



TO: Board of Directors  
FROM: Liz Jamieson, Director of Capital Projects  
SUBJECT: UW Department of Earth Sciences/Pacific Northwest Seismic Network Agreement  
– ShakeAlert Earthquake Early Warning Project  
DATE: April 21, 2020  
TYPE: Action Needed

The Pacific Northwest Seismic Network is a collaboration between the University of Washington, University of Oregon, and the United States Geological Survey. Together, they are developing and implementing the ShakeAlert Earthquake Early Warning system to immediately warn the public when a damaging earthquake starts to occur. The attached agreement allows them access to Elger Bay Elementary School in order to install and maintain an earthquake sensor that will provide input from the south end of Camano Island to the ShakeAlert system.

Recommendation:

We recommend the board **move to approve the attached Site Access Agreement for Seismic Monitoring at Elger Bay Elementary School through March 22, 2025 and then automatically renew every five (5) years.**



Dear Site Host:

On behalf of everyone here at the Pacific Northwest Seismic Network, I would like to thank you for your participation in the ShakeAlert Earthquake Early Warning system. The ShakeAlert system is being built to provide people on the West Coast a critical warning before an earthquake's destructive shaking hits. This will give people crucial time to take protective actions, and it cannot happen without your help and the help of others like you.

How does it work? The Pacific Northwest Seismic Network is a collaboration between the University of Washington, the University of Oregon, and the United States Geological Survey. We are developing and implementing the ShakeAlert Earthquake Early Warning system to immediately warn the public when a damaging earthquake starts to occur. With earthquake sensors spread across the Pacific Northwest, the ShakeAlert system rapidly detects a strong earthquake using the nearest sensors, determines the magnitude and location, and immediately sends out an alert to the public before the destructive shaking has time to reach them. This provides up to tens of seconds of warning before intense shaking hits, allowing people to take cover, drivers to pull over, tunnels and drawbridges to stop traffic, hospitals to pause surgeries, and gas valves to close.

Your site will be named UW.ELGR. Please find enclosed a copy of the siting report which includes the proposed location for the sensor, installation details, and all other information relevant to the installation at your location. Within the next few months, the PNSN will be reaching out to you to schedule the station installation between you and our contractor. We plan on giving you plenty of heads up, but if you have any concerns, questions, or corrections, please do not hesitate to let us know.

Also attached are two copies of our land use agreement. Please read through this, sign it, and send one copy back to us in the enclosed stamped and addressed envelope. Again, if you have any questions please contact us at 206-685-8180 or by email at [pnsn@uw.edu](mailto:pnsn@uw.edu).

For more information about the Pacific Northwest Seismic Network, visit our website at [www.pnsn.org](http://www.pnsn.org). You can also learn more about the ShakeAlert Earthquake Early Warning project at [www.shakealert.org](http://www.shakealert.org).

Thank you again from the PNSN and the Pacific Northwest for your participation in this effort to save lives!

Sincerely,

A handwritten signature in black ink that reads 'Paul Bodin'.

Dr Paul Bodin  
PNSN Network Manager



## Site Access Agreement for Seismic Monitoring

- e. Upon termination of this Agreement, PNSN will remove the Equipment and restore areas of the Property on which the Equipment was located to their pre-existing condition (as nearly as possible) prior to the commencement of activities under this Agreement. This removal and restoration will be completed within ninety (90) days after the date of termination unless extended by the mutual agreement of the parties, such agreement not to be unreasonably withheld.
4. Condition of the Property. UW acknowledges that (a) Grantor has made no representation or warranty concerning the condition of the Property or the fitness of its use for seismic monitoring and, (b) entry onto the Property is accepted strictly in an "as is" condition and solely at the risk of PNSN and its members.
5. Right to Remove Equipment. Equipment located on the Property will not become a fixture. PNSN will have the right to remove any or all of the Equipment at any time.
6. PNSN shall not permit any mechanics or other liens to be filed against the Property by reason of labor or materials furnished to the Property by PNSN.
7. Liability/Insurance. Grantor shall be reimbursed for losses arising from property damage caused in whole or in part by the negligent act or omission of any employee or agent of the UW or PNSN while performing activities under this Agreement. Grantor assumes no liability for loss or damage to the Equipment or for injuries to or agents, contractors, employees or representatives while in, on, or about the Property.
8. Term and Termination of the Agreement. This Agreement will be in effect from 23 March 2020 and will continue through 22 March 2025 and then automatically renew every five (5) years unless terminated by either party. Either party may terminate this Agreement at any time by providing at least ninety-(90)-days written notice to the other party.

