

**POSITION DUTY STATEMENT**

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE Senior Transportation Electrical Engineer	OFFICE/BRANCH/SECTION Central Region Construction, 501	
WORKING TITLE Senior Electrical Construction Engineer	POSITION NUMBER 931-501-3164-	EFFECTIVE DATE 01/01/2015

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 general direction of a Supervising Transportation Engineer, incumbent will be responsible for planning, directing, and coordinating highway construction electrical work in the north part of Central Region. Must possess a valid California Professional Electrical Engineers License.

**TYPICAL DUTIES:**

Percentage Essential (E)/Marginal (M) <sup>1</sup>	Job Description
40% E	Assign work, give instructions and make decision on various electrical engineering and administrative problems in connection with directing the work involved in electrical and related work for construction projects in the Central Region.
20% E	Ensure that project construction conforms to traffic control, project plans, specifications, environmental, hazardous waste, and storm water pollution prevention criteria.
15% E	Provide leadership and supervision for field office and inspection staff. Exercise supervisory duties such as review and approve time sheets, prepare individual development plans, assure adequate training is provided, evaluate staff performance, oversee and conduct safety meetings and conduct disciplinary procedures all in a timely manner. Manage and monitor staffing resources including travel, operating expenses, and overtime, vehicle usage, and PRSM (workload).
10% E	Provide information for contract change orders, prepare comprehensive field reports, and other miscellaneous correspondence.
5% E	Provide appropriate training and evaluation of subordinates to assure their development and the quality of their performance.
5% M	Meet with private and public sector and the news media to ensure that they and the public are properly appraised of contract progress, and any special contract problems.
5% M	Coordinate electrical inspection consultant contract.

<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**

Supervise a staff of electrical engineer and others engaged in transportation engineering work and development activities.

**KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS**

Possession of a valid certificate of registration as a Electrical Engineer issued by the California State Board of Registration for Professional Engineers. Possession of valid drivers license is required.

**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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Knowledge of: Various phases of transportation engineering, including planning processes and methods, systems planning, evaluation of alternatives, and facility locations and design, construction, operation and maintenance, transportation economics and financing; project management concepts; factors which influence the impact of transportation facilities on the environment, the community and the economy; principles and techniques of personnel management and supervision. A working knowledge of surveying, paving, plant inspection, materials testing, California Test Methods (CTM), methods of proportioning and handling Portland cement and asphalt concrete; testing of materials, traffic planning and evaluation of alternatives which impact transportation facilities.

Incumbent needs to have knowledge of a manager's/supervisor's responsibility for promoting equal opportunity in hiring and employee development and promotion, and for maintaining a work environment that is free of discrimination and harassment.

Knowledge of safety and health policies and procedures as contained in the Department's Injury and Illness Prevention Program, Laboratory Safety Manual, and the supervisor role in maintaining an effective injury and illness prevention program.

Incumbent is expected to have a good knowledge of all phases of engineering and departmental policies and operations; be familiar with all rules and regulations pertaining to the State and Highway Code, Cal/OSHA safety regulations, Construction Manual, Standard Specifications, Special Provisions, and other pertinent manuals, laws and codes.

Ability to: plan, organize and direct the work of others, analyze situations accurately and develop an effective course of action; relate to work with interdisciplinary groups and private industry; speak and write effectively; dictate correspondence and prepare reports. Incumbent must have the ability to analyze special provisions, plans, estimates, regulations, construction progress, and critical path method (CPM) scheduling and makes decisions based on these factors. Incumbent must have knowledge of scheduling, materials, safety practices, contract financing and record keeping. Ability to communicate and work under pressure is required.

Ability to read and write English and communicate effectively orally and in writing at a level required for successful job performance. Incumbent must be able to use and understand computers. Must be able to prepare reports and correspondence. Must have the ability to make neat and accurate mathematical calculations and engineering notes; make sound decisions in the implementation of contract plans, specifications and various engineering activities; organize/arrange data to produce effective work products without repetitious direction; and possess interpersonal skills necessary to be an effective team member.

Analytical Requirements: perform a full range of analysis in planning and coordinating electrical engineering functions. Develops and chooses from alternative courses of direction, determines the direction or indirect effect of action on other work and units. Incumbent is expected to apply sound engineering judgment in evaluating a variety of problems, assess workloads, set priorities and allocate staff.

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### RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The Senior Electrical Construction Engineer is responsible for all work in their assigned area and must answer for his/her decisions and those of subordinates. Errors in Judgement could result in:

- Time and cost overruns on contracts which could result in contractor claims and excessive expenditure of public funds.
- Use of inferior materials which require replacement and/or result in a finished product of poor quality.
- May result in expensive waste of time and materials.
- Cause additional work and/or project delays.
- Reduction in productivity.

The incumbent is responsible for his/her actions, decisions, quality of work, and proper use of State time, equipment, and materials. Improper performance of duties and/or failure to adhere to established policies, procedures, and guidelines could lead to adverse action and possible termination.

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## PUBLIC AND INTERNAL CONTACTS

Incumbent must be able to communicate effectively and have a professional working relationship with others including Department staff, consultants, Translab, Headquarters functions, cities, counties and federal agencies, technical/professional level staff of outside agencies, contractor's personnel and members of the public regarding construction projects. Has contact with private contractors, Resident Engineers and their staff, and other branches, both District and Headquarters.

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## PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The incumbent will be required to facilitate meetings across the Central Region. Out of town travel will be necessary. Employees will be required to sit for long periods of time using a keyboard and video display terminal. Employee must be congenial and tactful when dealing with others while effectively accomplishing tasks. Frequent telephone interaction is common.

Must possess the ability to lead, plan, and direct the work of others. Must be able to analyze situations accurately and adopt an effective course of action. Must be able to concentrate, formulate effective strategies, be multi-tasked, adapt to changes in priorities, and complete complex task or projects with short notice. Ability to resolve emotionally charged issues reasonably and diplomatically. Must be able to develop and maintain cooperative working relationships. Must be able to organize and prioritize. Must be able to communicate effectively and make effective presentations. Must be able to represent the Department of Transportation at meetings. Must be able to assign work, check work, give instructions and assistance, and maintain discipline. Must be able to provide technical oversight of consultants performing engineering work under contract with the Department.

Must possess the ability to work on uneven ground, climb, lift, carry, bend, squat, kneel, crouch, reach, pull, push, grasp, sit, stoop, crawl, and repetitive use of extremities. Must be able to transport variety of objects that are less or equal to 40 pounds. May be required to sit or stand for long periods of time.

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## WORK ENVIRONMENT

The incumbent will be working in both an office and field environment. As such the incumbent will be required to travel throughout the Central Region. Employees will also travel and work outdoors and may be exposed to dirt, noise, uneven surfaces, and/or extreme heat or cold. Job may have exposure to chemicals, equipment, machinery, heat, cold, dust, gas, fumes, outdoor conditions, indoor conditions, humidity, and high decibels of noise. Hard hat and safety vest or approved safety shirt must be worn at all times in the field, no exceptions. While at the Construction office employees will normally work in a climate-controlled office under artificial light. However due to periodic problems with the heating and air conditioning, the building temperature may fluctuate. Workload may subject employee to changes of shift, changes of work hours and workdays, and geographic transfer. Travel is required. Vacations may be restricted during peak times.

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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.)

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EMPLOYEE (Print)

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EMPLOYEE (Signature)

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DATE

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

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\_\_\_\_\_  
SUPERVISOR (Print)

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SUPERVISOR (Signature)

\_\_\_\_\_  
DATE