

POSITION DUTY STATEMENT

DOT PM-0924 (REV 01/2025)

CLASSIFICATION TITLE Transportation Engineer (Civil)	OFFICE/BRANCH/SECTION D12/Construction Administration/PQC	
WORKING TITLE Technology Coordinator/Transportation Engineer	POSITION NUMBER 912-501-3135-	REVISION DATE 10/01/2026

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

GENERAL STATEMENT:

Under the direction of a Senior Transportation Engineer, the Transportation Engineer (Civil) will perform difficult and complex engineering work related to construction management policies, procedures, and tools within the Division of Construction. Is the liaison between District and Headquarters staff, along with industry, regarding aspects of increasing utilization and innovative efforts of technology in terms of project development and contract administration. Represents the District as part of a Statewide team that leads the effort of transitioning the existing construction administration process toward e-Construction. Supports, maintains and educates staff on usage and upkeep of technology-based tools and equipment. Coordinates the planning, scheduling, and implementation of training for technology solutions. The incumbent works with other project delivery divisions, district staff, and headquarters staff to develop special reports, and develop and recommend changes in policies, programs, standards and concepts. Is the single point of contact for this technology in his area of assignment. Exceptional leadership, initiative, and communication skills are fundamental to carrying out the mission of this position.

CORE COMPETENCIES:

As a Transportation Engineer (Civil), 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.

- Learning on the Fly:** Learns quickly, is open to change, experiments, and is flexible. (Employee Excellence - Collaboration, Stewardship)
- Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Safety - Innovation, Pride)
- 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, Employee Excellence - Collaboration, People First, Pride)
- 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. (Prosperity, Employee Excellence - Collaboration, Innovation, 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, Employee Excellence - Collaboration, Innovation, People First)
- Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Employee Excellence - Innovation)
- 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. (Employee Excellence - Collaboration, People First)
- Analytical Skills:** Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Employee Excellence - Collaboration, Innovation, Integrity)
- Diagnostic Information Gathering:** Identify information needed to clarify a situation, seeking that information from appropriate sources. (Employee Excellence - Collaboration, Integrity)

TYPICAL DUTIES:

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

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50%	E	Support and maintain technology used by field construction staff. Support includes District implementation and maintenance of mobile devices (iPads), digital design and construction efforts including Unmanned Aerial System (UAS), automated machine guidance (AMG), smoothness and statistical pay factors (SPF), Falcon document management system, satellite-based grade management systems, Bluebeam software; electronic potential claim record system (ePCR), engineering report software, contract document retrieval software, as-built documentation software, and other construction software tools used and/or developed by Caltrans. Collect engineering data using UAS while in possession of a valid Remote Pilot Certificate issued by the Federal Aviation Administration (FAA). Track equipment and usage related to technology. Develop technology usage guidelines, instructions and protocols. Work with the Office of Performance and Innovation to develop and evaluate new technologies used in construction contract administration; to find appropriate projects for pilot evaluations; to create and maintain training and guidance for new and existing technologies; to represent District on technology committees and at meetings; to support innovation efforts to develop, test, and implement new technologies for field construction staff. Advise and consult with District cross disciplines on more complex issues relating to the integration of new technology into contract administration. Meet with users or stakeholders to establish business requirements, process flows, and technical requirements for new information tools and systems. Reviews guidance and technology for compliance with the Division of Construction Manual and Caltrans mission, vision, and goals.
30%	E	Inspection of contractor construction activity to ensure compliance with the project plans and specifications. Collect engineering data, sample construction materials and perform materials and environmental testing. Develop, or assist in the preparation of, specifications, change orders, contract estimates, and various documents and reports involved in the construction of transportation projects. Assist in the review of contractor submittals including Critical Path Method (CPM) schedules, water pollution control submittals, temporary traffic control submittals, shop drawings, etc. Assist in the research and documentation of information used for the resolution of claims being brought against the State by the contractor. May provide oversight of activities related to encroachment permits for utility relocation, local agency, and special funded transportation projects. May assist with construction support functions in the District 12 Construction Offices or District 12 Materials Labs.
15%	E	Responsible for making engineering calculations, analyzing situations regarding transportation facilities or system design concepts, applying sound engineering principles. Works in a team or independently to complete assigned engineering tasks for the development of projects or administration of construction projects. Facilitate, schedule, participate in or conduct quality control or constructability reviews, safety review meetings, Value Analysis Studies, or participate as a team member of a Project Development Team. Review or reference encroachment permits, Inter-Governmental Review/California Environmental Quality Act (IGR/CEQA) documents and local development plans. Respond or propose responses to inquiries, complaints, maintenance concerns, resolution of claims or pending litigation. Perform field reviews, investigations, inspections and prepare associated reports, diaries and documentation.
5%	M	Ensures safety of State employees, contractor's employees, as well as the traveling public by observing contractor's operations and traffic conditions, making recommendations, and taking corrective action when necessary. Reviews contractor operations for compliance with Occupational Safety and Health Administration (Cal/OSHA) regulations.

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

Does not supervise. May perform lead-worker responsibilities including coordinating the activities of a small group of staff which may include engineers, inspectors (assistant resident engineers), material testers, or office engineers. May be called upon to act in absence of the supervisor.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

KNOWLEDGE

Methods, materials, and equipment used in construction, surveying, and maintenance of transportation facilities. Incumbent must have knowledge of word processing and spreadsheet software as well as iPad applications related to construction activities.