## Site Access Agreement for Seismic Monitoring

9. Notices. Notices to the other party will be effective three (3) days after mailing in the US mail, postage prepaid, certified or registered mail, return receipt requested. Any notice by personal delivery will be deemed given when actually delivered.

To Grantor at:

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Email: \_\_\_\_\_



To PNSN/UW at:

MAILING ADDRESS:  
University of Washington  
UW Real Estate  
Campus Box 352210  
Seattle, WA 98195-2210

COURIER/DELIVERY ADDRESS:  
University of Washington  
UW Real Estate  
University Facilities Building  
3988 Jefferson Road NE, 1<sup>st</sup> Floor  
Seattle, WA 98195-2210

With a copy to  
University of Washington  
PNSN  
Campus Box 351310  
Seattle, WA 98195

Phone: (206) 616-3400  
Email: uwreo@uw.edu

Phone: (206) 616-0942  
e-mail: pnsn-admin@uw.edu

10. Transfer or Sale of Property. Grantor will notify (a) UW of any sale or transfer of the Property at least thirty (30) days prior to such sale or transfer and (b) any third-party purchaser/transferee of the Property of the existence and terms of this Agreement.
11. Authority. Grantor represents and warrants that Grantor owns the Property and has the legal authority to enter into this Agreement and grant UW the access it provides.

**AGREED TO BY:**

**Grantor**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

Date: \_\_\_\_\_

**UW**

By: Paul Bodin  
Name: Paul Bodin  
Title: Network Manager

Date: 16 March 2020





## ShakeAlert Station Siting Report

**Station: 1069-ELGR**

**Site Coordinates: 48.14519 -122.46853**

**Elevation: 54m**

**PLSS Information: S30 T31N R3E**

**Magnetic Declination: 15.75° E**

**Landowner:**

Name: Stanwood-Camano School District  
Site Address: Elger Bay Elementary School  
1910 Elger Bay Rd  
Camano Island, WA 98282

**Contact(s):**

Main contact: Liz Jamieson  
Phone: (360) 572-9277  
E-mail: [ejamieson@stanwood.wednet.edu](mailto:ejamieson@stanwood.wednet.edu)  
Mailing address: 26920 Pioneer Hwy,  
Stanwood, WA 98292

On-site contact: Principal Victor Hanzeli (for scheduling service visits)  
E-mail: [vhanzeli@stanwood.wednet.edu](mailto:vhanzeli@stanwood.wednet.edu)  
Office phone: (360) 629-1290  
Personal cell: (360) 722-6296  
Fax: (360) 629-1291  
Address: Elger Bay Elementary School  
1910 Elger Bay Rd  
Camano Island, WA 98282

Network contact: Dan Johnston  
E-mail: [djohnston@stanwood.wednet.edu](mailto:djohnston@stanwood.wednet.edu)

Facilities contact: Kevin Cruise (for input on routing GPS antenna cable)  
E-mail: [kcruse@stanwood.wednet.edu](mailto:kcruse@stanwood.wednet.edu)  
Phone: (360) 629-1235

**Site Type:** Elementary School

**Site Visit:** 20 February 2020  
**Visitors:** Graylan Vincent  
**Report by:** Graylan Vincent  
**Report approval:** Karl Hagel 3/11/2020

**Instrumentation to be Installed:**

- 3-channel strong motion accelerometer with a battery backup in a 20"x20"x20" enclosure.
- Outdoor GPS antenna.

