CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
Transportation Engineer (Civil)	District 11/Various Divisions	
WORKING TITLE	POSITION NUMBER	REVISION DATE
Resident Engineer	911-516-3135-911	09/09/2024

As a valued member of the Caltrans leadership team, you make it possible for the Department to provide a safe and reliable transportation network that serves all people and respects the environment.

## **GENERAL STATEMENT:**

Under direction of the Area Senior Construction Engineer (a Senior Transportation Engineer), the Transportation Engineer (Civil) will serve as the licensed professional Resident Engineer (RE) on construction projects. The RE will assign work, give instructions, and make decisions on engineering and administrative problems in connection with the construction of various transportation projects.

Appointment to Range D requires a valid Professional Engineering License (Civil) issued by the California Board of Registration for Professional Engineers.

# 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.

- Flexibility and Managing Uncertainty : Adjusts thinking and behavior in order to adapt to changes in the job and work environment. (Safety First, Cultivate Excellence Engagement, Innovation)
- Decision Making: Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Safety First, Strengthen Stewardship and Drive Efficiency Engagement, Integrity, Pride)
- 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. (Cultivate Excellence Integrity)
- **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. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency Engagement, Integrity)
- **Relationship Building:** The ability to develop and maintain internal and external trust and professional relationships, which includes listening and understanding to build rapport. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency Engagement, Integrity)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Strengthen Stewardship and Drive Efficiency Engagement, Equity)
- **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. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency - Engagement, Equity)
- Analytical Skills: Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency Engagement, Innovation)
- **Technical Expertise:** Depth of knowledge and skill in a technical area. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency Innovation, Integrity, Pride)

# TYPICAL DUTIES:

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

#### STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION **POSITION DUTY STATEMENT** PM-0924 (REV 01/2022)

45% E Performs the duties of lead worker over a team of inspectors, materials testers, consultants, and office personnel engaged in construction inspection. Coordinates/assigns work, trains, gives instructions, and makes decisions on engineering and administrative tasks in connection with various transportation projects. Provides oversight to contractors who complete many items of work on a project; interprets and enforces the State's requirements to ensure compliance from the contractor on project specifications. Ensures engineering integrity of construction projects including plan revisions and completing engineering inspections; ensures compliance with plans and specifications; monitors contractor's field operations and progress; conducts time-impact analysis; measures and records pay quantities; prepares daily reports. Analyzes the plans and estimates. Writes reports and makes estimates of a specialized nature in connection with various highway or other transportation projects.

- 35% E Responsible for drafting, approving, and submitting contract change orders, progress and final pay estimates, comprehensive field reports, and miscellaneous correspondence. Reviews plans and estimates for completeness and accuracy. Prepares comprehensive reports and correspondence; writes reports and conducts engineering investigations to ensure compliance with applicable laws, ordinances, standards, plans, and specifications. Formulates, researches, and develops solutions for field conditions that necessitate a contract change order. This may include doing any necessary engineering re-design work. Documents as-built condition of constructed facility. Makes Contract Acceptance recommendations. Assists the Construction Engineer with construction contract claims resolution.
- 10% E Ensures expenditures do not exceed allotted funds and promptly elevates concerns to the Construction Engineer if it becomes apparent that the balance of funds is insufficient to complete the projects. Assists the Project Manager in requests for additional funds when needed. The RE also communicates any delivery date commitment issues to the Construction Engineer. Ensures project construction conforms to traffic control, environmental, hazardous waste, and storm water pollution prevention criteria. Assists with ensuring performance of all safety-related activities. Traffic Management planning. Assists with ensuring compliance with regulations and specifications related to labor and civil rights. Reports any personnel, training, or staffing issues to the Construction Engineer for resolution.
- 10% E Coordinates resources such as equipment, vehicles, offices, construction staking requests, and overtime. Assist with ensuring that the project records are maintained per the Construction Manual.

<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

None. Employee will serve as lead worker and may be called upon to act in the absence of the supervisor for a short duration. May serve as a lead for functional guidance in training and assisting less experienced employees.

#### KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge of: Basic principles of physics, chemistry, and mathematics as applied to civil engineering; stress analysis; mechanics; engineering economics; hydrology and hydraulics.Storm Water Pollution Prevention Plans (SWPPP); Cal/OSHA safety regulations; methods, materials, tools and equipment used in highway and bridge construction; design engineering; cost estimating; knowledge of the various influences of transportation facilities and systems on the environment; testing of materials; principles and practices used in utility relocation; scheduling; critical path method (CPM) scheduling; and safety practices. Must have a complete knowledge of contract administration paperwork and documentation. Must have knowledge of the Construction Manual, Standard Specifications, and Special Provisions. The Resident Engineer must thoroughly study the assigned projects, becoming familiar with all its facets. Required to have a moderate degree of analytical skill to determine if construction work meets specification requirements and to interpret plans and specifications correctly. The Resident Engineer will be expected to work under considerable independence and make judgment calls as to when issues, problems, or contract clarifications needs to be elevated to the Construction Engineer. The Resident Engineer has authority under Section 5-1.01, "Authority of the Engineer", of the Standard Specifications. Will work closely with Assistant Resident Engineers (the Assistant Resident Engineer will be making recommendations and elevating all issues that have a mandate that only a licensed Professional Engineer has authority).

