STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

### POSITION DUTY STATEMENT

PM-0924 (REV 01/2022)

| CLASSIFICATION TITLE             | OFFICE/BRANCH/SECTION   |               |
|----------------------------------|-------------------------|---------------|
| Transportation Engineer (Civil)  | District 3/North Region |               |
| WORKING TITLE                    | POSITION NUMBER         | REVISION DATE |
| Transportation Engineer- Range D | 903-200-3135-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 Design Branch Chief (a Senior Transportation Engineer), or an Area Senior Construction Engineer, the incumbent serves as the Project Engineer in charged of the engineering work necessary for the preparation of Project Study Reports, Project Reports, contract plans, specifications, and estimates for transportation improvement projects. Incumbent will act as a lead worker and assist other staff with the assigned project work. Incumbent is responsible for the distribution, direction, and oversight of assigned work, provide input on evaluations, and provide training to other branch members. Incumbent will participate as a design team member. Incumbent will perform a wide variety of difficult and complex transportation engineering work. Will serve as a Resident Engineer (RE) on construction projects, as described on Caltrans Civil Engineering/Land Surveyor Registration Required Activities List. We promote equity, diversity and equal employment opportunities for all. This position may require travel and work at various North Region locations. A valid California drivers license is required when operating a state owned or leased vehicle. A California PE licensed is require for 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.

- Creativity and Innovation: Thinks beyond the confines of traditional models to recognize opportunities, seek creative solutions and take intelligent risks. (Cultivate Excellence Innovation)
- Decision Making: Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate
  decisions. (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. (Enhance and Connect the Multimodal Transportation Network 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. (Strengthen Stewardship and Drive Efficiency Innovation)
- **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. (Cultivate Excellence Engagement)
- Customer Focus: Considers, prioritizes, and takes action on the needs of both internal and external customers. (Enhance and Connect the Multimodal Transportation Network 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. (Strengthen Stewardship and Drive Efficiency Engagement)
- **Forward Thinking:** Anticipates the implications and consequences of situations and takes appropriate actions to be prepared for possible contingencies. Anticipates and prepares for future developments. ( Advance Equity and Livability in all Communities Innovation)
- Technical Expertise: Depth of knowledge and skill in a technical area. (Cultivate Excellence Innovation, Integrity)

# **TYPICAL DUTIES:**

Percentage Job Description

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

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| 25% | Е | Develop, coordinate and review Contract Plans for highway, freeway, and transportation facility projects including plan sheets such as layouts, typical sections, superelevations, drainage facilities, design details, and traffic handling. Review, accurately verify and evaluate plans to ensure Right of Way needs; including utility and maintenance requirements are met. Request and review plans and design input from other functional units, including Traffic, Landscape, and Structures, and incorporate plans and feedback into the project plan package. Develop and review bridge site submittals and structure plans. Review the work of others and approve the plan sheets, estimates, and specifications for the project. Responsible for the final preparation and review of the Plans, Specifications, and Estimates (PS&E) and the Ready to List (RTL) submittal. |
|-----|---|---|
| 25% | E | Make decisions on difficult engineering and administrative problems: Each project contains elements of public safety and quality of fixed works. These include traffic control, false work, trench shoring, signs and signals, effectiveness of drainage, earthwork stability, and quality of pavement and base. These items are the responsibility of the RE. Prepare reports, special estimates, correspondence, final reports and contractor's claims reports, and estimate the value of contractor's claims. Write letters to contractors concerning performance and enforcement, and write substantiation for change orders. Respond to citizens written complaints.   |
| 15% | E | Review and prepare Project Study Reports, Project Reports and other reports to determine, support, and devise solutions to ensure project need and purpose are met. Develop and analyze alternative solutions to ensure that geometric and design elements are in compliance with State and Federal Standards. Prepare cost estimates required for the reports. Prepare exhibits and participate in public hearings and informal meetings. Develop project schedules and staffing requirements. Request recommendation from other functional units to furnish data for and review environmental documents.  |
| 15% | E | The Transportation Engineer will perform the duties of lead worker over a team of inspectors, materials testers, consultants and office personnel. These persons' duties change through the course of the job, and it is necessary to train new employees and redirect experienced ones. Give instructions to contractors: the contractor works at many tasks and completes many items of work on a project. These are covered by complex specifications, and the RE must interpret and enforce the State's requirements to ensure compliance.  |
| 10% | E | Keep construction records, estimates, and balances. Also keep inspector's diaries, daily diaries, and weekly newsletters. Prepare monthly progress pay estimates of work completed, materials on hand, and change orders. Has a significant financial responsibility to keep their project solvent, and to project needs for additional funds. Prepare and present information to the public. Has the responsibility of providing clear, safe signing and delineation to the public: this involves accurate and widespread press information and sometimes TV interviews.   |
| 5%  | E | Coordinate project impacts with local agencies and utility companies. Prepare cooperative agreement and Memorandum of Understanding (MOU) which outline responsibilities of cooperating parties and manage the execution of agreement with local agencies. Review plans for completeness and accuracy. Prior to completion of design, the RE often reviews construction plans for completeness, traffic handling and ability to construct.  |
| 5%  | M | Coordinate and manage project work and records. Organize, facilitate, and attend project team meetings and public workshops. Prepare general technical correspondence. Provide consultant oversight. Maintain relations with project neighbors and with the business community. May participate in public meetings and Caltrans hearings.   |
|     |   | TIONS are the core duties of the position that cannot be reassigned.<br>FIONS are the minor tasks of the position that can be assigned to others.   |

SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS None. May act in a lead capacity on assigned tasks.

# KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge of: surveying; hydraulics; hydrology; the various phases of transportation engineering, including planning processes; design procedures; construction materials, methods and practices; construction contract administration; traffic operations, maintenance procedures; transportation economics and financing; project management concepts; factors which influence the impact of transportation facilities on the environment, the community and the economy. The incumbent must have knowledge of transportation facility design principles; knowledge of methods, materials, tools and equipment used in the construction of

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transportation facilities; ability to draw and understand geometric design, write and prepare specifications and make cost estimates, analyze situations accurately and take effective action; must have knowledge of the various influences of transportation facilities and systems on the environment; ability to plan the activities of others, prepare plans, estimates and specifications for construction transportation facilities, inspect construction of such facilities and judge whether they meet specifications, and prepare comprehensive reports. Will be required to understand basic design engineering principles: make accurate engineering calculations, research and compile statistical data and prepare calculations for a variety of transportation improvement projects.

Ability to: understand and implement the Caltrans project development process; follow departmental guidelines and procedures; delegate and insure completion of tasks; use computer software for design and drafting; understand construction contract documents; facilitate meetings; make effective presentations; prepare correspondence, and reports; communicate effectively and congenially both verbally and in writing; relate to and work with interdisciplinary project teams to build consensus, and identify and resolve project issues; deal effectively with people, including those within the organization, other government agencies, the public in general.

Analytical Requirements: analyze situations accurately; identify potential conflicts, and adopt an effective course of action; review project schedules and determine appropriate level and timing of review; recognize issues that are significant and implement an effective course of action.

Range D is required to have a California professional engineer license. The incumbent must be a licensed professional engineer in the State of California. A California drivers license is required when operating a state owned or leased vehicle.

### RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Errors in judgment or decisions could affect public safety, affect environmental quality, cause project delay, and result in excessive cost for project construction or result in tort liability for the Department. Employee is responsible for timely completion of quality work while following established policies, procedures and guidelines including the proper use of State equipment. The incumbent will be responsible for making accurate engineering calculations; analyzing situations regarding transportation facilities or systems design concepts; and applying sound engineering principles to various engineering activities. Errors result in waste of time, unacceptable or improper construction, poor public relations and contractor's claims.

#### PUBLIC AND INTERNAL CONTACTS

Routine contact by phone or in person with District, Region and Headquarters Caltrans personnel, contractors, engineering consultants, developers, representatives from other government agencies, the public, and industry representatives. The incumbent must be able to respond to inquiries and provide accurate and factual information to internal Caltrans contacts as well as other state agencies and the general public; should be able to deal effectively with others.

#### PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Incumbent may be required to sit all for long and short periods of time using a keyboard and a mouse (fine manipulation), view a video display terminal and use a telephone. Incumbent is subject to sit, stand, kneel, stoop, bend, walk, drive, write (simple grasping), and lift files, when on construction project sites; walk on slopes or uneven terrain.

Incumbent may be required to master new technical knowledge, complete projects with short notice, adapt to changes in priorities, accommodate project changes, review lengthy reports, organize files, prioritize workload, adhere to procedures, solve problems, analyze data, perform research, and meet deadlines.

Incumbent may be required to interact with other people in a cooperative manner, work under pressure, deal with difficult or irate people, and maintain focus during difficult situations.

Employee may be required to drive to and work at various locations throughout the North Region.

### WORK ENVIRONMENT

**ADA Notice** 

While at their base of operation in an office setting, employee will work in a climate-controlled office under artificial light. Incumbent may be required to live away from their permanent residence during the week and work outdoors. During fieldwork, incumbent may be exposed to traffic, noise, dirt, water, uneven surfaces, and extreme heat or cold.

Periodic travel is required for fieldwork and training. Periodic overtime and overnight travel is required. Travel may require the use of State supplied vehicles that vary in size. Possession of a valid California Drivers License is required when operating a state owned vehicle.

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| Positions located in Sacramento may be relocated to Marysville in the future.  |      |  |  |
|--|------|--|--|
| I have read, understand and can perform the duties listed above. (If you believe you may require reasonal this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the 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 |  |  |
|  |      |  |  |