

POSITION DUTY STATEMENT

PM-0924 (REV 01/2022)

CLASSIFICATION TITLE Transportation Engineer Tech	OFFICE/BRANCH/SECTION District 5 Maintenance Design/1251	
WORKING TITLE Culvert Inspector	POSITION NUMBER 905-600-3175-xxx	REVISION DATE 06/10/2022

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:

Caltrans has developed a Culvert Inventory Program as a proactive approach to the aging statewide culvert infrastructure. In support of the Culvert Inventory Program and the supervision of the a Senior Transportation Engineer and the functional direction of a Transportation Engineer, the Transportation Engineering Technician is responsible for assisting in the research and collection of culvert inventory and assessment data as well as analyzing data to determine repair needs.

CORE COMPETENCIES:

As a Transportation Engineer Tech, 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.

- **Flexibility and Managing Uncertainty** : Adjusts thinking and behavior in order to adapt to changes in the job and work environment. (Strengthen Stewardship and Drive Efficiency - Integrity)
- **Dealing with Ambiguity (Risk)**: Can comfortably handle risk and uncertainty, as well as make decisions to act without having the total picture. (Strengthen Stewardship and Drive Efficiency - Innovation)
- **Reliability**: Ability to demonstrate dependability in meeting commitments, and providing a consistent work product. Takes responsibility for individual actions in order to meet deadline demands. (Safety First, Strengthen Stewardship and Drive Efficiency - Integrity)
- **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. (Safety First, Strengthen Stewardship and Drive Efficiency - Innovation)
- **Teamwork/Partnership**: Develops, maintains, and strengthens partnerships with others inside or outside of the organization through effective communication and collaboration. (Strengthen Stewardship and Drive Efficiency - Engagement, Integrity)
- **Customer Focus**: Considers, prioritizes, and takes action on the needs of both internal and external customers. (Strengthen Stewardship and Drive Efficiency - Engagement, Integrity)
- **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 - Integrity)
- **Analytical Skills**: Approaches problems using a logical, systematic, and sequential approach. Weighs priorities and recognizes underlying issues. (Safety First, Strengthen Stewardship and Drive Efficiency - Integrity)
- **Computer literacy and application**: Appropriate knowledge of computer applications and other tools necessary to successfully perform tasks. (Strengthen Stewardship and Drive Efficiency - Integrity)

TYPICAL DUTIES:

Percentage Essential (E)/Marginal (M) ¹	Job Description
50% E	Performs the routine tasks of field gathering culvert inventory characteristics. Uses engineering judgement to assess the condition of culverts. Uses engineering judgment to recommend appropriate repair strategies and remaining service life. Uses hand-held computer equipment to capture inventory and assessment data. Transports technical equipment to remote field locations. Operates video inspection and GPS equipment at remote field locations. Develops expertise in identifying type and cause of culvert damage. Develops expertise in appropriate repair strategies and costs.

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20%	E	Uses computer oriented processes to compile field data. Incorporates various computer programs too transfer the electronic field data into an office database. Formats information stored in the database into usable inventory and assessment reports. Analyzes data for accuracy and completeness.
10%	E	Ensures that mobile inspection vehicle undergoes regularly scheduled maintenance services. Maintains video inspection equipment in good operating condition. Maintains problem and repair log for video inspection equipment. Maintains hand-held computer and GPS field equipment in good operating condition.
10%	E	Sets up and maintains safe work sites per the Manual of Traffic Controls for Construction and Maintenance Work Zones.
10%	M	Performs research into contract plans to determine location and characteristics of existing culverts. Compiles data into an electronic format using a computer.

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

The incumbent will not directly supervise others.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

This position requires the aptitude to work within a team setting. The TET will be required too assist in the culvert inventory research and database management within the office setting. The field work will require the operation of various pieces of equipment including but not limited to computers, video equipment, GPS equipment, rock climbing equipment, small hand tools and vehicle operation. The primary focus will be the operation and maintenance of the mobile culvert inspection system. In addition, the TET will assist in transporting equipment to the site locations and assisting in the collection of the identifying features of each culvert. The employee will be responsible for the quality and integrity of the field data.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Poor decisions could result in failure to properly service and maintain video inspection equipment and culvert inventory mobile unit which would result in excessive repair costs, loss of equipment and negatively impact work production. In accurate data collection would undermine the culvert inventory program and would results in decisions being made based on false or incomplete information. Failure to follow safe working practices could cause physical harm to the employee and/or team members.

PUBLIC AND INTERNAL CONTACTS

The employee will routinely interact with other Caltrans personnel including Maintenance field crews, Storm Water crews and all levels of management to transmit and obtain relevant engineering information. Those contacts will be verbal and/or written, as needed, to perform assignments. Public contact, though limited, may be required.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Transport and operate equipment on slopes.

Climbing on slopes and through brush. Use of ropes and climbing harnesses may be required.

Examination of both the exterior and interior of culverts.

Entering confined spaces is required periodically.

Ability to lift 50 lbs.

Driving of 1Ton Video Inspection Van or Truck throughout the District.

Required to do brush clearing.

Responsible for maintaining valuable computer and video equipment.

Exposure to poison oak, ticks and snakes is likely.

District wide travel will be required as necessary including overnight stays of 1-3 days, at least 2-3 weeks per month.

Has the ability to work near high speed traffic.

Personal Protective Equipment will be utilized at all times while in the field.

WORK ENVIRONMENT

While at base location, the employee will be working in an office setting utilizing computer equipment. While performing field work, the employee will be required to travel District wide. Employee will be exposed to snakes, poison oak and ticks as well as other wildlife and insects. Employee will be climbing up and down slopes regularly. Overnight stays will be required to facilitate field data collection. Overtime may be required. Employees may be required to travel within the State but travel of that nature is not very frequent. Employee will be working as an integral part of a two to three person team to perform field data collection in

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the field as well as data management in the office setting.

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