

**POSITION DUTY STATEMENT**

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE Transportation Surveyor, Caltrans	OFFICE/BRANCH/SECTION 04 / Right of Way Surveys Office / Field Offices	
WORKING TITLE Transportation Surveyor (Field/Office)	POSITION NUMBER 904-403-3029- XXX	EFFECTIVE DATE 11/13/2014

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:**

The Transportation Surveyor (Office or Field Services) position works under the direct supervision of a Senior Transportation Surveyor. Incumbent may work under the direction of a lead worker or Transportation Engineer, as a member of a field survey crew or in the District office. Incumbent shall have some experience and knowledge of all activities required of right of way engineering, records, and a survey crew:

**TYPICAL DUTIES:**

Percentage		Job Description
Essential (E)/Marginal (M) <sup>1</sup>		
35%	E	Calculates and plots right of way lines from information provide by Project Development; lays out mapping for delineation which includes maps for every type of State property transfer, prepares transmittal of appraisal maps and prepare legal descriptions. Must be able to produce all of the aforementioned maps on CADD System after training and experience. Reduces and plots survey notes; requests and analyzes title reports, deeds to affected property; and any available property maps; on this analysis determines and plans locations of existing property lines.
35%	E	Performs qualify assurance activities to ensure that surveying and right of way engineering work by others (consultants, local agencies, and developers) on State Highway Improvement projects conforms to minimum Caltrans standards, practices, and procedures. Using professional judgement in land surveying and property title matters, researches ownership records, title reports, Records of Survey, survey notes, vesting documents, etc., and contacts private surveyors, title companies, County Surveyors, and others to determine property ownership, ownership lines, and property rights.
25%	E	Operate surveying instruments such as a total station instrument, theodolite and level; which are used in collecting field data, needed in accomplishing land surveying, engineering surveying, construction control surveying and /or photogrammetric surveying request. Performs necessary survey calculations and acts as survey note-keeper as required when collecting field data while performing above field operations. Act as rod/chain person which includes use of sledge hammer while driving survey markers to grade, clear and cut brush, and act as flag person.
5%	M	Perform necessary maintenance of survey equipment to insure that it is in proper working order.

<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**

During the absence of the Sr. Transportation Surveyor, the incumbent maybe required to perform one of the following duties: (1) lead one or two co-workers in Surveying and Right of Way Engineering; (2) act as chief of the survey crew at the journey level and with a license; (3) at the journey level and with a license, at times may serve as a party chief engaged in routine, less complex survey activities where expertise of responsible charge as defined by the Land Surveyors' Act and direct supervision are not required.

**KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS**

Licensing Requirement:

Must have Land Surveyor-in-Training (LSIT) certificate as defined within the Business and Professional Code; or a

**ADA Notice**

For individuals with sensory disabilities, this document is available in alternate formats. For information, call (916) 445-1233, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

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Bachelor of Science degree in surveying, surveying engineering, or surveying geomatics.

### Knowledge of:

Fundamental plane and geodetic field surveying, principles, methods, equipment, materials and safety.  
Mapping and drafting techniques, including Photogrammetry.  
Plane and geodetic surveying, computation including computer applications and usage, adjustments and state plane coordinate systems.  
Departmental plans, standards, polices and procedures for Design, Right of Way and Construction relative to Surveys  
Principles and practices of boundary determination and land title research, including legal description of real property, ownership determination and real property acquisition.  
Elements in highway construction plans pertaining to construction staking for Surveys  
Methods to produce graphical terrain representations.  
Coordinate geometry, digital terrain modeling, import and export of files.  
MicroStation drafting software.  
Caltrans topographic feature codes.  
Computer file management.  
Basic principles of trigonometry and geometry.

### Ability to:

Comprehend and analyze highway construction plans.  
Identify discrepancies and errors on highway construction plans and communicate them to the appropriate designer or resident engineer.  
Calculate slope, elevation and offset.  
Create digital horizontal and vertical alignments.  
Manipulate data with Caltrans computer software.  
Create computer plots with MicroStation software.  
Create spreadsheets and word documents with computer software  
Create neat and accurate computations and notes.  
Communicate effectively, verbally and in writing  
Establish and maintain friendly and business-like relations with those contacted in the course of work.

### Analytical Skills:

The tasks performed are detailed and varied and require the incumbent to be innovative to carry out the Surveying [i.e. survey crew in obtaining the required data]; and/or Right of Way Engineering [i.e. multi-task, adapt to changes in priorities, and complete task in short notice]; in order to meet the needs of the Department. The incumbent should have thorough knowledge of surveying and right of way engineering techniques and their applications.

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### RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Errors in, Right of Way/Engineering /or Records determination of property lines or right of way lines can result in defective acquisition documents. These may lead in turn to defects in the State's title, exposing the State to various liability claims. Inaccurate property lines determination may cause the State to be discredited with title companies and local agency surveyors. Errors in regular field survey work may lead to encroachments and/or defects in the State's title, construction delays and greatly increasing costs to the State. Errors in judgement may impact the safety of workers and the traveling public.

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### PUBLIC AND INTERNAL CONTACTS

In an office setting, the incumbent will make mostly internal contacts, conferring with designers about the right of way locations, and with agents about appraisal maps and documents requested. As a field surveyor, the incumbent may be required to make contact with local property owners during the course of a survey.

Provide responsive high quality courteous service to State employees and coworkers, representatives of outside agencies, consultants and contractors, and members of the public. Providing accurate and complete up to date information in a timely manner.

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### PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

As part of a survey crew, the incumbent may be required to wear protective safety gear, such as life vests, safety glasses

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and earplugs for loud noises. Must have the ability to multi-task, adapt to changes in priorities, and complete tasks or projects with short notice. The incumbent must be able to develop and maintain cooperative working relations.

Must be able to carry up to 40 pounds of survey equipment or material.

**WORK ENVIRONMENT**

With a field survey crew, the incumbent may be exposed to adverse conditions that may include, but are not limited to extreme weather conditions; rough terrain, great heights; poison oak; insect bites and/or bee stings; loud noises, dust, and chemicals. Overtime may be required and vacations may be restricted during periods of heavy workload.

May be required to travel for short periods of time, however, travel in this district is not very frequent. May be required to participate in a limited term rotation, to staff the Vanguard Survey Unit. Rotational assignments may also be required between the Right of Way engineering and Surveys Field Offices. In the Surveys District office, the incumbent will work in a climate-controlled office under artificial light; however, due to periodic problems with the hearing and air-conditioning, the building temperature may fluctuate.

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