STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

## POSITION DUTY STATEMENT

PM-0924 (REV 04/2021)

CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
Maintenance Mechanic	District 11/ Maintenance / East Region	
WORKING TITLE	POSITION NUMBER	EFFECTIVE DATE
Maintenance Mechanic East Electric Crew	911-610-6940	

As a valued member of the Caltrans leadership team, you make it possible for the Department to provide a safe and reliable transportation network that serves all people and respects the environment.

## **GENERAL STATEMENT:**

Under the direction of a Caltrans Electrical Supervisor, incumbent performs a variety of skilled work in the operation, maintenance and repair of Buildings and Facilities which includes Region Offices, Maintenance Facilities, Wash Racks, Kitchens, Safety Roadside Rest Area Buildings and Facilities, Landscape Buildings and Pump Houses, and CHP Weigh Stations/Point of Entry's. A valid Class C Driver's License is required while performing duties associated with maintaining the State highway system; a Class A or B Driver's License is desirable. May be required to work emergency call out after hours. The incumbent may work individually or with others and may perform lead work over a less experienced crew member. Incumbent maybe required to work overtime including nights and weekends, may be required to work temporary and/or intermittent varied work shifts, and is expected to respond to emergency calls. May be loaned to another crew. The position may require out-of-town travel, usually in week-long increments. This position is represented under collective bargaining.

## **CORE COMPETENCIES:**

As a Maintenance Mechanic, the incumbent is expected to become proficient in the following competencies as described below in order to successfully perform the essential functions of the job, while adhering to and promoting the Department's Mission, Vision, Values, Strategic Imperatives and Goals. Effective development of the identified Core Competencies fosters the advancement of the following Leadership Competencies: Change Commitment, Risk Appetite, Self-Development/Growth, Conflict Management, Relationship Building, Organizational Awareness, Communication, Strategic Perspective, and Results Driven.

- Flexibility and Managing Uncertainty: Adjusts thinking and behavior in order to adapt to changes in the job and work environment.
   (Safety First Innovation)
- **Dealing with Ambiguity (Risk):** Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Safety First Innovation)
- Reliability: Ability to demonstrate dependability in meeting commitments, and providing a consistent work product. Takes responsibility
  for individual actions in order to meet deadline demands. (Strengthen Stewardship and Drive Efficiency Integrity)
- **Problem-solving and Decision-making :** Identifies problems and uses logical analysis to find information, understand causes, and evaluate and select or recommend best possible courses of action. (Strengthen Stewardship and Drive Efficiency Integrity)
- **Teamwork/Partnership:** Develops, maintains, and strengthens partnerships with others inside or outside of the organization through effective communication and collaboration. (Lead Climate Action Engagement)
- Customer Focus: Considers, prioritizes, and takes action on the needs of both internal and external customers. (Lead Climate Action
   Engagement)
- Communication: Expresses oneself clearly in all forms of communication. Gives feedback and is receptive to feedback received.
   Knows that listening is essential. Keeps others in the Division and other functional units informed as appropriate. (Cultivate Excellence Engagement)
- Analytical Skills: Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes
  underlying issues. (Strengthen Stewardship and Drive Efficiency Integrity)
- Computer literacy and application: Appropriate knowledge of computer applications and other tools necessary to successfully perform tasks. (Strengthen Stewardship and Drive Efficiency Integrity)

# **TYPICAL DUTIES:**

Percentage Job Description Essential (E)/Marginal (M)<sup>1</sup>

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30%	E	Operates, repairs, and maintains HVAC pumps, valves and appurtenances, refrigerant compressors, condensers, evaporators, traps, transfer pumps, expansions valves, stop valves, and float valves, together with all refrigerant lines and devices used to control temperatures in maintenance buildings. Operates, maintains, and repairs air compressors, together with distribution lines and all valves and devices for air control; operates, maintains and repairs all natural and manufactured gas distribution lines and manufacturing systems including all valves and control devices for fuel tanks and maintenance facilities; operates maintains, and repairs water filters, softeners, piping and pumps used in conjunction with water filters, softeners, piping and pumps used in conjunction with water distribution, including all sinks, showers, and toilet bowls, supply lines and water lines at the roadside rest areas and maintenance facilities. Does cement work, painting, window installation and glazing. Repairs overhead doors. Maintains and repairs steam cleaners, pressure washers, filtration systems and must understand Boiler systems and control circuits. Carportry and reef repair as peeded. Work could be an ground level or elevated beights with the
		circuits. Carpentry and roof repair as needed. Work could be on ground level or elevated heights with the assistance of ladders, personnel lifts or hoists. Use of Fall Protection Equipment when required.