Ability to communicate effectively, both verbally and in writing, and work under pressure is required. Must be able to prepare reports and correspondence. Must be able to use and understand computers. Must have the ability to make neat and accurate mathematical calculations and engineering notes; and possess interpersonal skills necessary to be an effective team member.

Must be able to organize and prioritize. Must be able to concentrate, formulate effective strategies, be multi-tasked, adapt to changes in priorities, and complete complex tasks or projects with short notice. Ability to resolve emotionally charged issues reasonably and diplomatically. Must be able to develop and maintain cooperative working relationships.

Must have the ability to evaluate work methods and traffic conditions closely, both before and during the work, to assure safety.

## RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The Resident Engineer is responsible for ensuring the contract is built according to plans and specifications; construction operations provide for the safety of employees and the traveling public; and that all changes in the contract are covered by change orders agreed upon by the contractor and the State.

Monitors contract funds and alerts the Construction Engineer to problems in a timely manner. Monitors delivery date commitments and alerts the Construction Engineer to problems in a timely manner. Failure to understand and failure to incorporate appropriate standards, requirements, and policies into work product may result in expensive waste of time and materials, cause additional work and project delays, and could result in excessive construction contract claims, and unnecessary costs to the State. An error in decision, judgment, or the processing of estimates or other contract administration paperwork would result in errors in payment to contractors and/or providers of service under contract with the Department. Poor engineering decisions made by the employee could cause a reduction of productivity.

Responsible for their actions, decisions, quality of work, and proper use of State time, equipment and materials. Improper performance of duties and/or failure to adhere to established policies, procedures and guidelines could lead to adverse action and possible termination.

#### PUBLIC AND INTERNAL CONTACTS

Must be able to communicate effectively with others including Department staff, technical/professional level staff of outside agencies, assistant resident engineers, contractor's personnel, and members of the public regarding construction projects. Maintains frequent contact with City and County representatives, private contractors, traveling public, Senior Engineers and their staff, and other branches, both District and Headquarters, to provide a coordination of effort in processing estimates, payments, and other documents that are handled by the Construction Field Office. Must be able to communicate effectively with Contractor's personnel, property owners, and internal personnel. Good communication skills are essential in carrying out the duties.

## PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Must be able to lead. Must be able to work on uneven ground, climb, lift, carry, bend, squat, kneel, crouch, reach, pull, push, grasp, sit, stoop, crawl, and repetitive use of extremities. Must be able to transport a variety of objects that are less or equal to 40 pounds. A hard hat and safety vest or approved safety shirt must be worn at all times in the field, no exceptions. May be required to sit for long periods of time. May be required to stand for long periods of time.

#### WORK ENVIRONMENT

The employee will be exposed to fieldwork, earthwork, paving operations, lab work, fog, weather conditions, chemicals, lab conditions, equipment, machinery, heat, cold, dust, gas, fumes, outdoor conditions, indoor conditions, humidity, and high decibels of noise. Hardhat and safety vest or approved safety shirt, and eye protection must be worn at all times in the field, no exceptions. Employee must work with a variety of materials including testing equipment. While at the Construction office employees will normally 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. Workload may subject employee to night work, flexible hours, frequent changes of shift, frequent changes of work hours and workdays, and geographic transfer. Travel is required. A valid California driver's license is desired. Incumbent may be required to travel on short-term and/or long-term expense. Vacations may be restricted during peak times. Overtime may be required.

Will be required to participate and complete the Caltrans Resident Engineer Certificate Program.

The Caltrans Transportation Engineer (Civil) Rotation Program is a mandatory 24-month to 33 months rotation assignment for all permanent, full-time Transportation Engineer (Civil) employees that have completed their probationary period hired by Caltrans Districts after June 22, 2018, or an earlier date as determined by the Districts. The purpose of Rotation Program is to provide opportunities for employees and Caltrans to benefit by participating in a standardized process that systematically engages newly hired engineers. Participants will develop well-rounded project delivery knowledge, skills, and abilities by rotating through diverse project delivery functional units. The Rotation Program includes mandatory core assignments in Design and Construction units, as well as a mandatory elective assignment. Each rotation assignment is typically between 6 to 12 months and will be based on workload needs and the employee's goals. Assignments may involve long-term travel and can be located throughout the state.

In addition to the Caltrans Transportation Engineer (Civil) Rotation Program, an incumbent may be required to go on loan to another project delivery function when there are temporary or peak staffing needs in those areas.

Will be assigned work based on Departmental needs and can be assigned anywhere within District 11 which includes San Diego and Imperial Counties.

Possession of a valid driver's license is required to operate a State owned or leased vehicle.

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.)

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