State of California

Governor's Office of Emergency Services (Cal OES)

NOTICE OF EXEMPTION

TO: Office of Planning and Research 1400 Tenth Street Sacramento, CA 95814 FROM: Office of Emergency Services 3650 Schriever Ave Mather, CA 95655

PROJECT TITLE: Seismic Monitoring Station

PROJECT APPLICANT: UC Berkeley Seismological Lab

COUNTY: Monterey

PROJECT LOCATION: Bradley Ranch, a private property (BK.BRAD), near Bradley, CA, Lat/Long: at 35.9263, -120.76081,, Dot Map ID: NS0052

DESCRIPTION OF PURPOSE AND NATURE OF THE PROJECT:

This new station will contribute to the CA Earthquake Early Warning System (CEEWS) designed to potentially save thousands of lives during a large earthquake, prevent critical infrastructure damage and expedite recovery following a large earthquake. The network to which this sensor is connected will contribute real-time data to accurately record and warn people of strong shaking due to earthquakes in the region, and help provide records of ground motion that would be of immense scientific, engineering and public safety value.

Under a ten-year lease with property owner, UC BSL plans to install and operate an outdoor seismic monitoring station at the Lat/Long location noted above. Three-day installation will take place in a roughly 36-sq.-ft. area, to install two small structures: 1. 4'x3'x10" sensor vault set on a 6" concrete base, with two attached PVC-pipe postholes (10" diameter) running from center of vault, to a maximum of 10' into the ground, leading to two seismometers (1 strong motion accelerometer and 1 broadband seismometer); 2. 4'x3'x6" concrete base on which a battery box, solar panel equipment, antenna mounts, and communications equipment are housed; and 3. 10'x15'x5' fence around site, with fence posts placed 1' deep in 4" diameter holes. A flexible conduit 1' deep and 5" wide will connect the two structures. Grounding rods will be inset next to the equipment to protect the site from lightning strikes. Holes for the vault, solar panel mount, and antenna and fence poles will be dug by a small backhoe or hand-operated auger. Access to site is entirely by existing roads and trails. There are no hazardous substances involved. If needed, a small generator (~8 KW) will be used to power a hand-loaded concrete mixer and any other tools needed for the work. A detailed description, schematic and photos are in Attachment 1.

PUBLIC AGENCY APPROVING PROJECT: Office of Emergency Services (Cal OES) **DIVISION OR UNIT CARRYING OUT PROJECT**: CA Earthquake Early Warning Program

EXEMPT STATUS:

Categorical Exemption. Class 3, CEQA Guidelines Section15303 (New Construction), Class 4 Section15304 (Minor Alterations to Land) and Class 6 Section 15306 (Information Collection).

REASONS WHY PROJECT IS EXEMPT:

This project is exempt in accordance with Class 3 as described above; construction of new small weatherproof enclosures to operate seismic sensor equipment for the purpose of data collection (Class 6). In accordance with Class 4, the project described above consists of minor public or private alterations in the condition of land and/or vegetation which do not involve removal of healthy, mature, scenic trees. None of the exceptions to a notice of exemption apply.

APPLICANT CONTACT:	Peggy Hellweg	TELEPHONE:	510-642-9905
TITLE:	Operations Manager	EMAIL:	hellweg@berkeley.edu
LEAD AGENCY CONTACT:	Nate Ortiz	TELEPHONE:	916-845-8795
TITLE:	Asst Deputy Director	EMAIL:	Nate.Ortiz@CalOES.ca.gov
SIGNED BY LEAD AGENCY: Signature:	NEROX		Date: 4 May 2021
Title:	Assistant Director of Plannin	g	

ATTACHMENT 1 – PROJECT DESCRIPTION AND GRAPHICS

If necessary, we will remove any pre-existing seismic or geodetic monitoring infrastructure. There will be two concrete pads poured, one to house the sensors and one to house the associated equipment, power and telemetry. The sensor vault will be ~4' × ~3' with two postholes each ~10" in diameter and up to 10' deep. The other pad, also ~4' × ~3' and ~18" thick, will have solar panel mount poles and telemetry antenna masts with a four-legged solar array that will also house the GPS antenna and a cell modem or radio antenna. Modern earthquake recording, This installation will provide live continuous seismic (both acceleration and velocity data) to enhance earthquake locations and facilitate Earthquake Early Warning.

WELL DRILLING AND CASING: Contractor shall excavate and level approximately 5 inches of topsoil to accommodate a 4' × 3' concrete pad. Contractor shall drill 2 vertical holes into the ground. Both holes shall be 10 feet in depth from surface level, or until the drill bit reaches refusal (bedrock), whichever comes first. The first hole shall have a diameter large enough to accommodate size 8 schedule 40 PVC pipe plus room for grouting (~10 ¾" diameter bit). The second hole shall have a diameter large enough to accommodate size 6 schedule 40 PVC pipe plus room for grouting (~8 %" diameter bit). For both casings, a PVC socket connected cap shall be installed at the end of the well before installing the casing. Contractor will ensure that casing is vertically aligned **+/- 2°**. In order to secure the casing, Portland cement will be poured around the casing, stopping 10" before reaching the excavated surface. The PVC pipe shall be installed so that casing protrudes ~6" above ground (pad) level.

