

POSITION DUTY STATEMENT

DOT PM-0924 (REV 01/2025)

CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
Senior Environmental Scientist (Specialist)	GNEIS	
WORKING TITLE	POSITION NUMBER	REVISION DATE
BIM4I Program Environmental Lead	913-140-0765-911	04/27/2026

As a valued member of the Caltrans team, you make it possible to improve lives and communities through transportation.

GENERAL STATEMENT:

Under the general direction of the GIS, National Environmental Policy Act (NEPA) Assignment, Environmental Management Systems, Inter-Agency Coastal, Web Services (GNEIS) Office Chief, an Environmental Program Manager I (Managerial), the incumbent serves as the Division's Building Information Modeling for Infrastructure (BIM4I) Program Lead and represents the Division of Environmental Analysis (DEA). As a Senior Environmental Scientist, the BIM4I Program Environmental Lead acts as the statewide point of contact for integrating environmental functions, requirements, and data standards into the Department's BIM4I Program. The incumbent provides leadership in developing, implementing, and advancing digital environmental workflows, policies, tools, resources and strategic initiatives that support Caltrans' transition to model-based design with digital files project. In coordination with the GNEIS Office Chief, and DEA management, the incumbent will collaborate with the BIM4I Program on efforts to modernize environmental practices by establishing statewide standards, creating and maintaining digital environmental workflows, collaborating across divisions and districts, and representing Environmental at BIM4I-related committees, events, and workgroups. The position will begin the process of ensuring environmental considerations are fully incorporated into BIM4I strategic planning, project delivery workflows, asset information modeling, data governance, and training programs. Through cross-divisional coordination, the BIM4I Environmental Scientist supports enterprise-wide consistency, compliance with evolving regulatory and digital requirements, and the development of tools, policies, guidance and training that enhance efficiency, data quality, and environmental outcomes across all project delivery phases.

CORE COMPETENCIES:

As a Senior Environmental Scientist (Specialist), 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.

- **Creativity and Innovation:** Thinks beyond the confines of traditional models to recognize opportunities, seek creative solutions and take intelligent risks. (Prosperity, Employee Excellence - Collaboration, Innovation, Stewardship)
- **Dealing with Ambiguity (Risk):** Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Employee Excellence - Collaboration, Innovation, People First)
- **Continuous Professional Development:** Seeks to obtain knowledge and improve performance while supporting others in doing the same. (Employee Excellence - Collaboration, Stewardship)
- **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. (Employee Excellence - Innovation, People First)
- **Teamwork/Partnership:** Develops, maintains, and strengthens partnerships with others inside or outside of the organization through effective communication and collaboration. (Safety - Collaboration, Stewardship)
- **Organizational Awareness:** Contributes to the organization by understanding and aligning actions with the organization's strategic plan, including the mission, vision, goals, core functions, and values. (Equity, Employee Excellence - Collaboration, Pride)
- **Interpersonal Effectiveness :** Effectively and appropriately interacts and communicates with others to build positive, constructive, professional relationships. Tailors communication style based on the audience. Provides and is receptive to feedback. (Employee Excellence - Collaboration, People First)
- **Forward Thinking:** Anticipates the implications and consequences of situations and takes appropriate actions to be prepared for possible contingencies. Anticipates and prepares for future developments. (Prosperity, Employee Excellence - Collaboration, Pride)
- **Technical Expertise:** Depth of knowledge and skill in a technical area. (Employee Excellence - Collaboration, Pride, Stewardship)

TYPICAL DUTIES:

Percentage Job Description
Essential (E)/Marginal (M)¹

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35%	E	Serves as statewide subject matter expert, focal point and liaison for BIM4I efforts within DEA. Leads statewide development and implementation of environmental policies, scientific standards, and workflows, including advancing the BIM4I Strategic Plan, and modernizing environmental processes to incorporate BIM technologies into existing environmental processes, and regulatory collaboration. Researches, analyzes and makes recommendations regarding BIM technologies, regulations, plans, policies, procedures, practices, scientific criteria and guidelines. Prepares and coordinates briefing information for the GNEIS Office Chief, Deputy Division Chief, executive management and/or CalSTA as necessary.
25%	E	Facilitates cross-divisional and district engagement to integrate environmental science requirements into BIM4I project delivery, ensuring environmental needs and commitments are incorporated across statewide practices. Supports District BIM Pilot Projects with scientific review and technical assistance.
20%	E	Manages environmental data governance and digital information standards for BIM4I, aligns asset modeling with scientific best practices, oversees digital twin alignment, and implements AI-supported analytical improvements for environmental datasets.
15%	E	Represents Environmental as the scientific subject-matter expert at BIM4I committees, meetings, summits, and statewide initiatives, ensuring environmental science alignment across all phases of project delivery.
5%	M	Supports training, outreach, and resource development for environmental BIM4I implementation, including training modules, workshops, and curriculum development.