- Operates, repairs, and maintains all types of motors, engines, and emergency generators used to power pumps, compressors, and fans; repairs and maintains single phase and multiphase electrical circuits up to 480 volts; repairs and maintains electrical transformers, motors, controllers, machinery, fixtures, and appliances and ice machines. Repairs and maintains electronic systems, such as clocks, automatic systems, security systems, energy management systems, and equal potential grounding; calibrates control systems for air conditioning, refrigeration, heating, and ventilation systems.
- 20% E Operates, maintains, and repairs water and sewage systems; inspects and trouble shoots electric and mechanical systems and equipment to identify repairs needed; performs minor building maintenance and repairs; plans layouts and estimate costs of electrical, mechanical, and electronic systems; requisitions parts, supplies and equipment. Calculates systems requirements to provide estimates for modification or replacement systems. May be required to get a water treatment certification.
- Work with city, county and private water surveyors to provide required backflow prevention testing reports and information regarding backflow related problems. Maintains an accurate database to provide district-wide information on backflow prevention assemblies. Orders backflow repair parts and maintains a working inventory. Maintains all equipment and any required certifications. Works on plumbing up to six inches diameter and repairs accident damage.
- 5% M Record Keeping and Reporting: pre and post operative equipment checks, fuel purchases/usage, Material usage reports, visa card purchase records. Operate and maintain laptop computer & desk computer reports and programs used for remote operation of facilities boiler/heater systems

<sup>1</sup>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

None. In the supervisor's absence, may prioritize and act as leadworker to other crew members such as Maintenance Workers or Equipment Operators assigned to assist in carrying out specific jobs, also workers from other agencies such as CCC.

# KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

# Knowledge of:

- Materials, methods, and equipment used in the operation and repair of plumbing, heating, electrical, water and sewer systems; materials, methods, and tools used in the repair of mechanical equipment and in miscellaneous building maintenance and repair work and skill in the performance of such work
- Safety practices, laws and regulations of the Division of Industrial Safety; Federal and State occupational safety and health regulations; departmental safety and health policies and procedures; and safe work practices dealing with heating, electrical, plumbing, and other mechanical systems
- 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

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• A lead worker's role in training less skilled workers

As the Maintenance Mechanic often works independently, incumbent must possess sufficient knowledge and awareness of safety to protect self and public at all times.

#### Ability to read:

- Possess superior mechanical ability
- Get along well with others
- Direct the work of others
- Follow oral and written directions
- Analyze situations accurately and take effective action
- Exercise sound public relations techniques
- Read and write at a level appropriate to carrying out job functions as stated above
- Communicate verbally in a clear, understandable voice for personal and public safety and security.
- Interpret detailed drawings, plans and specifications, and take effective action in the event of problems
- Make rough sketches and diagrams
- Determine and list material needs; order materials and equipment
- Keep accurate records including time and cost records of materials, equipment and expenses
- Operate and care for construction and maintenance equipment
- Ability to work safely around high-density traffic
- · Ability to work effectively alone or with others

#### RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Errors in judgment and decisions can affect the safety of the crew and the public, result in equipment misuse or damage, increase tort liability exposure, or result in employee grievances. Inaccurate, delayed or incomplete estimates may result in added labor and material costs.

#### PUBLIC AND INTERNAL CONTACTS

The incumbent has 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. It is necessary to maintain a professional, businesslike relationship with fellow employees and the motoring public, including occasional irate citizens/drivers.

## PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Most field work is done in close proximity to traffic and motorized equipment; incumbents 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 late night/after-hour call outs; sufficient color vision to successfully perform all phases of the job. Training subordinates, inspecting work and performing repairs require prolonged standing; bending, stooping, kneeling; manual dexterity; loading/unloading materials up to 100 pounds (signal equipment, concrete pull boxes, etc.) Desk work requires prolonged sitting, often at a computer terminal, under artificial light.

To successfully direct the work of others, incumbent must be able to communicate clearly in person or via electronic communications devices; develop and maintain cooperative working relationships with others; 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. Must be imperative to respond appropriately to difficult situations (irate citizens or errant drivers).

Much of this position is labor intensive. Incumbent must have physical ability to react quickly to errant motorist and do strenuous hand and mechanical labor.

Standing, Sitting and Walking - Standing and walking using hand tools 50%: Sitting and driving 20%. Twisting and turning, climbing, shoveling 30%.

Lifting (Floor to Bench to Floor) – Items listed may be any of the following but not limited to lifting tools, tools box, mechanical devices such as pumps and motors.

Carrying – Repair material, which may weigh 50 lbs., must be carried from storage areas to vehicles and from vehicles to job

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sites, which may be on uneven terrain. Tools are carried a few feet to 100 yards and weigh a few ounces to 50 lbs. each. Various items carried include any type of building material supplies, specific tools to accomplish job, tool box, small motors, pumps, lumber, plumbing material and supplies, and may be carried on uneven terrain.

Overhead Reaching – Overhead work includes pulling yourself up into many types of work environments from 0 to 30 times per day, working off a ladders, servicing equipment or doing mechanical repairs, signaling other workers, and throwing/loading material in equipment.

Other Reaching – Setting cones, lubing and checking equipment, shoveling, driving, using digging bar, shifting, holding tools or material; may be done on a continuous basis.

Pushing/Pulling – Shoveling, opening garage doors, hooking up trailers, pulling on hoses, tightening and loosening nuts on bolts. Installing and removing items such as pumps, small motors; pulling down on post drivers.

Twisting - The incumbent twist while driving equipment. Other twisting is done while dragging brush, shoveling, raking and setting down and picking up material, supplies, and tools.

Climbing/Balancing – Climbing is done in and out of work areas, such as rafters, attics, up and down ladders and used in fine manipulation of a ladders, stairways, (often with a load of material or supplies); onto steps and walkways. One example would be to climb up a ladder carrying supplies to work on an air conditioning unit on a roof or in attic area.

Bending/Crouching/Squatting/Crawling – The incumbent often bends continuously throughout the day while operating tools and performing physical labor. All of these activities are necessary when picking up and laying down tools and material. May also crawl around and underneath job site area while checking and servicing facilities, and putting on or removing parts.

Simple Grasping – This activity is necessary about 95% of the shift; climbing in/out and around job areas, operating and repair of equipment, using hand tools and handling materials.

Fine Manipulation – This occurs less than 2% of a day and usually while writing reports, reading through installation material or manipulating the knobs and levers on the tools. A higher percentage of the time would be saw, drill and hand tool operation.

Importance of Hearing and Sight – both are essential on the job because the Maintenance Mechanic often must hear directions and equipment, and must see in order to perform his/her duty safely.

Hearing should be adequate to hear warning devices used for worker safety, i.e. look out alarm devices, sensors, including vehicle horns used to warn employees of eminent danger at the work site. Corrected hearing is acceptable.

Sight needs to be corrected to the State of California Department of Motor Vehicles standards for safe vehicle driving. Night vision must be good for safety when working after dark.

#### WORK ENVIRONMENT

Most work is done outdoors, where incumbent shall be exposed to blown dust, exhaust fumes, noise, uneven surfaces, extremes of heat or cold, inclement weather. Work may be performed at heights up to 250 ft., over pavement or water and in the midst of traffic. 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 be worn over non-safety shirts or coats.
- Long pants. No shorts or cutoffs.
- Provided safety gear such as hard hat, safety glasses, hearing protection devices, face shields, gloves, respirator, chaps, or other safety gear must be worn as required by the department.

Possession of a valid driver's license is required to operate a State owned or leased vehicle.

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I have read, understand and can perform the duties listed above. (If you believe you may require reason this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform 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	