WELL PAD AND ENCLOSURE INSTALLATION: A concrete pad shall be constructed around the casing per. Concrete pad will be 4' × 3' and 4" high, plus 2" of tamped base gravel (wet). Pad should extend approximately 2" above grade level. Concrete shall contain a maximum ½" aggregate. Concrete shall contain a minimum 1% calcium chloride. Concrete shall contain minimum of 1 pound per cubic yard of synthetic fiber, ½" minimum length. Welded wire mesh, 6×6w1.4×w1.4, shall be used for slab reinforcement. Mesh shall be elevated above tamped gravel base using 2" × 2" wired dobies. Mesh shall be tied to doobies with steel wire. Pad shall be level, troweled to a smooth finish and have ½" chamfered finished edges. Previously removed topsoil should be leveled out and tamped down around concrete pad.

The well casings shall be decoupled from the pad. To achieve this, contractor shall use an oversized section of pipe around the already installed casing as a form, creating a ~1" gap around the casing and the pad while the pad is being poured. Contractor shall install a prefabricated $3'w \times 2'd \times 2'h$ aluminum enclosure on the sensor pad. This enclosure will be provided by BSL to the contractor. The enclosure shall be installed and mounted using $\frac{1}{2}" \times 3"$ concrete wedge anchors and appropriate hardware. All mounting hardware shall be 316 stainless steel. A bead of Sikaflex self-leveling sealant shall be run on the inside edges of the enclosure where it meets the pad to prevent water ingress.



Depiction of EEW installation (Engineering drawings available on request)



Photo of typical EEW installation.

BK.BRAD



BK.AASB - the installation and associated equipment will be located on a private property. The area that ground disturbance would occur consists of previously disturbed dirt in an active grazing area. There is no other infrastructure on the site and does not include any sensitive plant species.



BK.BRAD more photos



State of California Governor's Office of Emergency Services (Cal OES)



Looking South.

PROPERTY USE AGREEMENT BETWEEN ANTHONY LOMBARDO AND THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

THIS PROPERTY USE AGREEMENT ("Agreement") is made and entered into as of March 15, 2021 by and between **ANTHONY LOMBARDO** (hereinafter "Licensor") and **THE REGENTS OF THE UNIVERSITY OF CALIFORNIA**, a California corporation, on behalf of its UC Berkeley Seismological Laboratory (hereinafter "University").

WHEREAS, Licensor is the owner of that certain real property in the <u>County of Monterey</u> near the <u>City of Bradley, California</u>, located <u>at Lat: 35° 55' 35" N Long -120° 45' 40" W., Section</u> <u>14, Township 23S and Range 11E</u> ("Property"); and <u>APN 423-101-031-000.</u>

WHEREAS, University is a nonprofit constitutional corporation organized for educational purposes and involved in research and studies relating to earthquake faults, earthquake early warning and geophysical activity associated therewith; and

WHEREAS, as an accommodation to University, Licensor is willing to grant to University a nonexclusive right to enter the Property for the limited purpose of operating and maintaining an unmanned geophysical seismic observatory and related equipment ("Observatory"), as described in Article 1 below, upon that portion of Licensor's Property consisting of up to approximately 360 square feet, as shown in Exhibit A attached hereto ("License Area"). Licensor is willing to allow University to gain access to the License Area via the existing paved/dirt/gravel roads ("Access Route").

NOW, THEREFORE, the parties agree as follows:

1. <u>Grant of Agreement</u>. Licensor hereby grants to University a nonexclusive permission to allow University to enter the License Area for the limited purpose of operating and maintaining the Observatory as follows: to continue to contribute to our ability to detect and characterize earthquakes in northernmost California, and also to contribute toward the implementation of the ShakeAlert earthquake early warning system. Additionally, University will telemeter the seismic data in real time so that it can be used for University's earthquake reporting activities. University shall be solely responsible for all costs necessary to operate and maintain the Observatory. In maintaining its Observatory, and in all other operations upon Licensor's Property, University shall use reasonable care and diligence and shall perform all work in a proper and workmanlike manner so as to interfere as little as possible with agricultural, grazing or other uses to which Licensor's Property may be put. University shall keep the License Area free from rubbish, in a neat and clean condition, and shall use extraordinary care to prevent grass, brush, and forest fires on the License Area or on adjoining lands. Upon request of Licensor, University shall erect and maintain substantial fences with proper gates or cattle guards, as directed by Licensor, around those areas

of the License Area deemed to constitute a hazard by Licensor in Licensor's sole discretion. All such fences, gates and cattle guards shall be constructed in accordance with the specifications currently in use by Licensor in its own operations.