**Instrument Location:**

The instrument would be located in the IDF/data closet.

A soda can-sized GPS antenna would be mounted on an exterior wall and connected to the instrument with a coax cable.

**Power Option:**

- Standard 120V electrical outlet

**Internet Option:**

- Network switch

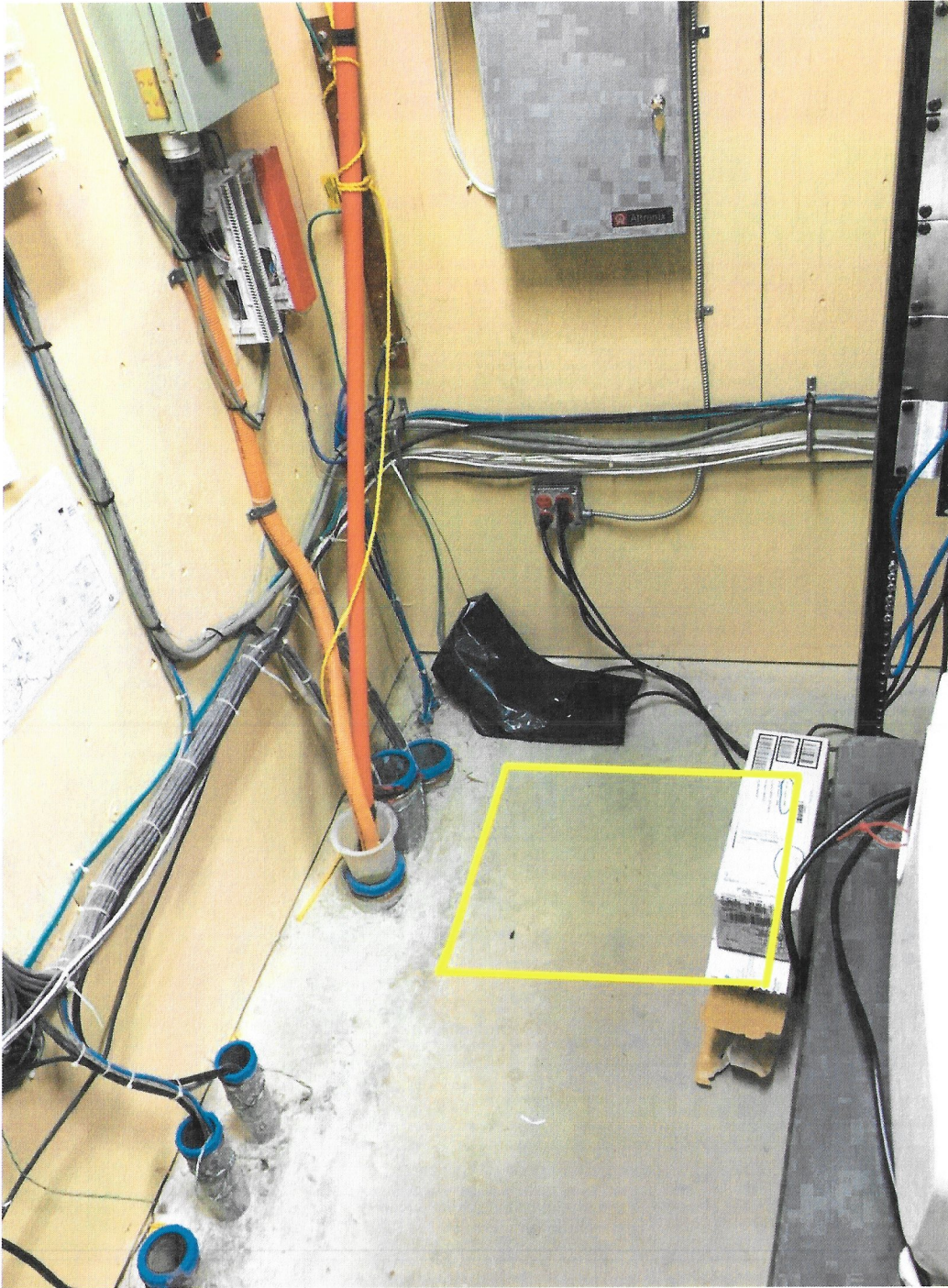
**Issues and Additional Information:**

- All personnel must request permission from the main contact to enter the site area and/or perform any installation or servicing.
- Vehicle accessibility: paved, accessible year round
- Environmental hazards: None expected
- GPS location was not determined during siting visit.

