

POSITION DUTY STATEMENT

PM-0924 (REV 04/2021)

CLASSIFICATION TITLE Transportation Engineer Tech	OFFICE/BRANCH/SECTION D3/North Region Construction	
WORKING TITLE Transportation Engineering Technician	POSITION NUMBER 903-502-3175-XXX	EFFECTIVE DATE

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:

When working in North Region (NR) Construction, the incumbent will be under the direct supervision of a NR Construction, Senior Transportation Engineer, and may receive direction from a Resident Engineer (Lead Worker). When working in North Region Project Development (NRPD), the incumbent will be under the direct supervision of a NRPD, Senior Transportation Engineer and may receive direction from a Project Engineer (Lead Worker).

Transportation Engineering Technician can be tasked in several engineering functions in the region. Based on annual workload and seasonal needs, the incumbent may be assigned by Caltrans to a variety of positions in the field or office environment.

In either environment, the incumbent will perform various transportation engineering tasks. Travel to project sites will be required. Possession of a valid California Driver's License is required when operating a state owned or leased vehicle.

CORE COMPETENCIES:

As a Transportation Engineer Tech, 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.

- **Creativity and Innovation:** Thinks beyond the confines of traditional models to recognize opportunities, seek creative solutions and take intelligent risks. (Cultivate Excellence - Innovation)
- **Dealing with Ambiguity (Risk):** Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Strengthen Stewardship and Drive Efficiency - Engagement)
- **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 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. (Safety First - Equity)
- **Teamwork/Partnership:** Develops, maintains, and strengthens partnerships with others inside or outside of the organization through effective communication and collaboration. (Strengthen Stewardship and Drive Efficiency, Advance Equity and Livability in all Communities - Integrity)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Enhance and Connect the Multimodal Transportation Network, Lead Climate Action - 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 First - Engagement)
- **Analytical Skills:** Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Cultivate Excellence - Innovation, Pride)
- **Commitment/Results Oriented:** Dedicated to public service and strives for excellence and customer satisfaction. Ensures results in their organization. (Lead Climate Action, Advance Equity and Livability in all Communities - Equity)

TYPICAL DUTIES:

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

ADA Notice

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50%	E	When working in North Region Construction the incumbent will make inspections of construction projects. Ensure compliance with plans and specifications, collect engineering data, assist in drafting and prepare specifications, change orders, contract estimates, and other documents and reports involved in the construction of projects. Check engineering calculations for accuracy; assist in the preparation of and processing of Extra Work Bills, checking against the Resident Engineers and Assistant Engineer's dairies, verify hours and dollar amounts against dairies, make field investigations and laboratory analysis of materials being used in construction projects and advise Resident Engineer of problems or situations on project sites.
40%	E	When working in NRPD the incumbent will prepare project designs, plans, maps, estimates, specifications and reports under the direction of the engineer using computer programs and the latest CADD software on the Caltrans engineering workstation. Gather and analyze technical information as a team member for the design of transportation projects. Perform mathematical calculations related to plans, maps and estimates (quantities and costs). Assist in the preparation of roadway alignments, profile grades, superelevation drainage facilities and other geometric features. Performs drafting of all types of plans, maps, working drawings and detailed drawings involved with transportation project contract plans, boundary line maps, as-built maps and utility conflict maps. Analyze utility relocation plans as submitted by outside agencies. Obtain and utilize the latest updates of the Plans Preparation manual and drafting standards from HQ Division of Design. Check plans, maps and estimates for completeness and accuracy and conformity to standards. Attend project meetings, safety and construct-ability review meetings. Perform field work at project locations and site investigations.
10%	M	Perform special technical studies, investigations, and transportation engineering surveys or road inventories: prepares related reports and correspondence.

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

This position does not supervise or act in a lead worker capacity.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge of: methods, materials, and equipment used in construction, surveying and maintenance of transportation facilities; standards of alignment, grade of highway and other transportation facilities. Incumbent must have extensive knowledge of Computer Aided Drafting and Design (CADD) Software, the Highway Design Manual, the Caltrans Standard Specifications, and knowledge of word processing and spreadsheet software.

Ability to: prepare plans and estimates for construction or maintenance of transportation facilities, make accurate, neat and concise engineering calculations, documents and correspondence; use CADD software, word processing and spreadsheet software, make nonprofessional engineering decisions; perform drafting and mapping. Work with others cooperatively in a project team relationship; communicate effectively, both written and oral, with supervisors, fellow workers and others. Must have the ability to incorporate new procedures or techniques and be able to receive instruction from transportation engineer supervisor, leadworker, or designer on a continuous basis.

Analytical Requirements: must be capable of understanding transportation-engineering problems; must have basic knowledge of construction procedures, basic means and methods use in highway construction, and a basic design engineering principles. Be able to make accurate engineering calculations to understand and accurately interpret contract plans and specifications and to keep accurate and organized record to gather, analyze and summarize data into a report. Must know how contract item quantities are computed and know the method of payment. Must be familiar with safe field review practices.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The incumbent is responsible for the timely initiation and prosecution of project development tasks assigned and that all work complies with all applicable manuals, circular letters and directives. The incumbent is required to coordinate work with Headquarters, other Regions/ Districts, their functional units, as well as other involved departments.

Failure to diligently prosecute the above may delay projects, increase cost, and result in a less than satisfactory product.

PUBLIC AND INTERNAL CONTACTS

At all times this assignment requires working effectively with other people. This includes personnel at levels within the North Region, other Districts, Headquarters, local agencies, FHWA, private industry, and the public.

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PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Employee will work under field conditions, which will entail walking on uneven terrain under variable weather conditions. The incumbent will work on project sites, and at that time, the incumbent may have to stand for long periods of time, walk on slopes or uneven terrain, move and transport bags of material samples (weighing up to 50 pounds) to Materials Labs.

Employee must be congenial and tactful when dealing with others while effectively and cooperatively accomplishing tasks. Frequent telephone interaction is common and necessary.

At times, the incumbent may have to be work in office environment. Employee will be required to sit for long periods of time using a keyboard and video display terminal.

WORK ENVIRONMENT

The individual will work as a construction inspector, materials tester, or in surveys. Incumbent may be required to live away from their permanent residence during the workweek.

When working outdoors, incumbent may be exposed to dirt, noise, uneven surfaces, and/or extreme heat or cold. During field work, use of heavy-duty clothes and boots is required. Periodic overtime work and out of town overnight travel may be required. Travel may require the use of State supplied vehicles that vary in size.

The individual may be loaned to Construction Engineering unit. While working in the office, the incumbent will work in a climate-controlled office under artificial lighting. There will be regular field trips to project sites, travel to meet with agencies, the public, and for training classes.

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