



FINDINGS OF FACT STAFF REPORT

Date: October 29, 2010 OPRD Ocean Shores Coordinator: Tony Stein
OPRD File Number: BA-667-10 County: Tillamook Applicants: Consortium For Ocean Leadership, Inc., Jeanine Hubler

Project Location: Seward of the terminus of Pacific Avenue, Pacific City
Tillamook County Assessor's Map # 4S-11W-25, Tax Lots 200, 500, 600, and 700.

Brief Project Description: The project involves the installation of two (2) 5,000 feet long, 5" steel pipes by horizontal directional drilling (HDD) from the North Pacific Cable beach vault at the western end of Pacific Avenue to a water depth of 20 meters offshore, a distance of approximately 0.9 miles. The conduit will be bored to obtain a depth of 43 feet below beach level from the upland site behind the beach dunes and the ocean shore to a point approximately 4,910 feet offshore.

The project application includes the subsequent installation of two submarine cables connecting offshore scientific seabed sensors and moorings to the shore facility in Pacific City. The subject conduit pipes and submarine cables will be the sea-shore interface for the Ocean Observatories Initiative (OOI), an ocean observatory system funded by the National Science Foundation. The OOI is an outgrowth of several years of community-wide scientific planning efforts, both nationally and internationally.

ADMINISTRATIVE RULE STANDARDS AND RELEVANT FACTS

- 1. PIPELINES OR CONDUITS UNDER THE OCEAN SHORE: POLICY - Pursuant to ORS 390.610(4), it is the policy of the Department to prohibit the use of the ocean shore as a north-south utility, communication, transshipment or conveyance corridor. This prohibition applies to pipelines, conduits, cables, wires, towers, transmission, relay or booster stations and other continuous or intermittent facilities for moving material or services, or transmitting data, information, energy, or other commodity whether for private or public use or benefit.**

The submarine cables will be crossing the beach in an east-west direction. This route will not result in the ocean shore being used as a north-south utility corridor.

- 2. PIPELINES OR CONDUITS UNDER THE OCEAN SHORE: JUST COMPENSATION; OAR 736-020-0040 -**
Prior to the issuance of any permit under these rules and regulations, the Department shall receive from the prospective permittee, payment of just compensation for the use of the ocean shore. The amount of just compensation shall be at the discretion of the Department. Factors the Department may consider in setting the amount of just compensation may include:
- (a) The length and width of the ocean shore occupied by the proposed pipeline, cable or conduit crossing;
 - (b) Any surface manifestations of the pipeline, cable or conduit crossing on the ocean shore;
 - (c) Potential impacts to unusual or scenic land forms;
 - (d) Potential impacts to fish and wildlife and their habitats;
 - (e) Potential impacts to recreation use or access to the ocean shore or to public recreation facilities adjacent to the ocean shore that may be affected by the pipeline, cable or conduit crossing;
 - (f) The safety features and practices to be employed by the applicant during construction, through out the life of the facility, and in the event of a break, rupture, exposure or other hazardous circumstance;
 - (g) Benefits that will accrue to the public from the proposed project such as sewer, gas, or electric service, phone or other communication service, or beach access mitigation;
 - (h) Benefits that accrue to private individuals, companies, organizations or corporations from the proposed project; and
 - (i) Administrative costs to the State of processing the application, issuing the permit, and monitoring the project for permit compliance.

In no case shall just compensation be less than the Department's administrative costs as calculated under the fee provisions in OAR 736-020-0004.

The cable facility will be installed by a directional bore operation, staged from an upland location. The conduit and cable will be located at a depth of 43 feet below the surface of the beach, and at least 45 feet below the vegetated dunes. There will be no impacts to scenic landforms or recreation use. Based on these considerations, OPRD is requiring the minimum amount of just compensation as calculated under the fee provisions in OAR 736-020-0004.

3. GENERAL STANDARDS, OAR 736-020-0010

Project Need – There shall be adequate justification for a project to occur on and alter the ocean shore area.

The application describes that the need for the project is to provide the U.S. ocean sciences research community with basic seabed sensors, undersea cables, instrumented moorings, and other infrastructure required to make sustained, long-term and adaptive measurements in the oceans. The installation of the HDD conduits will allow the connection of Regional-scale node (RSN) components to an existing facility. The initiative will support related elements, such as unified project management, data dissemination and archiving, modeling of oceanographic processes, and education and public engagement activities essential to the long-

term success of ocean science. The system will also allow near-time availability of oceanographic and meteorological data to the public via the internet.

The National Science Foundation's (NSF's) Ocean Sciences Division has developed the Ocean Observatories Initiative (OOI), as an outgrowth of several years of community-wide scientific planning efforts, both nationally and internationally. The research-focused observatories will enable the OOI to be networked, and become an integral part of the proposed Integrated and Sustained Ocean Observing System (IOOS). IOOS is an operationally-focused national system and will contribute to the international Global Ocean Observing System (GOOS) and the Global Earth Observing System of Systems (GEOSS).

