

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
Materials and Research Engineering Associate (Specialist)	D8/Construction - SRL - Independent Assurance Lab	
WORKING TITLE	POSITION NUMBER	EFFECTIVE DATE
MREA - IA Tester	908-500-3381-	

As a valued member of the Caltrans team, you make it possible for the Department to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. Caltrans is a performance-driven, transparent, and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation and teamwork.

GENERAL STATEMENT:

Under the direction of the Independent Assurance Branch Chief, a Senior Transportation Engineer, Caltrans, the incumbent will oversee the District's Independent Assurance (IA) program as described in the Caltrans Independent Assurance Program Manual (IAPM). The incumbent provides California Test Method (CTM) training and witnesses testing services for Caltrans Construction personnel, local agencies, and consultants. A valid driver's license is highly desirable.

TYPICAL DUTIES:

Percentage		Job Description
Essential (E)/Marginal (M) ¹		
35%	E	Qualifies Caltrans and consultant construction samplers and testers in various California Test Methods (CTM). Administers written examinations and performs witness tests in the field by observing the sampler/tester demonstrate the proper sampling and testing procedures. Reviews the calibration of equipment used by the sampler/tester. Checks all calculations required by the CTM. Completes the required documentation and issues a Certificate of Proficiency (Form TL-0111) to those passing the exam.
25%	E	Qualifies Caltrans, consultant, and local agency laboratories performing materials testing on Caltrans and national Highway System construction projects as directed by the Federal Highway Administration's Federal-Aid Policy Guide, 23 Code of Federal Regulations, Part 637. Inspects laboratory facilities for compliance with the IAPM. Issues a Caltrans Qualified Laboratory Inspection Report (Form TL-0013) to those passing.
15%	E	Trains Caltrans Construction personnel who perform materials sampling and testing in various CTMs as directed in the Caltrans Construction Manual and IAPM.
15%	E	Maintains District database of qualified testers and laboratories as required by the IAPM. Publishes this information on the Master List of Caltrans Qualified Testers (Form TL-0108T) and the Master List of Caltrans Qualified Laboratories (Form TL-0108L) for use by Caltrans Resident Engineers and local agencies.
10%	M	Arranges for and prepares material samples from local materials suppliers to be used in corroboration testing of all qualified testers as required in the IAPM. Checks all calculations and completes Report of Witness Test (Form TL-0103), Corroboration Report (Form TL-0104), and IA Log Summary (Form TL-0110).

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

None. The incumbent may work in a lead capacity with co-workers.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge of Asphalt Concrete (AC) and Portland Cement Concrete (PCC) operations, sampling and testing frequencies for AC and PCC aggregates, liquid asphalt, paving asphalt and Portland cements. Knowledge of structure foundations; test equipment, field instrumentation procedures, soil sampling. Knowledge of the various Caltrans Test Methods and the required ASTM Test Methods as listed in the Independent Assurance Manual. Knowledge of soil mechanics, materials testing, and compliance with the Quality Control and Quality Assurance for Asphalt Concrete and the Quality Assurance Program Manuals. Ability to learn, master, and teach the above specialties to new employees and rotational employees

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requiring Caltrans qualifications. Ability to maintain job records as per categories in the Construction Manual by ensuring all paperwork is complete and accurate. Ability to make neat and accurate computations and engineering notes and prepare reports. Ability to establish friendly and cooperative relationships with those contacted in the course of work. Ability to apply sound judgment in test situations and the ability to analyze factors capable of affecting test results. Ability to operate office equipment (i.e., computers, telephone, fax, copier machines). Ability to comprehend and analyze specification requirements and test methods as they relate to Contract Specifications. Ability to analyze and correctly interpret the various test methods and observe the sampler and testing by the Acceptance Testers ensuring compliance of the various testing methods. Ability to implement a training and testing program. Ability to analyze data based on the standards of geotechnical and materials engineering practice and formulate a solution.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Responsible for sampling and testing frequencies and oversees that California Test Methods are followed by ensuring all paperwork meets Federal Highway Administration requirements. Failure to adhere to directions and procedures may result in inaccurate test results and/or unqualified testers/laboratories that could reduce the service life of the constructed facility or result in costly claims to the State.

PUBLIC AND INTERNAL CONTACTS

Will maintain close communications with supervisor and other inspection offices. Has daily and frequent contact with fellow branch offices and District and Headquarters TransLab personnel regarding test results and inspection reports.

As a representative of the Department and the State of California, the incumbent is expected to maintain fair, impartial and effective relationships with clients and to conduct oneself in a professional and courteous manner at all times

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Physical activities vary and may be for a lengthy period of time. May be required to sit using a keyboard and video display terminal to enter and audit data. While working in the laboratory, may be required to stand for extended periods of time to perform materials testing in and around test equipment. Requires manual dexterity to operate testing equipment and handle materials. May be required to be tested and fitted to wear a respirator while working in the laboratory. May occasionally be required to move equipment and test materials that require lifting 60 to 80 pounds.

May be required to travel to Districts to train laboratory personnel on specific test methods. When working in Districts, may be required to stand for long periods of time; pull, push, bend, stoop and squat to examine testing equipment; maintain mental awareness and physical agility when working in the proximity of laboratory machinery.

Will be required to develop and maintain cooperative working relationships and respond appropriately to difficult situations. Must behave in a fair and ethical manner toward others and demonstrates a sense of responsibility and commitment to public service. The incumbent will value cultural diversity and other individual differences in the workforce. Will consider and respond appropriately to the needs, feelings, and capabilities of different people in different situations.

WORK ENVIRONMENT

Will work in a climate-controlled environment under artificial lighting. Most of the workday will be in the laboratory where there is exposure to extreme heat, chemicals, odors, dust, and noise from laboratory testing equipment. For some part of each day, will work in a climate-controlled office. Both environments are under artificial lighting. May occasionally be required to travel and work outdoors, and may be exposed to dirt, noise, uneven surfaces, and/or extreme heat or cold.

Working hours will be set between the hours of 6:00 a.m. and 6:00 p.m. May be required to work nights, weekends, and split shifts. Per Diem may be necessary based on workload. Vacations may be restricted during peak times. May be required to travel to other satellite offices for training and/or meetings.

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)

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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