☐CURRENT ☒PROPOSED

POSITION INFORMATION	
NAME	**MCR** I
CLASSIFICATION Precision Electronics Specialist	**POSITION NUMBER** 538-103-6926-007
WORKING TITLE Seismic Instrumentation Specialist	**DIVISION/UNIT** California Geological Survey/Earthquake Engineering Program
EFFECTIVE DATE	**LOCATION** Sacramento
BARGAINING UNIT R09	**CONFLICT OF INTEREST DESIGNATION** N/A

REQUIREMENTS OF POSITION			
☒ MEDICAL EVALUATION	☒ CONFLICT OF INTEREST	☒ TRAVEL REQUIRED	☐ BILINGUAL FLUENCY
☐ SUPERVISORY	☐ SPECIALIST	☒ DRIVER LICENSE	☐ PROFESSIONAL LICENSE
☐ TYPING CERTIFICATE	☐ HYBRID	☒ OTHER In-office	

DEPARTMENT STATEMENT:

All employees are responsible for contributing to an inclusive, safe, and secure work environment that values diverse cultures, perspectives, and experiences, and is free from discrimination. You are expected to work cooperatively with team members and others to enable the department to provide the highest level of service possible. Your efforts to maintain regular attendance and treat others fairly, honestly, and with respect are critical to the success of the department's mission and vision.

GENERAL STATEMENT:

Under the supervision of the Senior Precision Electronics Specialist, the Precision Electronics Specialist (PES), applies advanced knowledge of precision electronic equipment - including accelerographic and data communications systems -, to support the Earthquake Engineering Program (EEP) in the Department of Conservation's California Geological Survey. The PES is responsible for a wide range of technical and research activities, including seismologic and data communications research; system design; specification development; calibration; experimentation; testing; validation; integration; and specialized studies of technologically complex seismic systems. Duties include, but are not limited to:

ESSENTIAL FUNCTIONS

PERCENT	DESCRIPTION
40%	Performs special studies to test and evaluate performance characteristics of new seismologic equipment; develops specifications and designs seismologic systems, including calibrating, testing, validating, and integrating new, or modifying existing instruments, equipment and

	technology into the EEP network of strong earthquake shaking recorders, and develops standards and procedures for their implementation and usage. Also plans, schedules, and leads the installation of technologically advanced, complex instrumentation systems at sites throughout the state. Monitors the work of installation technicians to ensure accuracy and compliance with Strong Motion Instrumentation Program (SMIP) procedures, existing or newly developed scientific methods and procedures, and accepted scientific standards. Monitors the state of health of the seismic network and performs or coordinates necessary maintenance to ensure continuous, high-quality data collection. Performs site visits before, during, and after field installations to ensure correct project installation has occurred, providing consultation, assistance and problem resolution to the more complex installations, and prepares a synopsis of project-related issues to management staff.
35%	Responsible for the development and performance of EEP network equipment, including seismic communication devices, upgrade and installation procedures to resolve complex technical problems or as necessitated by changing EEP, scientific or manufacturer standards or requirements including, but not limited to, analyzing symptoms, proto-typing, testing, and solutions. Assists in coordinating the network-wide instrument rework efforts of field functions to ensure a unified programmatic approach in the resolution of seismologic operational problems and meeting instrumentation objectives.
15%	Assist Sr PESs to plan, develop, and oversee technical training programs. Provides training, leadership and oversight to lower-level technicians with regard to the operation, repair, calibration and installation of new or modified accelerographic and data communications systems; develop equipment integration methods and procedures; and writes specialized scientific reports. Responsible for developing and performing quality assurance tests and inspections of routine incoming accelerographic instruments and electronic equipment to verify proper operation, calibration and quality of workmanship; testing includes detailed visual review, electronic circuitry tests, static calibration tests, other tests, as appropriate; and follow-up analysis and reporting of findings and outcome.

