

POSITION DUTY STATEMENT

PM-0924 (REV 3/2006)

CLASSIFICATION TITLE Transportation Engineer Technician	DISTRICT/DIVISION/OFFICE North Region/District 3/Construction/ Materials Laboratory	
WORKING TITLE Materials Tester	POSITION NUMBER 903-502-3175-xxx	EFFECTIVE DATE January, 2012

As a valued member of the Caltrans team, you make it possible for the Department to improve the mobility across California by being innovative and flexible; reporting to work as scheduled; working cooperatively with team members and others; and treating others fairly, honestly and with respect. Your efforts are important to each member of the team, as well as those we serve.

GENERAL STATEMENT: Under the general direction of the District Materials Engineer, a Senior Transportation Engineer, the incumbent has the responsibility of sampling and testing materials used in roadway construction, assists in pavement evaluation and design by testing materials and assists in field investigations and gathering of data for analysis. Incumbent should possess a valid California driver's license.

TYPICAL DUTIES:**PERCENTAGE**Essential (E)/Marginal (M)¹**JOB DESCRIPTION**

The Material Tester assignment comprises a variety of different complex tasks. These duties are performed with little or no direct supervision. The responsibilities are itemized below.

- 50% (E) Sample and test materials in accordance with California Test Methods, American Association of State Highway and Transportation Officials (AASHTO) Test Methods and American Society for Testing Materials (ASTM) used in roadway construction, embankment and backfill material, aggregates and pavement materials.
- 20% (E) Plan and perform necessary process testing for asphalt Job Mix Formulas and mix designs using specified test methods and Department policy.
- 20%(E) Miscellaneous duties and other assignments within position specifications including maintaining project files, preparation by hand or computer work of technical presentations, attending training, handling telephone inquiries.
- 10%(M) Assists in field investigations and gathering of data for analysis.

¹ 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

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SUPERVISION EXERCISED OVER OTHERS:

This position does not supervise.

KNOWLEDGE, ABILITIES AND ANALYTICAL REQUIREMENTS:

Knowledge of: Caltrans, AASHTO and ASTM test methods, Soil properties and soil behavior, Soil and material sampling techniques, Standards and Practices of materials as practiced by the Department and the engineering profession, and Caltrans Specifications.

Abilities: Math, testing and computer skills are required. Must possess good written and oral skills and work independently. Must be able to use a computer and associated software. Must be able to make independent decisions based on engineering principles. Must be able to work with others in the District, the Department, the public, and other agencies to carry out duties.

Analytical Requirements: Must be able to perform testing, and analyze the data based on standards of geo-technical and materials engineering practice.

CONSEQUENCE OF ERROR/RESPONSIBILITY FOR DECISIONS:

Errors in planning field investigations and materials testing may result in inadequate or faulty data for preparation of materials recommendations. Such errors may necessitate additional field investigation or testing resulting in time delays and additional cost to the state.

Errors may result in improper testing. The consequences could be inadequate or inappropriate design recommendations resulting in structural failure, construction difficulty resulting in contractor claims or additional maintenance expenditures. Omissions in plans and reports could lead to unnecessary change orders, claims, and delays; errors in judgment could result in a design product of lesser quality, which could increase project construction costs or increase the Department's exposure to tort liability.

PUBLIC AND INTERNAL CONTACTS:

The incumbent must maintain a professional working relationship with Region and District functions, Headquarters personnel, outside agencies, and the public.

PHYSICAL, MENTAL AND EMOTIONAL REQUIREMENTS:

Employee will be required to sit and stand for long periods of time using a keyboard and video display terminal and or testing equipment. Employee must be congenial and tactful when dealing with others while effectively accomplishing tasks. Frequent telephone interaction is common. Must be able to lift 50 pounds at or above waist height repeatedly, and carry the 50 pounds for a distance of 50 feet.

Emotional Requirements: Must be able to develop and maintain cooperative working relationships. Incumbent will work as a member of a team.

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WORK ENVIRONMENT:

While in the office, employees will work in a climate-controlled office under artificial lighting. When working in the lab area or outdoors, employees may be exposed to dirt, dust, fumes, noise, uneven surfaces, and/or extreme heat or cold and/or live traffic. Out of town travel will be necessary.

I have read, and understand the duties listed above. If you believe you may require accommodation, please discuss this with your hiring supervisor.

EMPLOYEE (Print)	DATE
EMPLOYEE (Signature)	DATE

I have discussed with and provided a copy of this duty statement to the employee named above.

SUPERVISOR (Print)	DATE
SUPERVISOR (Signature)	DATE