

POSITION DUTY STATEMENT

DOT PM-0924 (REV 01/2025)

CLASSIFICATION TITLE Sr Bridge Eng	OFFICE/BRANCH/SECTION DES/METS/OCL/SMT Branch	
WORKING TITLE Chief, Structural Materials Testing Branch	POSITION NUMBER 559-320-3185-xxx	REVISION DATE 11/14/2025

As a valued member of the Caltrans team, you make it possible to improve lives and communities through transportation.

GENERAL STATEMENT:

Under the general direction of the Chief of the Office of Central Laboratories, the Structural Materials Testing Branch Chief is responsible for the operations of the Structural Materials Testing Laboratories and Machine Shop. The branch provides quality assurance testing for structural materials products used in projects statewide, machine shop services for test samples, equipment and instrumentation, as well as technical expertise and consultation on various structural material products.

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. (Safety, Prosperity - Innovation)
- **Dealing with Ambiguity (Risk):** Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Climate Action - 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. (Equity, Climate Action - Collaboration)
- **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, 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. (Safety, Employee Excellence - Integrity)
- **Organizational Awareness:** Contributes to the organization by understanding and aligning actions with the organization's strategic plan, including the mission, vision, goals, core functions, and values. (Equity, Prosperity - Innovation)
- **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. (Safety, Equity, Employee Excellence - Integrity)
- **Planning and Results Oriented:** Organizes and executes work to meet organizational goals and objectives while meeting quality standards, following organizational processes, and demonstrating continuous commitment. (Safety, Employee Excellence - Collaboration, Innovation)
- **Technical Expertise:** Depth of knowledge and skill in a technical area. (Safety, Employee Excellence - Innovation)

TYPICAL DUTIES:

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

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50%	E	Serves as Quality Manager of the Structural Materials Testing Laboratories, maintaining accreditation to the American Association of Laboratory Association (A2LA). In the course of maintaining this accreditation, the incumbent, under general direction, does the following: (1) plans, assigns and reviews work; (2) give instructions, maintain discipline, establishes goals and prepares programs, manages purchasing and budgets to achieve these goals; (3) performs the more difficult work and directs analysis, quality assurance testing and special investigations pertaining to structural steel, fasteners, structural bearings and joint seals, anchorage devices, earthquake retrofit, and other related structural products; (4) establishes and oversees the system for filing test records; (5) prepares correspondence and written reports as needed; (6) participates in training programs; (7) oversees proficiency testing programs; (8) supports METS Representatives to facilitate timely verification of material quality; (9) attend and participates in meetings and conferences; and (10) manage safety of employees and compliance with regulations and policies.
25%	E	Participate and/or lead various technical committees including but not limited to: Mechanical Testing Committee, DES Concrete Design and Fiber Reinforced Polymer Committees, and other specialized Department committees or teams. In this capacity, prepares strategic actions and work plans, plans research, reviews, edits or recommends changes to plans, specifications or test methods. Improves internal processes to deliver products and services to customers.
15%	E	Supervises Machine Shop Operations: Under general direction, plans, assigns and reviews work; gives instructions, maintain discipline, established goals and prepares programs and budgets to reach these goals.
10%	M	Consults, confers with and assists other Headquarter and District personnel, public agencies, manufacturers, contractors, and private individuals in the area of structural materials and related products. Provides technical expertise and consultation on specialized structural materials, testing or analyses. Evaluates new products of structural nature.

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

Directly supervises a staff of professionals including engineers, associates, technicians, machinist supervisor.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Must have knowledge of engineering principles in materials quality assurance, ability to work in a team-based environment in all aspects of testing and quality assurance. Must have excellent communication skills (verbal, writing, and group setting). Must plan and direct the work of others, review work quality and performance, improve the work of employees, and accurately analyze situations to develop an effective course of action. May serve as representative of the Department on legal or legislative matters.

Must have or develop an understanding of the budgeting processes, electronic databases, purchasing procedures, contract administration, the purpose and organizational policies and procedures of the Department and communications media. Must complete the mandatory Supervisor's Workshop Training and thoroughly understand the materials and supervision techniques presented. Must be an effective communicator and have the ability to participate in a team setting to solve complex engineering problems. Must understand and apply principles of safe practices. Must be familiar with the standards, specifications and tests for all structural products used in constructing, operating and maintaining transportation facilities; structural constituents of these products and applicable health and environmental regulations; methods of testing and evaluating these products and the ability to make engineering judgments on the basis of the results; advanced analytical techniques and instrumentation including their accuracy and reproducibility; principles of statistical quality assurance; personnel management practices and development and implementation of budgets.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Successful maintenance of laboratory accreditation are federal requirements within 23CFR637. Failure to meet this standard can result in loss of federal funds.

The fair and impartial application of quality assurance test methods to products is critical to both safeguarding the public's transportation investment and providing private sector competitors with equal opportunity for marketing their products. The incumbent has the responsibility for supervising the prompt and expeditious testing of products and materials used by the Department to construct, operate and maintain the state highway system. The approval and use of products or materials that do not comply with the specifications could not only cause monetary losses, but also subject the traveling public to inadequate or even unsafe facilities. Failure to properly supervise and oversee the work of the Branch could result in similar consequences.

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PUBLIC AND INTERNAL CONTACTS

Must be able to communicate effectively, orally and in writing, with vendors, contractors, manufacturers, local agencies, and various State personnel. The incumbent will work with State personnel from Headquarters and Districts, and will have contact with manufacturer's representatives, contractors, national committees, other states and federal offices. It is important that these contacts be handled in a professional manner.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Employee will be required to sit and/or stand for long periods of time using a keyboard and video display terminal, reviewing and auditing data, editing manuals and test methods. Employee will be required to have the physical dexterity necessary to manipulate the materials used and will be required to sustain the mental activity needed for report writing, auditing, problem solving, analysis and reasoning. Employee will occasionally be required to travel statewide. Employee will be required to develop and maintain cooperative working relationships and respond appropriately to difficult situations.

WORK ENVIRONMENT

While at their base of operation, employee 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.

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