respect. Your efforts are important to each member of the team as well as those we serve.

GENERAL STATEMENT:

Under the supervision of a Caltrans Electrical Supervisor, the CT Electrician II assists in the maintenance of electrical installations within an assigned area in San Diego and Imperial counties. A valid Class C California driver license is required while performing duties associated with maintaining the State highway system; a "B" license is desirable. The incumbent will work individually or with others, and may oversee a less experienced crew member. The normal work week is Monday through Friday, from 6:30 a.m. to 3:00 p.m., on a 5/40 work schedule. Incumbent may be required to work overtime including nights and weekends, may be required to work temporary and/or intermittent varied work shifts, and is required to respond to emergency calls. This position is represented under collective bargaining. Duties include but are not limited to:

TYPICAL DUTIES:

Percentage		Job Description
Essential (E)/Marginal (M) ¹		
70%		Install, repairs and maintains electrical installations, including traffic signals, flashers, ramp meters, count stations, bridge electrical and various associated electronic devices. This includes all portions of highway traffic signals-conduits, wiring, poles, heads, solid state controllers, switches-highway and tunnel lighting, pumps, ventilation equipment, illuminated signs, motors, generators, and devices associated with maintenance-related buildings (shops, roadside rests, etc.). The maintenance and repair of the TMS Communications Network district wide, (electrical analog/digital and light) in communication with Traffic Monitoring Center (TMC), Hubs, Nodes, traffic signals, CCTV's, Changeable Message Signs (CMS), Ramp Meters and Vehicle Detection Systems (Ramp Meter/VDS). These elements will have associated equipment such as but not limited to motors, alarms, heating and air-conditioning systems, control equipment, surveillance equipment, loop detectors, telemetry equipment, power services, generators, and UPS systems, that will fall under this responsibility. May perform minor facility maintenance.
10%	E	Inspects and tests signals and lighting for proper operation. May act as inspector in traffic signal installations under contract.
10%	E	Installs and repairs electrical or electronically controlled motors, pumps and other equipment. Repairs include but are not limited to trouble-shooting the problem, making adjustments and replacing parts.
10%	M	As requested by the Supervisor or in the Supervisor's absence: Establishes work priorities for the crew; schedules and files monthly signal checks; schedules and files requests and documents from municipalities, Construction, Signal and Ramp Meter Operations; schedules and files all Locate and Mark out Requests for Permits and Construction activities; assists in the training of subordinates; prepares reports of labor, materials and equipment used.

¹ESSENTIAL 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

None. In the Supervisor's absence, may prioritize and assign work to other crew members, note problems, and depending on the severity, bring to the attention of the Supervisor, or in his/her absence, the Electrical Area Superintendent.

KNOWLEDGE, ABILITIES AND ANALYTICAL REQUIREMENTS

Knowledge of:

- Materials, methods, and equipment applicable to the repair of highway electrical and electronic systems including but

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information, call (916) 654-8410, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

POSITION DUTY STATEMENT

PM-0924 (REV 09/2013)

not limited to traffic signals, count stations, hubs, nodes, CCTV's, Changeable Message Signs (CMS), Ramp Meters and Vehicle Detection Systems (Ramp Meter/VDS).

- Knowledge of safety practices, laws and regulations of the Division of Industrial Safety; knowledge of federal and state occupational safety and health regulations; departmental safety and health policies and procedures; knowledge of safe work practices.
- Operation and maintenance of equipment and tools used in electrical maintenance; provisions of the California Vehicle Code as it applies to the loading and operation of motor vehicles
- Rules and regulations pertaining to electrical maintenance, maintenance standards, placing of detours and warning signs, inspection of encroachments or contracts
- A leadworker's role in promoting equal opportunity in employee development, and for maintaining a work environment free of discrimination and harassment

As the Electrician II often works independently, s/he must possess sufficient knowledge and awareness of safety to protect self and public at all times.

Ability to:

- Repair a wide variety of delicate traffic control devices in the field, including electrical and electronic apparatus
- Make rough sketches and diagrams
- Determine and list material needs
- Interpret detailed drawings, plans and specifications, and take effective action in the event of problems
- Communicate verbally in a clear, understandable voice for personal and public safety and security.
- Direct the work of others
- Keep records including time and cost records of materials, equipment and expenses
- Operate and care for construction and maintenance equipment
- Analyze situations accurately and take effective action
- Exercise sound public relations techniques
- Work independently without close supervision
- Instruct subordinate crew members

Analytical ability is required to plan and schedule the work of others, troubleshoot electrical problems and adopt an effective course of action.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Errors in judgment and decisions can affect the safety of the employee and others, result in equipment failure and/or tort liability.

PUBLIC AND INTERNAL CONTACTS

Routine contact with coworkers, supervisors, and Dispatch personnel (Caltrans, Highway Patrol or Traffic). May have contact with law enforcement or other agencies at signal malfunctions or knockdowns. May have public contact by phone or in person at a worksite. Necessary to maintain a professional, businesslike relationship with the fellow employees and the motoring public, including occasional irate citizens/drivers.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Most work is done in close proximity to traffic and motorized equipment; incumbent's hearing must be sufficient to hear car horns, warning shouts and backup signals. Incumbent must possess sufficient peripheral vision to be aware of changes in surroundings; sufficient night vision to respond to after-hour callouts; sufficient color vision to successfully perform all phases of the job. Work requires prolonged standing; bending, stooping, kneeling; manual dexterity; loading/unloading materials up to 50 pounds (signal equipment, concrete pull boxes, etc.).

To successfully direct the work of others, incumbent must develop and maintain cooperative working relationships; recognize and respond appropriately to emotionally-charged issues or problems; respond calmly to unusual situations, keeping in mind at all times the safety of self, fellow crew members and traveling public. Imperative to respond appropriately to difficult situations (irate citizens or errant drivers).

WORK ENVIRONMENT

Most work is done outdoors, where incumbent will be exposed to blown dust, exhaust fumes, noise, uneven surfaces,

POSITION DUTY STATEMENT

PM-0924 (REV 09/2013)

extremes of heat or cold, inclement weather. Work may be performed at heights. Occasional night work is required.

Personal safety requirements include but are not limited to:

- Appropriate footwear, in good and sturdy condition, must be worn; tennis or running shoes are not appropriate.
- Either long or short-sleeved shirts provided by Caltrans, or a safety vest is to worn over non-safety shirts or coats.
- Long pants. No shorts or cutoffs.
- Provided safety gear--hard hat, safety glasses, hearing protection devices, face shields, gloves, respirator, chaps, or other safety gear--must be worn when required by the department.

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)

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