

**POSITION DUTY STATEMENT**

PM-0924 (REV 01/2022)

CLASSIFICATION TITLE Transportation Engineer (Civil)	OFFICE/BRANCH/SECTION METS/OQASI/QASI Vallejo	
WORKING TITLE Materials Engineering & Testing Services Representative	POSITION NUMBER 559-318-3135-xxx	REVISION DATE 04/04/2022

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 direction of the Senior Bridge Engineer, the Transportation Engineer will perform the duties of a Materials Engineering and Testing Services Representative (METS Rep.) or Assistant METS Representative (AMR) within the Office of Quality Assurance and Source Inspection (OQASI). Quality Assurance and Source Inspection Branch, Vallejo. The Primary function of the Quality Assurance and Source Inspection Branch is to ensure the materials and products used in California Department of Transportation construction projects comply with contract requirements with an emphasis on structural & roadway components produced at the source and shipped to the job site.

The incumbent will perform a wide variety of professional engineering work in the Department. This work is performed on highway construction projects involving bridges, roadways, buildings, and other highway infrastructure managed by the department. The primary responsibility of the incumbent is to represent METS on ongoing projects to provide materials engineering expertise and ensure compliance with contract documents during all phases of the project. Work is performed in both an office and field setting with frequent trips to various job sites and manufacturer facilities.

The METS Rep/AMR leads METS involvement on all Department construction projects. The incumbent works to provide clear, effective and timely technical recommendations regarding construction materials, assists Branch Seniors by identifying resources needed to accomplish METS source inspection and quality assurance responsibilities for his assigned projects, and works collaboratively with all stakeholders to anticipate and resolve any issues associated with source inspection and quality assurance activities with the overall goal of maintaining standards and consistency while minimizing the impact on project schedule and cost. The incumbent will also provide expertise in the development and improvement of corporate products such as the Quality Assurance and Source Inspection Manual and Process Improvement Assessments.

Travel in and out-of-state, up to 25% is required. A valid driver's license is required when operating a state or personal vehicle on official business in performance of their duties driving to various field locations.

As part of your employment with DES there is a mandatory TE Civil Professional Development Rotation Program that applies to all permanent full-time TE Civils hired after January 1, 2017. Temporary relocation more than 50 miles from your permanent unit may be necessary for rotation assignments.

**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. (Strengthen Stewardship and Drive Efficiency - Engagement)
- **Decision Making**: Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Cultivate Excellence - Innovation)
- **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. (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. (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, Innovation)

**ADA Notice**

For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (279) 234-2284, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

**POSITION DUTY STATEMENT**

PM-0924 (REV 01/2022)

- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Strengthen Stewardship and Drive Efficiency - Innovation)
- **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 - 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. (Cultivate Excellence - Innovation)
- **Commitment/Results Oriented:** Dedicated to public service and strives for excellence and customer satisfaction. Ensures results in their organization. (Strengthen Stewardship and Drive Efficiency - Engagement)

**TYPICAL DUTIES:**

Percentage		Job Description
Essential (E)/Marginal (M) <sup>1</sup>		
35%	E	Serves as the single point of contact between METS and its customers for all projects within assigned area. In this capacity, keeps up to date on all structural and roadway materials issues on projects. Meets with construction, district lab, materials inspection, fabrication, and contractor personnel to identify materials-related issues and recommends solutions consistent with project documents and METS Quality Manual (QASI Manual etc.). Ensures all Quality Control Plans are reviewed and responded to on time. Visits job sites in coordination with the construction staff. Visits fabrication and manufacturing shops, which may be out-of-state. Reviews inspection reports, evaluates inspection activities at fabrication facilities to ensure compliance with project and office objectives. Determines which bid items require OSM inspection when not on the list of approved bid items requiring inspection. Determines the appropriate field investigation for a given situation. Directs technicians regarding structures or pavement investigations. Analyzes data and provides recommendations regarding field investigations.
30%	E	Prepares as-needed reports transmitting technical recommendations for their assigned projects, NCR Summary Reports, Materials Issues by Bid Item Report, and METS Rep. Monthly Summary reports. Runs contract-required meetings discussing METS-related materials attended by Construction and Contractor representatives, Presents information regarding METS practices to Construction. Assists Statewide Material Support Branch with fabricator audits and programmatic assessments. Develops 12 month METS Rep. forecast report. Prepares written recommendation reports for structural, non-structural and roadway material and applies a Professional Engineer stamp to these reports.
30%	E	Performs gap analysis and continual improvement on internal guidance documents. Implements ISO 9001 framework when drafting guidance documents. Utilizes plan-do-check-act cycle to evaluate current business processes, draft recommendations, and implement changes. Develop training materials and provide training on various technical topics.
5%	M	Completes other duties as assigned by the Branch Senior, which may include assisting the supervisor in planning the daily assignments for the inspectors and clerical staff as well as participating on METS Technical Committees.

<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**

Does not supervise others. Licensed engineers may act as a lead person over other engineers, MREAs, and technicians.

**KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS**

Incumbent must hold a valid California driver's license when operating a State vehicle.

Knowledge of:

Employee must have knowledge of:

The Department's construction process and basic design principles,

The materials used in projects including welding, precast concrete, coatings, roadway materials, structural fasteners, and general Material mechanics and properties.

**ADA Notice**

For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (279) 234-2284, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

## POSITION DUTY STATEMENT

PM-0924 (REV 01/2022)

---

Industry practices for fabrication of structural components,  
The testing, inspection, sampling, and reporting procedures of structural and roadway components,  
Labor and safety practices in Department projects.  
ISO 9001 Quality Management Systems.

Employee must have the ability to:  
Interpret plans, specifications, and shop drawings,  
Communicate clearly and efficiently,  
Represent the Branch in public or in Department meetings,  
Occasionally act for the Branch Chief,  
Perform basic computer applications such as online database and Microsoft Office software.

Employee must be able to perform basic engineering calculations related to the inspection and testing of the materials used in Caltrans construction, and be able to analyze and check all necessary test reports on materials incorporated in the work for conformity to applicable specifications.

---

### RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The METS Rep. is directly responsible for recommending acceptance or rejection of METS inspected materials. Decisions must be clear and concise. Inappropriate decisions may have the potential of jeopardizing the integrity of structures and roadway which could affect contract claims and delay construction.

---

### PUBLIC AND INTERNAL CONTACTS

The METS Rep. has considerable contact by telephone, email, and person-to-person with manufacturers, vendors, contractors, and Caltrans construction and administrative personnel. The METS Rep. has daily and frequent contact with Branch offices, Headquarters, District labs and Translab personnel regarding testing results and inspection reports.

---

### PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Employee may be required to sustain the mental activity needed for writing, problem solving, analysis and reasoning; will be required to develop and maintain cooperative working relationships and respond appropriately to difficult situations. Employee is required to drive a State motor vehicle. Employee may occasionally be required to move equipment and test materials weighing up to 50 lbs.

---

### 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.

# POSITION DUTY STATEMENT

PM-0924 (REV 01/2022)

---

---

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