CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
Transportation Engineer (Civil)	District 10 Construction 501, District 910	
WORKING TITLE	POSITION NUMBER	REVISION DATE
Assistant Resident Engineer	910-501-3135-xxx	

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 the direction of the Area Construction Senior Transportation Engineer and/or the Resident Engineer, incumbent performs various transportation construction and Engineering tasks in the office and field settings, i.e. conducting engineering inspections for compliance checks and making recommendations; performing labs to analyze construction materials for quality control. Full details are noted in the Typical duties section As incumbent progress in experience, assignment will increase from average to high difficulty.

### **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. (Cultivate Excellence Engagement, Innovation)
- Dealing with Ambiguity (Risk): Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Cultivate Excellence, Lead Climate Action Engagement, Innovation)
- 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,
  Strengthen Stewardship and Drive Efficiency 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)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Strengthen Stewardship and Drive Efficiency Engagement)
- **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, Integrity)
- Analytical Skills: Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Cultivate Excellence - Engagement)
- 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. (Cultivate Excellence, Strengthen Stewardship and Drive Efficiency - Engagement, Integrity)

### **TYPICAL DUTIES:**

Percentage Job Description

Essential (E)/Marginal (M)<sup>1</sup>

50% E Responsible for performing engineering inspections; ensures compliance with plans and specifications; makes engineer recommendation; monitors contractor's work and progress; measures and records pay quantities utilizing various measuring devices such as tape measures and measuring wheels. Prepares daily reports of the work including documenting conversation and other items that affect the work. Incumbent will be responsible to follow the Construction Manual. Incumbent will make recommendations and seek the approvals of the Resident Engineer or licensed engineer.

20%	E	Performs laboratory, reviews or analyzes field tests of construction materials including Quality Control/ Quality Assurance (QC/QA) coordination and prepares or reviews reports pertaining to construction materials. Measures materials such as aggregate, asphalt concrete, and Portland cement concrete using various testing devices such as a nuclear gauge, ignition oven, and compaction tube. Perform field test at the Construction site or Construction lab in accordance to the written standards. Record and document field test and maintain project records.
20%	E	Prepares and recommends monthly progress estimates, contract change orders, and contract acceptance and obtains approval from licensed engineer in responsible charge. For the contract change orders incumbent will make necessary calculations to justify money or time. Incumbent is responsible for maintaining contract records. Assists the Construction Engineer or Resident Engineer with construction claims resolution.
10%	Μ	Performs drafting and engineering necessary in making revisions to contract plans.

<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. Incumbent may be called upon to act in absence of the supervisor for a short duration. May serve as a lead engineer for other inspectors and for functional guidance in training and assisting less experienced employees.

## KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Must have a complete knowledge of contract administration paperwork and documentation. Must be able to communicate effectively in both verbal and written form. Must be able to use and understand computers. Must have knowledge of the Construction Manual, Standard Specifications, and Special Provisions. Must be able to prepare reports and correspondence. Incumbent is required to have a moderate degree of analytical skill to determine if construction work meets specification requirements and to interpret plans and specifications correctly. Incumbent should have knowledge of methods, materials, tools and equipment used in highway and bridge construction; scheduling; and safety practices. Incumbent is required to know methods of proportioning and handling Portland cement and asphalt concrete; testing of materials; principles and practices involved in utility relocation, environmentally sensitive areas, Storm Water Pollution Prevention Plans (SWPPP) and Cal/OSHA safety regulations. Incumbent must be able to calculate pay quantities on Contractor's contracts and communicate effectively orally and in writing. Personal computer (PC) skills are required. Must have the ability to make neat and accurate mathematical calculations and engineering notes; make sound decisions in the implementation of contract plans, specifications and various engineering activities; demonstrate the potential to assume progressive technician journey level responsibility; organize/arrange data to produce effective work products without repetitious direction; and possess interpersonal skills necessary to be an effective team member.

Knowledge of: Basic principles of physics, chemistry, and mathematics as applied to civil engineering; stress analysis; mechanics; strength of materials; properties and uses of engineering materials; methods and equipment of engineering construction; engineering economics; hydrology and hydraulics.

Ability to: Inspect construction work and enforce compliance with plans and specifications; analyze situations accurately and take effective action; prepare reports.

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

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. 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 recommendations made by incumbent could cause reduction of productivity (The incumbent cannot make "engineering decisions" without a PE license.)

Incumbent is responsible for his/her 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

Incumbent must be able to communicate effectively with others including 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 a coordination of effort in processing estimates, payments and other documents that are handled by the Construction Field Office.

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Incumbent must be able to communicate effectively with Contractor's personnel, property owners and internal personnel. 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.

## PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Must possess the ability 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 variety of objects that are less or equal to 40 pounds. Hardhat 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.

The workload is subject to frequent, substantial, and unexpected changes. Workload may subject employee to 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. Night-work, overtime and/or flexible hours may be required. 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 task or projects with short notice. Ability to resolve emotionally charged issues reasonably and diplomatically. Must be able to develop and maintain cooperative working relationships. Vacations may be restricted during peak times. Use of computers and other various office equipment is required.

#### WORK ENVIRONMENT

Job will have exposure to night work, field work, 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. Incumbent 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. 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.

All Transportation Engineers hired by Caltrans after May 19, 2000 will be required to participate in the mandatory "Transportation Engineer Rotation Program". The rotation program consist of 9 months Construction Work, 9 months Design Work, and 6 months in an Elective Assignment(s). The rotation length and assignment will be based on workload needs and could take place anywhere within Central Region Construction. The rotation program is a key element in the development of our new employees and allows them to be assimilated into the Caltrans workforce much quicker and to be more productive.

In addition, to the Transportation Engineer Rotation Program, incumbent may be required to go on loan to other functional units during the winter months, when there is excess staff, or staffing needs in another area, etc.

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.)

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