

POSITION DUTY STATEMENT

PM-0924 (REV 04/2021)

CLASSIFICATION TITLE Transportation Engineer (Civil)	OFFICE/BRANCH/SECTION District 5/Design III/Engineering Services	
WORKING TITLE CADD Support Engineer	POSITION NUMBER 905-203-3135-024	EFFECTIVE DATE 10/16/2025

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 the direction of a Senior Transportation Engineer, the Computer Aided Design and Drafting (CADD) Support Engineer provides user support with various CADD application software and design capabilities, provides CADD design problem solving services to users, and serves as the District CADD training coordinator. The incumbent will help evaluate CADD customized applications and hardware and recommend revisions or additions. Must be proficient in MicroStation and Civil 3D software.

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.

- **Change Leadership:** Develops new and innovative approaches needed to improve effectiveness and efficiency of work products. Encourages others to value change. Considers impact and recommends changes. (Strengthen Stewardship and Drive Efficiency - Innovation)
- **Decision Making:** Makes critical and timely decisions. Takes charge. Supports appropriate risk. Makes challenging and appropriate decisions. (Cultivate Excellence - Integrity)
- **Initiative:** Ability to identify what needs to be done and doing it before being asked or required by the situation. Seeks out others involved in a situation to learn their perspectives. (Cultivate Excellence - Pride)
- **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 - Integrity)
- **Teamwork/Partnership:** Develops, maintains, and strengthens partnerships with others inside or outside of the organization through effective communication and collaboration. (Cultivate Excellence - Equity)
- **Customer Focus:** Considers, prioritizes, and takes action on the needs of both internal and external customers. (Cultivate Excellence - Pride)
- **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. (Strengthen Stewardship and Drive Efficiency - Engagement)
- **Analytical Skills:** Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Strengthen Stewardship and Drive Efficiency - Innovation)
- **Technical Expertise:** Depth of knowledge and skill in a technical area. (Strengthen Stewardship and Drive Efficiency - Pride)

TYPICAL DUTIES:

Percentage Essential (E)/Marginal (M) ¹	Job Description
35% E	Provides user first level support to resolve issues on an individual basis regarding engineering application software and CADD systems. Assists users in solving problems by recommending various engineering application software and procedures to follow using features in the software. Works with IT to troubleshoot and solve software malfunctions such as application crashes, tool functionality, and file corruptions. Assists users with project design tasks such as setting up a project in Civil 3D, creating alignments, profiles, super elevations, etc. Converts oversight design files into the appropriate formats.

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20%	E	Evaluates, updates, configures, and debugs engineering application software and CADD systems. Tests computer configurations to allow for the proper functioning of software to meet the needs of the users for designing transportation infrastructure. Participates in the CADD Technical Advisory Committee (CTAC) meetings and serves as a district key user that gives feedback to HQ CADD by testing software updates and recommending proposed changes. Works with IT to test and evaluate CADD and IPLOT functionality when new operating systems are deployed. Troubleshoots printers, plotters and scanner jams and malfunctions, or calls for service as needed. Creates resource files for new printers to automatically set the right pen and paper size. Evaluates and tests new updates to engineering software and recommends revisions as needed.
15%	E	Serves as the District CADD training coordinator responsible for providing and coordinating supplemental training. Responsible for quarterly request needs, enrolling students in CADD classes, and providing class recommendations for staff. Maintains a list of those that have attended training and recommends, as necessary, training for CADD users. Coordinates with HQ CADD and supervisors in requesting classes, identifies staff needs, and ensures class prerequisites are met. Attends training in all CADD related systems so as to train others.
15%	M	Collaborates with IT in maintaining hardware inventory for ordering and replacement of aging CADD equipment. Coordinates equipment deployment with IT by providing a list of employees and offices that are to receive the CADD equipment.
10%	M	Ensures that printers, plotters and scanners are operational and accessible. Replaces and tracks hardware consumables; ink cartridges and print-heads, toners, drums, fusers, transfer kits, and maintenance kits as needed.
5%	M	Provides project specific support to assist the design team in meeting the delivery of accelerated projects or projects challenged with meeting certain milestones.

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

No supervisory duties but the incumbent may be asked to act in a lead-worker role.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

The incumbent must have a knowledge of design and construction terminology, methods and concepts; functions and organization within the Department; Department directives and policies as they pertain to the individual and professional working environment; how to effectively use a computer and use conventional and state-of-the-art equipment and software. The incumbent must have the ability to use CADD systems and software with minimal training to design, prepare and modify drawings; perform complex mathematical and engineering calculations; effectively communicate both verbally and in writing; prepare technical reports and other documentation. The incumbent must be able to analyze CADD software as they relate to fundamental engineering principles; interpret user problems and provide solutions; analyze situations and take effective action.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The incumbent is responsible for technical information and engineering data upon which recommendations, conclusions and decisions are based. Failure to provide accurate and timely information and service could jeopardize project and programmed delivery. Project delivery failure could lead to loss of Department credibility, increased liability and affect the cost and schedule of improvement projects.

PUBLIC AND INTERNAL CONTACTS

The majority of the contacts are with departmental staff. Occasional contacts can be expected with the general public, public agencies, consultants and elected officials or their staff.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The incumbent will sit for prolonged periods but be expected to travel for meeting with customers, teaching short duration classes and more. The incumbent will be required to maintain sustained mental activity for report writing, problem solving, analysis and reasoning. The incumbent is expected to be able to maintain appropriate professional relationships in accordance with policy at all times. This includes being courteous and be customer service oriented. The incumbent is expected to keep their workspace(s) clear and clean of litter, clutter, trash, recyclables and other obstacles keeping a safe and clean work environment. Other physical requirements include, but are not limited to, climbing stairs, lifting/ carrying objects without causing injury, twisting, stretching, bending, stooping and kneeling.

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WORK ENVIRONMENT

While at his/her base of operation, employee will work in a climate-controlled office under artificial lighting. Employee will be expected to have an in-office presence, and may be allowed and/or expected to telework from a home office or other appropriate location on a part-time basis. Employee may be required to travel in state for meetings, conferences, and training. Vacation and other leave may be restricted during peak work times. Overtime may be required during peak times and fiscal year-end closing.

May be required to go on loan or rotation to other units (i.e. Construction, Maintenance, Permits, Traffic, Office Engineer, PJD, etc) based on workload needs.

This position may be eligible for telework. The amount of telework is at the discretion of the Department and based on Caltrans's current telework policy. While Caltrans supports telework, in-person attendance may be required based on operational needs. Employees are expected to be able to report to their worksite with minimal notification if an urgent need arises. The selected candidate may be required to conduct business travel on behalf of the Department or commute to the headquartered location. Business travel reimbursements considers an employee's designated headquartered location, primary residence, and may be subject to CalHR regulations or applicable bargaining unit contract provisions. All commute expenses to the headquartered location will be the responsibility of the selected candidate.

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

SUPERVISOR (Print)

SUPERVISOR (Signature)	DATE
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