

CLASSIFICATION TITLE Transportation Engineer (Elect)	OFFICE/BRANCH/SECTION D12 / Project Delivery / Office of Construction Field 2	
WORKING TITLE Transportation Engineer (Electrical)	POSITION NUMBER 912-300-3609-026	REVISION DATE

As a valued member of the Caltrans team, you make it possible to improve lives and communities through transportation.

GENERAL STATEMENT:

Under the direction of a Senior Transportation Electrical Engineer (Supervisor), the Transportation Engineer (Electrical) performs a wide variety of professional engineering work in either an office or field setting. As incumbent progresses in experience they will be assigned more difficult work and may function as a lead person over the activities of various engineering and technical personnel. Possession of a valid is required when operating a state or leased vehicle.

CORE COMPETENCIES:

As a Transportation Engineer (Elect), 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, Employee Excellence - Collaboration, Innovation, Stewardship)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Safety - Innovation, Integrity, People First)
- **Continuous Professional Development:** Seeks to obtain knowledge and improve performance while supporting others in doing the same. (Safety, Prosperity, Employee Excellence - Equity, Pride)
- **Conflict Management:** Recognizes differences in opinions and encourages open discussion. Uses appropriate interpersonal styles. Finds agreement on issues as appropriate. Deals effectively with others in conflict situation. (Equity, Employee Excellence - Collaboration, Equity, Stewardship)
- **Fostering Diversity:** Capable of working with a diverse work group, including but not limited to differences in race, nationality, culture, age, gender, and differently able. Makes everyone feel valuable regardless of diversity in personality, culture, or background. Fosters a diverse culture to create best solutions. (Equity - Equity, Innovation, People First)
- **Organizational Awareness:** Contributes to the organization by understanding and aligning actions with the organization's strategic plan, including the mission, vision, goals, core functions, and values. (Safety - Collaboration)
- **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. (Prosperity - Integrity, Stewardship)
- **Planning and Results Oriented:** Organizes and executes work to meet organizational goals and objectives while meeting quality standards, following organizational processes, and demonstrating continuous commitment. (Employee Excellence - Collaboration, People First, Pride)
- **Technical Expertise:** Depth of knowledge and skill in a technical area. (Safety - Innovation, Stewardship)

TYPICAL DUTIES:

Percentage Essential (E)/Marginal (M) ¹	Job Description
45% E	Ensures contract compliance for contract documents (standard specifications, standard plans, contract provisions and contract plans) by reviewing and inspecting the Contractor's work during night and/or day hours at the project site. Maintains or assists with the monthly progress estimate for electrical, communications and/or other assigned contract items. Maintains or assists in the maintenance of necessary records pertaining to construction progress, job expenditures, contract change orders, contingency balance; daily communication with the contractor, public, utility company representatives and other public agencies. Required to analyze problems and make effective decisions.

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20%	E	Ensures contract safety features, applicable Storm Water Pollution Prevention Plan (SWPPP) or water pollution requirements and compliance with all applicable permits by reviewing submittals and the Contractor's work at the project site during night or day.
15%	E	Verifies that all material used on the project are in compliance with the contract plans and specifications. Maintains material acceptance records for the project.
10%	E	Conducts field investigations during night and day shifts and recommends changes to design to correct design errors or oversights. Assists or writes electrical change orders. Performs an analysis to verify costs submitted by the Contractor.
5%	M	Assists in the preparation of information for the public or other public agencies relating to construction details that may impact the public.
5%	M	Ensures that assigned State equipment (vehicles, phones, computers and various tools) are only used for State business. Ensures that assigned State vehicle is maintained at the proper intervals.

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

This position does not supervise; however, incumbent may be required to work in a lead capacity with co-workers.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge of the principles of electrical engineering; Standard Specifications, Standard Plans, methods and equipment of electrical construction; properties and uses of electrical construction materials. Knowledge of electrical testing equipment. The ability to make neat and accurate computations and to prepare written reports. The ability to establish and maintain cooperative relationships with those contacted in the course of work. The ability to communicate effectively, written and orally. The ability to work in adverse conditions during night and day shifts. The ability to make decisions in the absence of lead workers or supervisor to assure project progress. The ability to use a personal computer and applicable software. The ability to work various shifts including night, evening, and day shifts to meet the work schedule of the Contractor. The ability to travel throughout Orange County.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Errors in judgment and/or decisions could affect public safety, result in tort liability, or incur additional costs for the department. Inaccurate, delayed, or incomplete records or estimates may result in added costs to the Department.

PUBLIC AND INTERNAL CONTACTS

The incumbent will routinely have contact with other State personnel, contractors, consultants, public agencies and utility representatives to transmit or obtain relevant project information. These contacts will be verbal or written, as needed to perform the assignment. Must be able to represent the Department in litigation matters. Must be able to develop working relationships with Contractors and other local agency personnel.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Physical: Outdoor inspection activities during night, evening and day work require the ability to stoop, bend, kneel, and traverse over level and uneven surfaces and move equipment or materials from one location to another. Physical activity varies and any singular physical requirement may be for lengthy periods of time. Requires manual dexterity to operate personal computers and test equipment. Will be required to be trained in first aid and Cardiopulmonary Resuscitation (CPR) and able to apply this skill in the event of an emergency. Must be able to travel in a vehicle for sustained periods of time and or on uneven terrain. Must be able to work in extreme weather conditions.
Mental: Must be able to sustain mental effectiveness to write reports, perform audits, identify equipment and materials, analyze problems and take initiative to resolve contract related problems.
Emotional: Must be able to maintain emotional control during conflicts. Must be able to develop and maintain cooperative working relationships, respond appropriately to difficult situations, recognize emotionally charged issues or problems, and perform appropriately for a situation.

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WORK ENVIRONMENT

This position is classified as a field position. 90% of the work will be performed at the project site and 10% will be in the office writing reports, performing analysis and communicating with other personnel. Work locations vary throughout Orange County and in various environments. Field activities during night and day shifts include exposure to moving traffic, loud noises, extreme heat and cold temperature, dust, uneven terrain, and moving heavy construction equipment. May require long term assignment for night work. Night and evening work requires the ability to work with artificial lighting. Ability to be aware of and maintain alertness to the environment is critical. Required to wear and utilize protective clothing; i.e., hard hat, work boots/shoes, vests, coveralls, eye protection, hearing protection and respirator equipment. Possession of a valid driver's license is required when operating a state or leased vehicle.

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.)

I agree that by providing my electronic signature for this form, I agree to conduct business transactions by electronic means and that my electronic signature is the legal binding equivalent to my handwritten signature. I hereby agree that my electronic signature represents my execution or authentication of this form, and my intent to be bound by it.

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