

**POSITION DUTY STATEMENT**

DOT PM-0924 (REV 01/2025)

CLASSIFICATION TITLE Transportation Engineer (Elect)	OFFICE/BRANCH/SECTION D3/North Region Construction	
WORKING TITLE Electrical Inspector	POSITION NUMBER 903-502-3609-XXX	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 the Technical Services Support Branch Senior, a Senior Transportation Electrical Engineer, the incumbent will be in charge of/or perform a wide variety of difficult and complex transportation engineering work. This position may require travel and work at various North Region locations. The incumbent should possess a valid California driver's license when operating a State owned 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.

- **Managing Change:** Demonstrating support for organizational changes needed to improve the department's effectiveness; supporting, initiating, sponsoring and implementing change. (Prosperity, Employee Excellence - Collaboration, Pride)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Prosperity, Employee Excellence - Innovation, Integrity, Stewardship)
- **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. (Prosperity, Employee Excellence - Integrity, People First, Stewardship)
- **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. (Safety, Employee Excellence - Collaboration, Integrity, Stewardship)
- **Teamwork and Collaboration:** Sets team structure. Organizes, leads, and facilitates team activities. Promotes team cooperation and encourages participation. Capable of cross functionality and working well with others on a team to achieve personal goals, team goals, and organizational goals. Takes responsibility for individual actions in order to achieve consistent results. (Safety, Employee Excellence - Collaboration, Integrity, 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, Employee Excellence - Collaboration, Integrity, Pride)
- **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. (Safety, Employee Excellence - Collaboration, People First)
- **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. (Safety, Employee Excellence - Collaboration, Pride, Stewardship)
- **Technical Expertise:** Depth of knowledge and skill in a technical area. (Employee Excellence - Innovation, Pride, Stewardship)

**TYPICAL DUTIES:**

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

**ADA Notice**

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50%	E	Perform difficult electrical engineering tasks involved in the construction of Roadway Lighting, Traffic Monitoring System, Traffic Signals, Intelligent Transportation System and other roadway electrical facilities. Inspect the installation of electrical equipment and facilities and ensure acceptable accomplishment of the project and its compliance with uniform standards, specifications and practices. Review and perform field tests of electrical equipment including quality control and quality assurance. Review vendor's submittal packages and ensure compliance with contract plans and specifications. Interface with designers, local agencies, utility companies and contractors for technical coordination and troubleshooting.
25%	E	Prepare and maintain necessary construction records and documents including construction progress schedule, expenditures and daily dairy reports. Assist Resident Engineers with monthly estimate and prepare required documents including contract change orders and as-built plans. Respond or propose responses to construction inquiries, complaints, resolution of claims or pending litigation.
15%	E	Work in a team or independently to complete assigned engineering tasks for administration of construction projects. Provide oversight of activities related to encroachment permits for utility relocation and special funded transportation projects. Ensure project compliance with safety standard and specifications and coordinate traffic control. Perform constructibility and other reviews of contract plans and specifications involving electrical work for completeness and accuracy.
10%	M	Facilitate, schedule, participate in or conduct quality control and safety review meetings. Maintain project files, attend training, perform special reviews and interpret new requirements. Maintain relations with project neighbors and with the business community. May participate in public meetings and Caltrans hearings.

<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**

The incumbent does not supervise, but on occasion, could act in a lead worker capacity. The incumbent will receive supervision from a Senior Transportation Electrical Engineer and/or direction from a Transportation Engineer (Civil or Electrical), working as a lead worker.

**KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS**

The incumbent must have knowledge of transportation facility design principles; knowledge of methods, materials, tools and equipment used in the construction of transportation facilities; thorough knowledge of electrical theory as applied to the construction of highway lighting and traffic control systems; thorough knowledge of modern highway lighting and traffic control equipment and apparatus; ability to draw and understand geometric design, write and prepare specifications and make cost estimates. The incumbent must have knowledge of the various influences of transportation facilities and systems on the environment; ability to prepare plans, estimates and specifications for construction transportation facilities, inspect construction of such facilities and determine whether they meet specifications, prepare correspondence and reports.

The incumbent will be required to understand basic design engineering principles: make accurate engineering calculations, research and compile statistical data and prepare calculations for a variety of transportation improvement projects.

The incumbent must be able to analyze situations accurately, identify potential conflicts, and adopt an effective course of action; review project schedules and determine appropriate level and timing of review; recognize issues that are significant and implement an effective course of action.

**RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR**

The incumbent will be responsible for making accurate engineering calculations; analyzing situations regarding transportation facilities or systems design concepts; applying sound engineering principles to various engineering activities. Omissions in plans and reports could lead to unnecessary change orders, claims, and delays; errors in judgment could result in a design project of lesser quality, which could increase project construction costs or increase the Department's exposure to tort liability.

**PUBLIC AND INTERNAL CONTACTS**

The incumbent must be able to establish and maintain a professional and cooperative relationship with those contacted in the course of the work, such as with Region and District functions, contractors and their employees, local agencies and officials, regulatory agencies, utility companies, engineering consultants, developers and public stakeholders in order to transmit or obtain relevant engineering information. These contacts could be verbal or written, as needed, to perform assignments with the goal of protecting the State's interests and providing quality products on and for the State's infrastructure.

**PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS**

Employee will be required to drive to and work at various locations throughout the North Region. Employee may be required to stand for long periods of time, when on construction project sites; walk on slopes or uneven terrain. May be required to lift and

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carry samples of materials, which weigh up to 50 pounds. When at their base office setting, employee may be required to sit for long periods of time using a keyboard and video display terminal. In the course of the employee's work, must maintain a cooperative working relationship within the working environment, with peers, subordinates, and contractors and their employees. Must have a thorough working knowledge of construction principles and techniques.

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### WORK ENVIRONMENT

The incumbent will be required to work at various locations throughout the North Region. Temporary assignment away from one's "headquarter location" may be required. Employee will be notified of a change of assignment under the terms of the current Collective Bargaining Agreement. Employee will be reimbursed for travel expenses according to the Department's Travel Policies. May be required to work at night. Will be subject to noise, odors, dust, and extreme weather conditions. Incumbent must work with and about a variety of materials, construction and testing equipment. When in the office, either a construction field office or in a North Region Project Development branch, employees will work in a climate-controlled environment with artificial lighting.

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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.

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EMPLOYEE (Print)

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EMPLOYEE (Signature)

DATE

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

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SUPERVISOR (Print)

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SUPERVISOR (Signature)

DATE

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