MARGINAL FUNCTIONS

PERCENT	DESCRIPTION
10%	Performs administrative duties including, but not limited to: adheres to department policies, rules and procedures; submits administrative requests including leave, overtime, travel, and training in a timely and appropriate manner; accurately reports time in the Tempo timekeeping system; and submits time sheets by the due date. Assists other EEP activities with the collection, archival and dissemination of post-earthquake products including processing digital records and entering them into the archival system. Maintain SMIP configuration management records via established procedures and tools.

SUPERVISION RECEIVED:

The Precision Electronics Specialist with occasional direction and assignments from other senior EEP staff.

SUPERVISION EXERCISED:

May act as a team leader.

ADMINISTRATIVE RESPONSIBILITIES FOR SUPERVISORS AND MANAGERS:

NONE

PERSONAL CONTACTS:

Interfaces with other EEP staff, equipment manufacturers, property representatives, data communications and power service providers, Caltrans employees, hospital staff and various inspectors to coordinate and facilitate the testing, installation, repair and maintenance of EEP equipment.

ACTIONS AND CONSEQUENCES:

Sub-standard job performance or errors in work may prevent critical earthquake shaking data from being recorded and/or compromise the integrity of the recorded data. Using safe work practices are critical to the prevention of injury to oneself and others as well as damage to equipment. Poor planning and preparation for the work will increase the cost in time and materials.

CONDUCT AND ATTENDANCE EXPECTATIONS:

Staff are expected to be courteous, treat others fairly, honestly, with respect, work cooperatively, and provide the highest level of service possible when interacting with state employees, peers, management, and the public. Staff are expected to maintain regular attendance according to your approved work schedule. Staff are expected to adhere to all applicable state information security policies and promptly report any damaged or lost equipment to their supervisor. Telework may be available for this position in accordance with the Department of Conservation's Telework Policy and procedures on an ad hoc basis with supervisor's prior approval. Working at home, before and/or after hours is unauthorized unless pre-approved. Commute to or from the office is not considered time worked.

WORKING CONDITIONS/PHYSICAL REQUIREMENTS

FREQUENCY	DESCRIPTION
FREQUENTLY	• Work in an office environment sitting at a desk during core office hours using a desktop computer, keyboard, mouse, monitor, printers and scanners under artificial lighting for prolonged periods of time. • Moving about the office and standing or sitting during in-person meetings. • Bending and stooping to retrieve and replace files and records. • Use of cellular phone/telephone. • Work in a high-rise building. • Travel throughout the state (via driving a truck/van and/or commercial flights). • Work at heights (using fall prevention equipment with ladders and lifts), on roadway shoulders, and in enclosed spaces (such as inside bridge box girders). • Uses desktop and laptop PCs to control, retrieve and analyze data from digital accelerographic systems through direct connections, radio or telephone modems. • Uses industry standard electronic test equipment to troubleshoot, repair and calibrate accelerographic and data communications systems. • Must safely use hand and power tools common in construction trades and work both indoors and outdoors. • Operate California state fleet vehicles
OCCASIONALLY	• Occasional overtime and non-standard work hours. • Bend and twist at the neck and waist, squat and kneel.

	• Perform repetitive hand motions, simple grasping, fine manipulation, pushing and pulling with right and left hands. • Work at heights using fall prevention equipment with ladders and lifts. • Work on roadway shoulders and in enclosed spaces such as inside bridge box girders. • Ability to move and/or transport at least 40 pounds over irregular terrain for at least 100 yards.

The duties of this position are subject to change and may be revised as needed or required.

I have read and understand the duties listed above and I can perform these duties with or without reasonable accommodation (if you believe reasonable accommodation is necessary, discuss your concerns with your supervisor).		
Employee Printed Name	**Employee Signature**	**Date**

I have discussed the duties of this position with and have provided a copy of this duty statement to, the employee named above.		
Supervisor Printed Name	**Supervisor Signature**	**Date**