

CLASSIFICATION TITLE Transportation Engineer (Elect)	OFFICE/BRANCH/SECTION District 7 / Construction Field	
WORKING TITLE Assistant Resident Engineer	POSITION NUMBER 907-xxx-3609-xxx	REVISION DATE 07/01/2026

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

GENERAL STATEMENT:

Under the supervision of the Senior Transportation Electrical Engineer and direction of one or more Resident Engineers (RE), the Assistant Resident Engineer (ARE) will perform a wide variety of professional engineering work. Serves as the inspector on construction projects, reads plans and specifications, inspects work, prepares daily reports, measures work done for payment, documents progress of contractor's work, makes calculations for progress payment and creates as-built plans in connection with the administration of construction contracts. Must possess a valid California Driver's License.

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, Prosperity, Employee Excellence - Integrity, Stewardship)
- **Decision Making**: Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Safety, Prosperity, Employee Excellence - Integrity, Stewardship)
- **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. (Prosperity, Employee Excellence - Collaboration, Equity, 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, Equity - Collaboration, Equity, Integrity, Stewardship)
- **Teamwork/Partnership**: Develops, maintains, and strengthens partnerships with others inside or outside of the organization through effective communication and collaboration. (Prosperity, Employee Excellence - Collaboration, Equity, Pride)
- **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. (Equity, Prosperity - Collaboration, Equity, Integrity)
- **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, Climate Action, Prosperity - Collaboration, People First, Stewardship)
- **Analytical Skills**: Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Safety, Climate Action, Prosperity - Innovation, Pride, Stewardship)
- **Thoroughness**: Ensures that work and information is complete and accurate. Ensures that assignment goals, objectives, and completion dates are met. Documents and reports on work progress. (Equity, Employee Excellence - Collaboration, Integrity, Pride)

TYPICAL DUTIES:

Percentage Essential (E)/Marginal (M) ¹	Job Description
50% E	Performs daily and/or nightly field inspections and prepares daily inspection reports documenting the Contractor's activities. Reviews the contractor's construction work, materials used and submittals for compliance, completeness and accuracy. Maintains accurate and complete project records and ensures compliance with departmental policies and procedures. Calculates and documents field quantities for payment purposes. Documents as-built condition of constructed facility. Applies good judgment in analyzing work situations for difficult engineering and contract administrative problems while drawing sound conclusions.

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25%	E	Ensures complete, accurate and timely contract records pertaining to construction progress, job expenditures, budget programs and work order balances, are maintained in accordance with the State and Federal regulations and laws. Confers with contractors regarding compliance with plans and quality of work and construction activity.
15%	E	Assists Resident Engineers in the preparation of contract change orders ensuring proper construction and completion of the contract. Researches, formulates and develops solutions for field conditions. May include engineering re- design work. Reviews extra work bills, plans, specifications and estimates. Oversees the installation of electrical equipment, and performs other work tasks as directed. Elevates all issues and makes recommendations.
10%	E	Ensures safety of State and Contractor employees, as well as general public safety by observing operations and conditions, taking corrective action when necessary. Reviews Contractor's operations for compliance with CALOSHA regulations. Represents Caltrans in meeting with Federal, State, Local and Regional agencies, contractors, consultants, and the public regarding the scope and content of the contract.

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

None. The incumbent may be called upon to act in the absence of the supervisor for a short duration. Position may have responsibility for functional guidance in training and assisting inexperienced employees.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge of contract documents to include but not limited to the Standard Plans and Specifications, varying types and methods of industry construction practices, State safety orders, traffic control, field office engineering techniques, effective communication, both written and verbal and negotiation skills with respect to internal and external customers.

Knowledge of computers, communications, data analysis procedures and testing procedures as required to effectively inspect an interconnected traffic management, communication and general electrical and electronic systems. Also checks extra work bills, plans, specifications and estimates prepared by others oversees installation of electrical equipment by others and performs other work tasks as directed.

Knowledge of all phases of construction; knowledge of electronics, electrical systems, materials, construction methods and testing methods used; and knowledge of contract administration procedures.

Knowledge of factors that influence the impact of transportation facilities on environment, the community and the economy. Ability to analyze and interpret the plans and specifications, and the resultant day-to-day communication with contractors, utility companies, public and other agencies is required. The tasks normally are non-repetitive as each contract has its own onset problems and features.

Ability to comprehend and interpret Standard Plans and Specifications, Special Provisions, and Change Orders; assess contractor's field operations for safety purposes; determine if Contractor has adequate and competent staff performing required work in compliance with the contract; communicate effectively with Contractor's and State's personnel regarding performance and safety issues, performs simple fields surveys and other engineering tasks as required, provide leadership and guidance to staff to successfully accomplish assigned tasks.

Ability to assess conflicts in the contract documents, and determine a best course of action; assess and respond appropriately to internal and external personality conflicts that may interfere with progress of the work. Assess circumstances that may require elevation of issues to appropriate level for resolution.

Ability to prepare comprehensive reports and correspondence.

Ability to perform difficult and complex engineering work.

Ability to develop, implement and evaluate project activities.

Ability to develop and choose from alternative courses of direction.

Ability to communicate effectively and establish and maintain professional and cooperative relations with those contacted in the course of work.

