

POSITION DUTY STATEMENT

DOT PM-0924 (REV 01/2025)

CLASSIFICATION TITLE Sr Bridge Eng	OFFICE/BRANCH/SECTION DES/Bridge Design/Structure Office Engineer	
WORKING TITLE Senior Specification Development Engineer	POSITION NUMBER 559-240-3185-074	REVISION DATE 12/05/2025

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 Supervising Bridge Engineer (Office Chief, Structure Office Engineer), the incumbent is responsible for research and development of structure specifications for the construction of bridges, retaining walls and other transportation-related structures.

CORE COMPETENCIES:

As a Sr Bridge Eng, 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. (Prosperity - Collaboration, Innovation)
- **Dealing with Ambiguity (Risk):** Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Employee Excellence - Collaboration, Innovation, Integrity)
- **Initiative:** Ability to identify what needs to be done and doing it before being asked or required by the situation. Seeks out others involved in a situation to learn their perspectives. (Employee Excellence - Collaboration, People First)
- **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. (Employee Excellence - Collaboration)
- **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. (Equity - Collaboration, People First)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Prosperity, Employee Excellence - Collaboration, Pride)
- **Interpersonal Effectiveness :** Effectively and appropriately interacts and communicates with others to build positive, constructive, professional relationships. Tailors communication style based on the audience. Provides and is receptive to feedback. (Equity - Collaboration)
- **Analytical Skills:** Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Employee Excellence - Integrity, Pride)
- **Technical Expertise:** Depth of knowledge and skill in a technical area. (Employee Excellence - Pride, Stewardship)

TYPICAL DUTIES:

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

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40%	E	<p>Provides advanced technical direction to staff engaged in the research, development, and maintenance of structure-related specifications within the Structure Specifications Research and Development Branch.</p> <p>Performs expert-level review of developments to ensure technical accuracy, consistency with statewide standards, and alignment with policy direction.</p> <p>Trains, mentors, and guides Specification Development Engineers on specification-writing methods, research techniques, and interpretation of construction practices.</p> <p>Provides expert recommendations to the Branch Chief for improving statewide Standard Special Provisions (SSPs) and Standard Specifications.</p>
30%	E	<p>Develops, modifies, and authors complex or highly specialized specifications for bridges, retaining walls, and transportation-related structures.</p> <p>Research emerging construction technologies, materials, methods, equipment, and procedures to support continuous improvement of statewide specifications and structural construction practices.</p> <p>Prepares, processes, and maintains statewide Public Interest Findings (PIFs) and sole-source justifications for structure-related materials and systems, ensuring compliance with federal and state requirements.</p> <p>Independently identifies gaps in existing specifications and proposes new statewide standards where needed.</p>
15%	E	<p>Serves as technical resource for district and headquarters staff regarding structure specification interpretation, application, and revision.</p> <p>Reviews and provides formal approval or recommended corrections for nonstandard special provisions and project-specific structure specifications submitted by districts.</p> <p>Advises project teams on constructability, contract compliance, and specification intent to reduce risk of disputes, claims, or change orders.</p>
10%	E	<p>Performs independent quality assurance evaluations on proposed specification revisions, technical policies, and engineering guidance that affect structure-related specifications.</p> <p>Reviews policy updates for alignment with statewide specification practices and makes recommendations to management and technical committees.</p> <p>Represents SOE on statewide technical committees and provides expert input on specification and policy development.</p>
5%	M	<p>Represents Structure Office Engineer at internal and external meetings with districts, Headquarters programs, industry groups, and other agencies.</p> <p>Performs other job-related duties as required, including contributing to statewide initiatives, participating in training development, and supporting departmental goals.</p>

<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. May act as lead person regarding technical activities of engineering staff. May perform the duties of Office Chief or Branch Chief when requested.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Strong technical writing and editing skills; an excellent command of English grammar, spelling, and usage; and an attention to detail.

Strong interpersonal skills, including the ability to elicit cooperation and facilitate resolution of differences of opinion among

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various parties. Ability to effectively coordinate and communicate, both orally and in writing, with all levels of management and employees in Headquarters and Districts, and with persons outside the Department. Demonstrated ability to make presentations, lead workshops, and serve on technical teams.

Strong research skills, including the ability to seek out, gather, and evaluate information from multiple sources. Ability to synthesize the information into a final specification document.

Knowledge of the computer programs, including databases, used in preparing, managing, and tracking specifications; general knowledge of the methods, procedures, tools, and equipment used in the design, maintenance, and construction of transportation-related structures; general knowledge about the properties and uses of construction materials.

Must have advanced knowledge of structures construction; methods, procedures, tools and equipment used in construction; properties and uses of construction materials. Must have experience in field construction work.

Must have the ability to read and interpret complex structures plans, specifications and estimates; understand, visualize and interpret complex construction stages and sequences, analyze plans for construction feasibility.

**RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR**

The incumbent is responsible for reviewing construction specifications developed by branch staff, developing construction specifications and approving nonstandard structure specifications produced by others. Errors or poor judgment may unnecessarily lead to contract change orders, disputes that cause claims, increases in engineering and construction costs, reductions in work quality, or loss of federal funds.

**PUBLIC AND INTERNAL CONTACTS**

The incumbent has contact with staff from DES Subdivisions, HQ Divisions, Maintenance, Districts, and Legal. The incumbent also has contact with industry representatives, such as materials suppliers, fabricators, contractors, and industry groups, and with other state departments of transportation, and governmental agencies such as Federal Highway Administration (FHWA). The incumbent receives visitors from industry interested in promoting their products or in developing new products and technology.

**PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS**

Must be able to work on a keyboard and sit for long periods of time. Must be able to adapt to changes in priorities and complete tasks or projects with short notice. Must be able to work with others in a cooperative manner and treat others with respect.

The incumbent must be able to sustain the mental activity needed to conduct necessary research, analysis, and synthesis of issues to make well-reasoned recommendations; and must be able to deal effectively with pressure, maintain focus, and intensity while remaining optimistic and persistent, even under adverse circumstances.

The incumbent must behave in a fair and ethical manner toward others and demonstrate a sense of responsibility and commitment to public service.

**WORK ENVIRONMENT**

While at their base of operation, incumbent will work in a climate-controlled office under artificial lighting. As a statewide organization, DES adjusts to periods of fluctuating workload to successfully deliver projects. Incumbent will be required to travel and perform fieldwork and will be exposed to dirt, uneven surfaces, extreme temperatures, noise, vibration, and odor associated with fieldwork. May work around bulky/heavy materials and equipment used in the vicinity of inspection areas. May also be exposed to the motoring public. DES employees may be given temporary assignments on DES projects throughout the State as workload demands.

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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)	
SUPERVISOR (Signature)	DATE