

CLASSIFICATION TITLE Senior Transportation Electrical Engineer, Supervisor	OFFICE/BRANCH/SECTION Mobility Programs/Electrical Design E2	
WORKING TITLE Senior Electrical Engineer, Branch Chief	POSITION NUMBER 903-350-3164-008	REVISION DATE 08/27/2026

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

GENERAL STATEMENT:

Under general direction of the Chief, Office of Mobility Programs, a Supervising Transportation Engineer, in the Division of Traffic Operations, the employee is responsible for overseeing the electrical design of various transportation projects. Employee also supervises and directs the work of Transportation Electrical Engineers in developing and reviewing electrical plans, specifications, and estimates for use in toll lanes, highway lighting, weigh-in-motion, traffic signals, traffic control, and traffic management and communications systems. Develops quality electrical engineers, uses resources effectively and efficiently to develop quality electrical deliverables, and is an active member on the District 3 Electrical Board and other statewide committees. Helps lead the District on the implementation of new technology and innovation from the electrical perspective. Possession of a valid driver's license is required when operating a State owned or leased vehicle.

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.

- **Change Leadership:** Develops new and innovative approaches needed to improve effectiveness and efficiency of work products. Encourages others to value change. Considers impact and recommends changes. (Safety, Employee Excellence - Collaboration, Innovation, People First, Stewardship)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Safety, Prosperity, Employee Excellence - Collaboration, Equity, People First)
- **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. (Safety - Integrity, 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. (Safety, Employee Excellence - Collaboration, Equity, Integrity, People First, Pride, 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, Equity, Climate Action, Prosperity, Employee Excellence - Collaboration, Equity, Innovation, Integrity, People First, Pride, Stewardship)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Safety, Equity - Innovation, People First)
- **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, Integrity, People First, Pride, Stewardship)
- **Analytical Skills:** Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Safety, Equity, Climate Action - Innovation, Pride, Stewardship)
- **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. (Safety, Employee Excellence - Collaboration, Integrity, People First, Pride, Stewardship)

TYPICAL DUTIES:

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

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45%	E	Responsible for overseeing the electrical design of various transportation projects. Plans and directs the work of Transportation Electrical Engineers preparing plans, specifications, and estimates for electrical and electronic traffic control devices. Responsible for the development of quality electrical plans, specifications, and estimates for use in various project types including toll lanes, highway lighting, weigh-in-motion, traffic signals, traffic control systems, and traffic management and communications systems. Reviews and approves the electrical portion of major safety and/or operations SHOPP and/or STIP programmed projects. Prepares project reports and participates on Project Development Teams.
15%	E	Conducts the final review of plans and estimates of the electrical portion of highway improvement projects to ensure that all products biddable, buildable, and will ultimately provide safe, integrated, and efficient electrical systems for those that live and travel through the state of California. Works cooperatively with other electrical units to ensure development quality electrical deliverables.
15%	E	Staff Supervision: Hires, develops, trains, coaches, and mentors a team of engineering staff to deliver the aforementioned projects and programs. Ensures staff understands the organization's mission, vision, and strategic management plan, the Division's strategic plans and principles along with office and branch performance targets. Schedules work assignments, establishes priorities, and monitors work performance. Prepares timely probation reports and individual development plans. Provides training opportunities within the unit, and develops plans and tools to build strengths and close performance gaps. Organize for success by implementing succession planning techniques. Employs necessary actions to address performance and disciplinary issues
10%	E	Attends District 3 Electrical Board meetings as an active member. Leads Electrical Board discussion topics, takes comprehensive notes, and disseminates information to management and staff regarding Electrical Board topics and action items. Attends other Statewide meetings and trainings. Participates in the development of guidance related to electrical design and components at the State and District level.
10%	E	Develops and tracks resources and electrical workload estimates. Ensures resources are being used effectively and efficiently. Requests appropriate resources and ensures adequate resources are provided to develop quality electrical deliverables. Other duties as needed.
5%	M	Stays abreast on new technologies and innovations related to electrical/ITS components, design, and implementation.

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
Supervising various electrical engineering staff. could also manage Electrical Technicians and Student Assistants

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS
Knowledge of electrical and electronic theory, principles and practices of traffic engineering as they apply to highway lighting traffic control, and electrical control systems; codes, safety orders, regulation and field practices governing design and installation of highway lighting and traffic control equipment.
Ability to layout work for others and direct them in their work; analyze situations accurately, and adopt an effective course of action.
Responsible for activities required to complete final plans, specifications, and estimates, and to review all work for completeness and accuracy.
Knowledge of electrical design practices and must be able to assist subordinates in performing engineering tasks and computer oriented processes.
Knowledge of the functional and organizational characteristics of the Division.
Knowledge of District functions, policies, procedures and operations.
Knowledge of computers and the Department's standard software.
The ability to learn quickly, analyze situations, and communicate tactfully and effectively with a variety of people with different

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR
The Senior Electrical Engineer is in charge of the Branch of Electrical Design. This includes responsibility for activities required to complete final plans and estimates, and to review all work for completeness and accuracy. The employee is recognized as an electrical design resource for the statewide weigh-in-motion programs. An error in judgment could result in design and construction of a substandard facility, causing future maintenance problems, operation problems or damage to State or privately owned property.

PUBLIC AND INTERNAL CONTACTS
The Senior Electrical Engineer works closely with the district Capital Program and other statewide design staff, headquarters, and

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district personnel. Maintains close coordination and cooperation with staff members of cities, counties and other agencies when appropriate.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Physical requirements for this position include sitting for long periods of time using a keyboard and video display terminal and may occasionally require bending, stooping and kneeling. Mental requirements for this position include the ability to multi-task, adapt to changes in priorities, and complete tasks or projects with short notice; ability to organize and prioritize large volumes of varied documents; and the ability to concentrate in order to review and create documents and meet strict deadlines. Emotional requirements for this position include: interaction with many people and the ability for employees to work together in a cooperative manner; ability to resolve emotionally charged issues reasonably and diplomatically; deal effectively with pressure, maintain focus, and intensity yet remain optimistic and persistent, even under adversity; consider and respond appropriately to the needs, feelings, and capabilities of different people in different situations; is tactful and treats others with respect; open to change and new information; and adapts behavior and work methods in response to new information, changing conditions, or unexpected obstacles.

WORK ENVIRONMENT

While at their base of operation, employee will work in a climate-controlled office under artificial lighting. Employee may also be required to travel and work outdoors and may be exposed to traffic, dirt, noise, uneven surfaces, and/or extreme heat or cold.

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

SUPERVISOR (Print)

SUPERVISOR (Signature)	DATE
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