

POSITION DUTY STATEMENT

DOT PM-0924 (REV 01/2025)

CLASSIFICATION TITLE Senior Transportation Electrical Engineer, Supervisor	OFFICE/BRANCH/SECTION District 5/ Design III/ Engineering Services	
WORKING TITLE Project Development Design Technical Services Branch Mgr	POSITION NUMBER 905-203-3164-XXX	REVISION DATE 06/30/2026

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 Supervising Transportation Engineer, incumbent is responsible for directing and supervising staff in the Utility Engineering Workgroup, the Office of Construction Estimate Review (OCER), Document Retrieval System (DRS), Quality Management Assessment (QMA), and CADD Support.

CORE COMPETENCIES:

As a Senior Transportation Electrical Engineer, Supervisor, 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 - Innovation)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Employee Excellence - Collaboration)
- **Ethics and Integrity:** Demonstrated concern to be perceived as responsible, reliable, and trustworthy. Respects the confidentiality of information or concern shared by others. Honest and forthright. Conforms to accepted standards of conduct. (Employee Excellence - Innovation)
- **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. (Equity - Collaboration, Innovation)
- **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. (Employee Excellence - Collaboration)
- **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. (Employee Excellence - Innovation, Stewardship)
- **Interpersonal Effectiveness :** Effectively and appropriately interacts and communicates with others to build positive, constructive, professional relationships. Tailors communication style based on the audience. Provides and is receptive to feedback. (Employee Excellence - Collaboration)
- **Workforce Management:** Hires and retains appropriate staff. Conducts workforce and succession planning. Provides feedback on performance. Addresses employee issues in a timely manner. (Employee Excellence - Integrity)
- **Managing Performance:** Responsible for employee performance, setting clear goals and expectations, tracking progress against departmental and unit goals, providing feedback, and addressing performance issues promptly. (Employee Excellence - Pride)

TYPICAL DUTIES:

Percentage
Essential (E)/Marginal (M)¹ Job Description

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25%	E	<p>Responsible for supervising and directing the work of engineers involved with reviewing electrical designs and existing electrical facilities from both within and outside the department for compliance with Caltrans utility policies and standards. Leverages Electrical Engineering knowledge of underground conduits, electrical systems, Transportation Management System (TMS) elements, signal loop detectors, traffic control systems, etc to enhance project utility coordination and lower project risks. Review and interpret electrical engineering plans and specifications for existing and proposed improvements planned within Caltrans Right of Way (including public utilities). Use knowledge of electrical engineering to review and approve utility policy exceptions. Use knowledge of electrical systems and their installation to enhance field safety during potholing and utility field investigations along with basic occupational safety and health regulations contained in the Title 8 Industrial Relations, Electrical Safety Orders, safety and health policies and procedures. Reviews plans, specifications, and estimates for highway lighting and traffic control projects for conformance to State standards and compliance with Caltrans Utility Policy; coordinates the development of standard specifications and standard plans for highway lighting and traffic control installations in order to ensure compliance with Caltrans Utility Policy; reviews research and reports relative to development of new highway lighting, sign lighting, and traffic control equipment and techniques to ensure compliance with Caltrans Utility Policy.</p>
25%	E	<p>Manages staff of the Utility Engineering Workgroup (UEW). The UEWs primary responsibility is to gather utility information, develop and maintain a Caltrans utility database and prepare all the plans and engineering products necessary to obtain utility certifications for projects. The UEW unit is also responsible to produce utility plan sheets, reports, utility related specifications, special provisions, and estimates of transportation improvement projects. The UEW is the single point of contact for all queries related to subsurface facility investigations including the coordination of potholing, underground utility location field marking, and plays a considerable role in the utility relocation process. Works cooperatively with the Project Engineer, Utility Coordinators and Utility Owners to determine conflicts. Ensures Encroachment and Utility Policy Exceptions are in accordance with the Manual for Encroachment Permits. Manages communication and coordination with project managers, design engineers, right of way utility coordinators, surveyors, and other functional units involved with project delivery and utility engineering support. Plans, develops and oversees architectural and engineering consultant task orders related to utility engineering, field inspections, locating and mapping of existing underground facilities that have been positively located commensurate to workload and resource needs.</p> <p>Supervise and provide guidance and support to engineers reviewing electrical plans, specifications and estimates for compliance with Caltrans Utility Engineering policies and standards. Ensure proposed electrical installations on the state highway system are in compliance with Caltrans Utility Engineering policies and standards. Ensure Utility work and investigations are completed in compliance with Electrical Engineering safety protocols.</p>
15%	E	<p>Manages the OCER staff in performing best practices for preparing final construction cost estimate certifications on construction contracts before advertisement, performs independent assurance on estimates, and provides construction cost estimate training. Manages the operations of the DRS unit including as-builts, records and archives; work with record management for history files, design exceptions, and other records to be archived. Works with DRS staff during the archive process to ensure completeness, quality, and consistency of the as-built plans that are archived in the District and submitted to Headquarters. Provides technical advice and procedural guidance to all subordinate engineering staff.</p> <p>Supervise and provide guidance and support to engineers reviewing electrical plans, specifications and estimates for compliance with Caltrans Cost Estimating Policy. Ensure electrical engineering project work is properly estimated including a cost breakdown as needed for electrical lump sum cost items. Ensure electrical engineering bid items include appropriate items in the contract related to costs such as delayed start, etc. Use knowledge of electrical engineering and specific electrical engineering items to research and provide guidance on current electrical engineering price trends.</p>