Ability to travel to and work at construction sites throughout the district and during all shifts.

Ability to make neat and accurate computations and engineering notes and to prepare reports.

Ability to analyze written and statistical reports and determine what direct or indirect effect these reports may have.

Ability to be innovative in resolving issues for the benefit of the department and the trust of the general public.

Ability to recognize deficiencies as they arise and develop workable and effective solutions.

Ability to apply sound judgment, analyze situations accurately and take effective action.

Ability to make decisions in the absence of higher-ranking personnel to assure project flow and appropriately elevate issues.

Ability to operate office equipment; i.e., computers, telephone, fax and copier machines.

Ability to see and maintain alertness to the environment at night is critical.

Ability to inspect construction work and determine whether it meets specification requirements.

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RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Errors in judgment and/or decisions could affect public safety or result in tort liability for the Department. Inaccurate, delayed or incomplete contract plans and estimates may result in added cost.

The incumbent is responsible for sound engineering and contract administrative decisions, with the review of a Resident Engineer and/or Senior Construction Engineer. Poor decisions could lead to significant fiscal impact to the department and ultimately the taxpayers.

PUBLIC AND INTERNAL CONTACTS

The position requires continuous written and oral communications contacts with internal and external customers at all levels in the District and in Headquarters. The position requirements include representing Caltrans by participating in meetings and interfacing with Federal, State, local and regional agencies, contractors, consultants and the public regarding the scope and content of the particular contract. The position requires establishing and maintaining good working relationships.

This position requires continuous contact with Caltrans personnel, contractors, engineering consultants, field inspectors, Resident Engineers, Senior Construction Engineers, materials laboratory, Commercial Materials Inspection Engineer and the Engineering Service Center, and the Federal Highways Administration Area Engineer, local agencies, elected officials, as well as public.

These contacts may be verbal and/or written, as necessary. The incumbent must establish and maintain friendly and cooperative relations with those contacted during work.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Incumbent must be in good health, health that supports good attendance. He/she will be required to access construction sites on a frequent basis. He/she may be required to work for long periods of time at a keyboard and video display terminal. This position requires driving for State business and be able to safely operate a vehicle. Proof of a valid California Drivers License is required and the incumbent shall provide authorization for release of driver information for the Department's use.

Physical: Outdoor activities require the ability to traverse across rugged terrain, hilly areas, or on uneven surfaces. Physical activities vary and any singular physical requirement may be for lengthy periods of time. Required to be trained in first aid/CPR and apply this skill in the event of an emergency. The incumbent must be able to walk, stand, or sit for long periods of time.

Other physical requirements of the job include ability to lift and/or carry 25 pounds or more, reaching overhead, pushing or pulling, twisting, climbing, balancing, bending, crouching, squatting, crawling and fine manipulation. Hearing and sight are both essential to job performance because the engineer must be able to hear directions, traffic, and equipment and must see to perform his/her duties, safely. Night vision must be good for safety when working after dark. While in the office, incumbent will work in a climate-controlled office under artificial light. However, due to periodic problems with the heating and air conditioning, the building temperature may fluctuate. Requires manual dexterity to operate computer for preparation of reports, diaries and/or preparations and various forms. Must be able to travel to field office and construction sites. May also travel to other District offices and Headquarters. The location of a construction site may necessitate driving for long periods of time.

Mental: Must be able to sustain mental activity to write reports, resolve politically sensitive problems, manage diverse field issues, deal with a large number of complex problems simultaneously, perform audit of man-hours worked, identify equipment/supplies used, problem solve, analyze and reason solutions to related field operations and take the initiative to effectuate corrective action.

Emotional: Must be able to maintain emotional control during conflicts with contractor and/or workers. 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.

WORK ENVIRONMENT

Workload may subject incumbent to night work, frequent changes in work shift, frequent changes of work hours and workdays, and geographic transfer. Incumbent will be exposed to various work environments. Vacations may be restricted during peak times. Overtime may be required.

Incumbent may be required to carry cell phone and provide after hours contact information to his/her supervisors for purpose of emergency response as it relates to his/her construction projects. Incumbent may be called back to the work site after he/she has completed his/her normal work shift and left the work site, and/or may be required to remain at the work site or at home and return to the work site on short notice.

This position requires the incumbent to work both indoors and outdoors. Outdoors activity includes exposure to moving traffic, working on uneven terrain, adjacent to heavy equipment, chemicals, lab conditions, gas, fumes, high decibels of noise, dust, humidity, and weather conditions of extreme heat and/or cold. May require working in the field at night. Night work requires ability to work with artificial lighting. Ability to maintain alertness to the environment is critical. While indoors, performs tasks related to contract administration, documentation, and/or communications with other personnel. Work locations may be in the vicinity of the construction project. Office space may be in the office building and/or trailers.

Hard-hat and shirt and safety vest, or approved safety shirt, and long pants - no shorts or cutoffs- must be worn at all time in the field, without any exceptions. Personal safety requirements include but are not limited to:

Work boots, in good sturdy condition, must be worn to provide foot and ankle support and protection.

Provided safety gear, hard-hat, safety glasses, and safety vest, hearing protection devices, gloves, respirator, and other gear must be worn as required by Department.

Your duty statement may be updated on a yearly basis and/or as your job functions change.

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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.

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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