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

This position does not have direct subordinate staff but may act in a lead capacity over consultant staff and research or student assistants. The incumbent will provide technical direction and scientific guidance to district environmental staff and consultants involved in the development and implementation of BIM4I ensuring the application of scientific methodologies and regulatory standards.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge: An in-depth knowledge of Caltrans' major work activity areas and organizational structure, Departmental policies and financial constraints and specific knowledge of planning, project development procedures, project design, construction, operations, maintenance and emergency actions. Requires thorough knowledge of transportation characteristics, issues, and planning concepts as well as scientific methodology in support of compliance with federal and state environmental laws, regulations, Executive Orders, and procedures regarding the extent of environmental documentation required. Must have extensive knowledge of environmental laws and regulations including the National Environmental Policy Act, and the California Environmental Quality Act. Must have a thorough working knowledge of organizational relationships both within and outside the Department that pertain to planning, design, construction, operation, and maintenance of transportation facilities. Requires a solid understanding of the DEA business objectives and their relation to the project's objectives. Requires strong project management skills including experience in managing and leading complex projects with an emphasis on quality assurance and risk management. Knowledge of business process analysis, the Caltrans (Department) IT management policy and development, as well as the principles and methods of GIS and databases is desirable. Requires knowledge of research methods and techniques, including planning studies and investigations, statistical procedures, and the general principles, concepts and terminology used in researching related issues.

Abilities: Based on broad environmental experience and expertise, the incumbent must be able to reason logically and creatively using a variety of analytical and problem-solving techniques to resolve or provide information regarding complex research and analysis. Must be able to exercise good judgment in the resolution of complex environmental, management and related issues. Must be able to resolve conflicts with stakeholders and project staff. Must be able to take action independently and organize work priorities. Must be able to establish and maintain cooperative relationships, dealing with respect, tact and persuasion with district and HQ counterparts. Must demonstrate ability to lead and direct projects. Must be able to communicate effectively, both orally and in writing, and have the ability to write memos, letters, procedures, and develop graphs, charts or other illustrative materials. Must have the ability to use personal computers and the Internet to conduct research.

Analytical Abilities: The work and responsibilities assigned to this position require the ability to independently assimilate environmental, technical and procedural input from various sources, including the districts and other stakeholders, to interpret and evaluate that input and develop alternative courses of action and make objective recommendations on all critical issues affecting the environmental process, management and related tools.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

This position is responsible for independent action and initiative in carrying out the assigned duties. As a subject matter expert, the incumbent is expected to analyze and develop policy, procedures, practices, and/or guidelines on complex environmental issues, performance measures, and documentation for transportation proposals and activities. Failure to carry out these responsibilities could result in:

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- additional effort to provide reasonable measures to avoid or minimize environmental impacts
 - extensive delays to programs, projects or emergency actions
 - litigation that could delay and/or add substantial cost to essential programs, projects emergency actions
 - loss of public confidence in the Department as a responsible public agency and first-rate engineering and environmentally sensitive organization.
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PUBLIC AND INTERNAL CONTACTS

Must establish and maintain working relationships with Caltrans District/Region staff; other disciplines in the DEA; and with other divisions in Headquarters and the Districts/Regions, primarily with the Division of Design, Division of Planning, and Legal. On an as-needed basis, the incumbent may need to establish and maintain cooperative and collaborative relationships with management and staff of state and federal environmental resource and regulatory agencies, and transportation planning entities, among others. Arranges for, attends, participates in, and where appropriate, represents the Department at meetings with interest groups, individuals, local, regional, state, and federal agencies in regard to environmental performance measures, issues and mitigation matters for program, projects and emergency actions.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Must have the ability to develop and maintain cooperative working relationships; respond appropriately to difficult situations; recognize emotionally charged issues or problems and acknowledge the various responses without escalating tensions. Must be capable of translating between engineering, transportation, planning, and environmental terminology and common language. Must be able to effectively communicate and may be required to make presentations, facilitate meetings, lead workshops, and serve on quality teams. The incumbent must be able to sit for prolonged periods of time while using a laptop and video display monitor, to read, review or prepare documents, or while attending meetings. Some walking may be required. Must be able to use fine manipulation and/or simple grasping during the course of the workday. Must be capable of sustained mental activity needed for report writing, auditing, problem solving, researching, analyzing, evaluating, synthesizing, and reasoning. The workload may be subject to frequent, substantial and unexpected changes that could affect the scheduling or completion of assignments. The incumbent must have the ability to multi-task, adapt to changes in priorities, and complete analysis or projects with short notice. Must have the ability to develop and maintain cooperative, collaborative working relationships and recognize difficult, emotionally charged and/or sensitive situations and handle them effectively and appropriately. Must deal effectively with pressure, maintain focus, and intensity yet remain optimistic and persistent, even under adversity. The incumbent behaves in a fair and ethical manner toward others and demonstrates a sense of responsibility and commitment to public service. The incumbent values cultural diversity and other individual differences in the workforce and with the public.

WORK ENVIRONMENT

The work environment is fast-paced and requires considerable flexibility in managing time, priorities, and assignments. It can be demanding and/or stressful. When in the office, the incumbent will work in a climate-controlled office under artificial light.

This position may be eligible for telework. The amount of telework is at the discretion of the Department and based on Caltrans's evolving telework policy. Caltrans supports telework, recognizing that in-person attendance may be required based on operational needs. Employees are expected to be able to report to their worksites with minimum notification if an urgent need arises. The selected candidate will be required to commute to the headquartered location as needed to meet operational needs. Business travel may be required, and reimbursement considers an employee's designated headquartered location, primary residence, and may be subject to CalHR regulations or applicable bargaining unit contract provisions. For permanent and limited term appointments, all commute expenses to the headquartered location will be the responsibility of the selected candidate.

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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.)

I agree that by providing my electronic signature for this form, I agree to conduct business transactions by electronic means and that my electronic signature is the legal binding equivalent to my handwritten signature. I hereby agree that my electronic signature represents my execution or authentication of this form, and my intent to be bound by it.

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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