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10%	E	Manages the District's CADD Support staff responsible for providing user support with various CADD application software and design capabilities, provides CADD design problem solving services to users, and provides supplemental CADD training.
		Supervise and provide guidance to the CADD support engineer in the support of CADD work for electrical engineering plans.
10%	E	Manages the Quality Management Assessment Coordinator and the implementation of the District's Quality Management Plan including QC/QA procedures and Quality Management Assurance, performs quality audits on projects, documents results from those audits, and makes quality related recommendations where needed. Provides leadership and direction in the performance of quality audits on projects, the documentation of those quality audits, and the production of quality related recommendations where needed. The Quality Management Assessment Coordinator will provide support to the District Design Liaison and efforts within the District's Division of Project Development.
		Supervise and provide guidance to the Quality Manager in the review of electrical engineering plans, specifications and estimates in order to ensure proper QC/QA procedures are followed.
10%	E	Prepares workload and task management estimates and schedules for use in project work plans. Prepares status reports, monitors project status and attends meetings related to project delivery and functional support. Plans, supervises, assigns and monitors work, gives instruction and guidance, maintains discipline, makes decisions, and handles difficult technical issues involved with directing the work of staff involved. Reviews timesheets. Prepares overtime requests and keep a record of accumulated overtime for each staff member.
		Estimate and assign workload for engineers working in areas related to electrical engineering and utility review.
5%	M	Serves as the Design Performance Measure representative for assessing design performance metrics and attends HQ meetings to exchange design quality improvement ideas between districts. Serves as the Professional Development Single Point of Contact responsible for participating in the exchange of design quality improvement ideas between districts and attends the Office of Professional Development quarterly Statewide Professional Development Community meetings.

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

Incumbent directly provides first-line supervision to a staff of approximately six to twelve engineering personnel, including Transportation Engineers (Civil) / (Electrical) Ranges A-D, and Transportation Engineering Technicians (TETs).

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

This position requires knowledge of Caltrans organization, departmental policies, management and supervising principles, project management concepts, the project development process, design engineering activities, and financial constraints. Also requires a detailed knowledge of organizational relationships and engineering functions both within and outside Caltrans that pertain to planning, design and construction of transportation facilities.

Must have the ability to administer an engineering program; plan and direct the work of others; prepare technical correspondence and complete comprehensive reports; and address an audience effectively. Also, must communicate effectively both orally and in writing with all levels of Caltrans management in Headquarters, the District, DES, external groups and organizations, and local governments and the public.

Must have the ability to perform, review and analyze a wide variety of project development policies, procedures and other activities, and draw conclusions leading to appropriate and timely recommendations on project delivery. Incumbent must be able to prioritize work based upon guidelines established by District/Department needs. Must be able to understand and interpret detailed technical studies. Incumbent must maintain current knowledge of the laws and regulations that impact the Department.

Knowledge of:

- *Electrical engineering principles and their application to Utility Engineering
- *Electrical engineering principles and their application to design, construction and maintenance process
- *Electrical and Electronic theory as applied to traffic control systems, components and circuits

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RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The Senior Transportation Engineer is in responsible charge and answers for his/her decisions and for the actions and decisions of his/her subordinates. The incumbent is responsible for independent action and initiative in carrying out assigned duties. Consideration of all input and pertinent factors is crucial to reaching conclusions and taking appropriate actions to ensure timely completion of the engineering required to meet project development delivery commitments. Poor decisions may result in project delays and inaccurate or incomplete reports and contract plans, specifications and estimates that require corrections and added costs for engineering and construction. Errors in judgment would result in the inefficient use of public funds, in injuries or delays to the traveling public, and in the department's failure to meet budgeted programs resulting in a lack of confidence by the Legislature, the public and other governmental agencies.

PUBLIC AND INTERNAL CONTACTS

Maintains a close working relationship with his/her counterparts in the District, DES and Headquarters, for the purposes of effective quality management, scheduling project work, assigning personnel and coordinating design and engineering services activities. Extensive ongoing contacts are required with Department management, functional managers, and Design Seniors.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Incumbent must possess the ability to work with a team, effectively, and efficiently to coordinate multiple assignments and tasks. Incumbent must possess the ability to work under pressure. Must be able to analyze raw data, reason logically, recognize problems and develop solutions, and make recommendations for improvement and simplification. The work of the incumbent is detailed, complex, and variable and requires independent action and decision-making. Must possess the ability to supervise a diverse work group, provide specific direction to employees, and deal with sensitive employee issues including disciplinary actions.

WORK ENVIRONMENT

While at his/her base of operation, employee will work in a climate-controlled office under artificial lighting. Employee will be expected to have an in-office presence, and may be allowed and/or expected to telework from a home office or other appropriate location on a part-time basis. Employee may be required to travel in state for meetings, conferences, and training. Vacation and other leave may be restricted during peak work times.

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