2. <u>Licensor's Equipment.</u> Licensor desires to colocate an internet responder site "Licensor's equipment" with Licensee's observatory. This will require that Licensee provide sufficient space in the Licensed Area for the installation of Licensor's equipment on Licensee's antennae mast and a sufficient power source for Licensor's internet equipment installation.

3. <u>Installations and Equipment</u>. University shall install seismic sensors on the License Area in a vault in the ground. At the surface, there will be equipment which shall include batteries, solar panels, and radio telemetry equipment, including an antenna. University will give Licensor access to power and infrastructure to support Licensor's equipment. Licensor will be provided continuous source of 24 watt power at no less than 25 watts.

4. <u>Access</u>. In order for University to gain access to the Observatory, Licensor shall provide University with the Access Route to be followed each time University wishes to gain access to the Observatory. Licensor shall have the right to change the Access Route in its sole discretion, and University shall provide Licensor with reasonable notice prior to University's entry upon Licensor's Property or the License Area.

5. <u>Term</u>. This term of the Property Use Agreement shall be <u>ten (10)</u> years, from <u>March 15, 2021 – March 14, 2031</u>. At the end of the term, the Property Use Agreement may be renewed, subject to the agreement of Licensor and University.

6. <u>Removal of Observatory</u>. Upon the termination of this Agreement, University shall, leave such installations/equipment/structures used with its research operations on the Property that are associated with power and telemetry and remove other elements of installations/equipment/structures as requested by the Licensor.

7. <u>Indemnity</u>. Licensor shall not be held responsible for any loss of or damage to any equipment owned or operated by University upon the License Area. University shall indemnify, defend and hold harmless Licensor, its officers, partners, agents, and employees from and against any claims, damages, costs, expenses, or liabilities (collectively "Claims") arising out of or in any way connected with this Agreement and its use of the Licensor's property including, without limitation, Claims for loss or damage to any property or for death or injury to any person or persons, but only in proportion to and to the extent that such Claims arise from the negligent or wrongful acts or omissions of University, its officers, agents, employees, or invitees under University's direct supervision and control.

8. <u>University's Insurance</u>. University, at its sole cost and expense, shall insure its activities in connection with this Agreement and obtain, keep in force and maintain insurance as follows:

a. General Liability Self-Insurance Program (contractual liability included) with minimum limits as follows:

Each Occurrence	\$2 Million
Personal and Advertising Injury	\$2 Million
General Aggregate *	\$4 Million

- b. Business Automobile Liability Self-Insurance Program for owned, non-owned, or hired automobiles with a combined single limit of not less than One Million Dollars (\$2,000,000) per occurrence.
- c. Property, Fire and Extended Coverage Self-Insurance Program in an amount sufficient to reimburse University for all of its equipment, trade fixtures, inventory, fixtures, and other personal property located on the License Area, including improvements on the Property hereinafter constructed or installed.
- d. Workers' Compensation as required by law.

The insurance coverages referred to under this Paragraph shall include Licensor as an additional insured. Such a provision shall apply only in proportion to and to the extent of the negligent acts or omissions of University, its officers, agents and employees, or any person or persons under University's direct supervision and control, and then only to the extent such supervision and control is required by law. University, upon full execution of this Agreement, shall furnish Licensor with Certificates of Insurance evidencing compliance with all requirements. Certificates shall provide for thirty (30) days advance written notice to Licensor of any material modification, change or cancellation of any of the above insurance coverages.

9. <u>Notices</u>. Any notice required hereunder shall be in writing and shall be addressed as follows:

Licensor:	Anthony Lombardo P.O. Box 1450 Salinas, CA 93902 Phone: 831-320-4333 Email: tony@alombardolaw.com
University:	Dr. Peggy Hellweg Berkeley Seismological Laboratory University of California, Berkeley 213 McCone Hall Berkeley, CA 94720-4760 Phone: 510-643-9449 Email: peggy@seismo.berkeley.edu
with copy to:	Helen Levay, Manager Real Estate Services University of California, Berkeley A&E Building, 2 nd Floor Berkeley, CA 94720-5600 Phone: 510-643-2066 Email hlevav@berkeley.edu

10. <u>Counterparts</u>. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, and all of which shall constitute one and the same agreement.

11. <u>Attorneys' Fees</u>. In the event of any action or proceeding brought by either party against the other under this Agreement, the prevailing party shall be entitled to recover all costs and expenses, including reasonable attorneys' fees, in such action or proceeding.

12. <u>Governing Laws</u>. This Property Use Agreement shall be construed in accordance with the laws of the State of California.

13. <u>Entire Agreement</u>. This Property Use Agreement constitutes the entire agreement between the parties hereto and supersedes any and all prior agreements, both written and oral, regarding the subject matter hereof.

IN WITNESS WHEREOF, the parties hereto have executed this Property Use Agreement as of the date first above written.

LICENSOR:

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Date

UNIVERSITY:

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

Bv	Helen LEVAY	
Its		
Date	3/31/2021	