ABILITIES

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Use UAS for data collection with a valid Remote Pilot Certification, access and extract information from databases. Work with others cooperatively in a project team relationship and supervisors; negotiate and communicate effectively, verbal and written, with supervisors, fellow workers, and others. Must have the ability to incorporate new procedures or techniques using technologies and be able to train others.

The incumbent will be required to develop and maintain contract administration technology, do mapping and drafting and make neat and accurate computations and engineering notes and prepare reports; prepare designs, plans and specifications for projects and perform basic drafting; inspect construction work and determine if it meets specification requirements; evaluate and implement utility relocation plans; analyze situations accurately and take effective action; prepare comprehensive reports and correspondence.

Ability to perform simple field surveys and other engineering tasks as required.

Ability to provide leadership and guidance to staff to successfully accomplish assigned tasks.

Ability to establish and maintain professional and cooperative relations with those contacted in the course of work, including Contractor's and State's personnel regarding performance and safety issues.

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

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

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

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

ANALYTICAL REQUIREMENT

Complexity of work problems requires good analytical ability. Problems include technology troubleshooting and implementation, and could vary from basic earthwork and grading calculations to the development of special staking procedures and redesigning facilities to fit existing field conditions.

Apply sound judgment, analyze situations accurately, develop and choose from alternative courses of direction, and take effective action.

Comprehend and interpret Contract Plans, 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.

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.

Inspect construction work and determine whether it meets contract requirements. Recognize deficiencies as they arise and develop workable and effective solutions.

Identify innovations that will increase productivity, reduce costs, and maintain or improve quality.

Possession of a valid Remote Pilot Certificate issued by the Federal Aviation Administration (FAA) is desirable.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Must be able to effectively make decisions concerning work in progress and in solving field problems. Failure to handle implementation and administrative issues properly as they arise could result in the unnecessary payment of large claims to the contractor and/or delay in contract completion. Improper management of resources and lack of quality assurance would result in loss of funding and poor delivery to the public. Failure to incorporate technologies could result in inefficient and costly contract administration practices.

PUBLIC AND INTERNAL CONTACTS

Incumbent must be able to communicate effectively with others including Construction Engineers, Department staff, technical/professional level staff of outside agencies, contractor's personnel and members of the public regarding construction projects. Has frequent contact with private contractors, Resident Engineers and their staff, and other branches, both District and Headquarters, to provide coordination of effort. Good communicative skills are essential in carrying out the duties. Must be able to guide teams to an issue resolution and be able to build consensus within the team. Incumbent must establish and maintain friendly and cooperative relations with those contacted in the course of work.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

PHYSICAL: Physical activities vary and any singular physical requirement may be for lengthy periods of time. May be required to sit and/or stand for long periods of time. Requires manual dexterity to operate computers (keyboard and video display terminal), tablets, field engineering equipment, testing, and safety equipment. Activities include field measurements, inspections and observations, in addition to reviewing and tracking documents and preparation of reports and various forms. Must be able to

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review documents, plans, and specifications in the format provided to field personnel and the contractors. Must be able to review the contract documents as they are maintained by the contract administrators.

Required to be trained in first aid/CPR and the ability to apply this skill in the event of an emergency. Outdoor activities require the ability to traverse across rugged terrain, hilly areas, or on uneven surfaces that are near freeways, highways, roads, and construction sites. Physical activities require the ability to walk, stand, stoop, bend, twist, crouch, kneel, crawl, push and/or pull, reach overhead and lift, move and/or carry equipment/items weighing 25 pounds or more.

Hearing and sight are both essential to job performance because the incumbent must be able to hear directions, traffic and equipment, and must see to perform their duties safely. Corrected vision/hearing is acceptable. Night vision must be good for safety when working after dark.

Must be able to travel to field offices, field meeting locations, and construction sites; may also travel to other District Offices and Headquarters; therefore, incumbent must be able to travel by car or commercial transportation. Incumbent must be able to travel using a car; vehicles will vary from passenger cars to one-ton pickup trucks. This travel may necessitate traveling on long stretches of highway through mountains, deserts, and urban areas. Some terrain may cause the jostling of the vehicle's occupants.

MENTAL: Requires sustained mental activity needed for data management, report writing, problem solving, analysis, and reasoning. Must have the ability to multi-task, adapt to changes in priorities, and complete tasks or projects with short notice. Must have the ability to organize, track, and prioritize large volumes of varied documents and the ability to concentrate in order to review documents and meet deadlines.

EMOTIONAL: Requires the ability to develop and maintain cooperative working relationships; respond appropriately to difficult situations; recognize emotionally charged issues or problems; and acknowledge the various responses. Must be able to deal effectively with pressure, maintain focus, and intensity yet remain optimistic and persistent, even under adversity. Must consider and respond appropriately to the needs, feelings, and capabilities of different people in different situations; must be tactful and treat others with respect.

WORK ENVIRONMENT

Incumbent may be required to travel locally and rarely to other areas of the state for training. 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 will be required to use state issued cell phone and vehicle responsibly in conformance with the Department's policies. Must respond timely during working hours and provide after hours contact information to their supervisor for purposes of emergency response as it relates to their construction projects. Incumbent may be called back to the work site after incumbent has completed their regular shift.

This position requires the incumbent to work both outdoors and indoors. Outdoor 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. 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 safety vest, or approved safety shirt, and long pants - no shorts or cut-offs - 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 the Department.

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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

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

SUPERVISOR (Print)	
KEN TRAN	
SUPERVISOR (Signature)	DATE