**Background Vibrations:**

- Elber Bay Rd West 110m
- Shoreline 760m East

**Site Photos:**



**Image 1:** Proposed sensor location in the IDF/data closet with electrical outlet. Network rack is adjacent to the right.





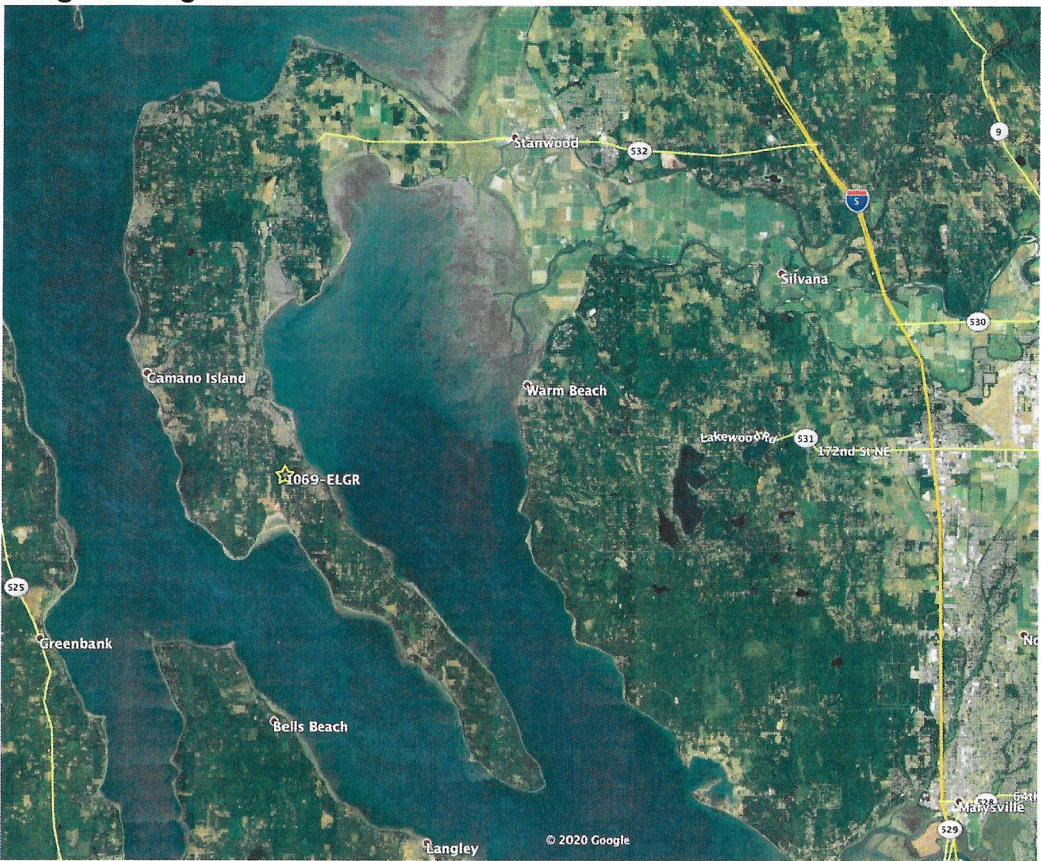
**Image 2:** There are various conduit routes through the floor and ceiling from the IDF to other parts of the school that could possibly be used to route the GPS antenna cable.



**Image 3:** School entrance.



**Image 4: Regional view**



**Image 5: Area view**



**Image 6: Local view**