A finding of project need follows the review of all other applicable standards and is included in the findings summary at the end of this report.

Protection of Public Rights – Public ownership of or use easement rights on the ocean shore shall be adequately protected.

The proposed cables will be buried to a minimum depth of 43 feet below the beach and will not affect public rights of recreation or ownership.

Public Laws – The applicant shall comply with federal, state, and local laws and regulations affecting the project.

Tillamook County Department of Community Development has certified that the project is consistent with the local government comprehensive plan. A Fore-dune Grading Permit for moving sand at the North Pacific Cable beach vault for construction purposes will be required by Tillamook County.

A Joint Permit application from the Division of State Lands and the U.S. Army Corps of Engineers for the conduit and cable placement is currently pending. A condition of approval will require that any easement agreements and/or any required permits from the Division of State Lands and the Corps be finalized prior to installation of the cable on the ocean shore.

Alterations and Project Modifications – There are no reasonable alternatives to the proposed activity or project modifications that would better protect the public rights, reduce or eliminate the detrimental affects on the ocean shore, or avoid long-term cost to the public.

The site for the proposed cable landing has been chosen due to the physical characteristics (deep sand substrate) and because of the connectivity to existing infrastructure in close proximity to the landing site.

The horizontal directional drilling (HDD) method is considered the most appropriate technique for installing the conduits that will house the fiber optic cable. Boring will allow the conduits to be installed to an adequate depth (43 feet below beach level) so that the facility will not be exposed by beach or dune erosion. HDD is a common technique used to install cables, pipelines, fiber optic ducts and other types of buried infrastructure under environmentally sensitive areas or technically difficult sites.

Trenching of fiber optic cables across the beach has been conducted on other installations in Tillamook County, and in these instances the conduits became exposed during erosion events, requiring extensive repairs and re-installation. The subject application will not use trenching within the ocean shore area, using the HDD method for constructing the project as described above.

Public Costs – There are no reasonable special measures, which might reduce or eliminate significant public costs. Prior to submission of the application, the applicant shall consider alternatives such as nonstructural solutions, provision for ultimate removal responsibility for structures when no longer needed, reclamation of excavation pits, mitigation of project damages to public interests, or a time limit on project life to allow for changes in public interest.

Public costs will be minimal, as the cable and conduits will be buried and will not infringe on public recreation. In this case, the method of burial will be a directional bore with no need for excavation or heavy equipment use within the ocean shore area. Costs of maintaining and repairing the cable will be the responsibility of the permit applicant and subsequent owners of the cables.

Compliance with LCDC Goals – The proposed project shall be evaluated against the applicable criteria included within Statewide Planning Goals administered by the Department of Land Conservation and Development.

For this permit, Tillamook County has certified that the proposed project is compatible with the acknowledged local comprehensive plan and land use regulations. This certification meets the Department's obligation to ensure compatibility with the Statewide Planning Goals administered by the local governments.

Goal 19, Ocean Resources, is not a function of local governments, but is addressed separately through state and federal programs. The OPRD permit for installation of the conduits and fiber optic cables does not affect ocean resources, as the proposed project only involves subsurface installation of the cable beneath the ocean shore. However, the ocean shore installation is a necessary part of the overall project, which extends across Oregon's Territorial Sea. An important requirement of Goal 19 is to protect areas important to fisheries and to avoid operational conflicts with other ocean uses and activities. To protect fisheries interests, the permit applicant has signed a Memorandum of Understanding (March 22, 2010) regarding pre-installation activities with the Oregon Fishermen's Cable Committee (OFCC). The OFCC will work with the Consortium for Ocean Leadership, Inc., to create a formal agreement further defining a long term relationship, protecting fishermen from damage and liability in the event that fishing gear is caught on the seafloor cable.

To help ensure compatibility with Goal 19, OPRD will require conditions that the permittee, prior to construction, finalize a written agreement with the OFCC, and obtain all required permits from state and federal agencies with jurisdiction on the ocean seafloor.

4. SCENIC STANDARDS, OAR 736-020-0015

Projects on the ocean shore shall be designed to minimize damage to the scenic attraction of the ocean shore area.

Natural Features – The project shall retain the scenic attraction of key natural features, for example, beaches, headlands cliffs, sea stacks, streams, tide pools, bedrock formations, fossil beds and ancient forest remains.

The proposed cable and conduits will be buried beneath the beach and will not be visible. The scenic attraction of the beach and dunes will therefore be retained.

Shoreline Vegetation – The project shall retain or restore existing vegetation on the ocean shore when vital to scenic values.

The cable installation will not affect any existing vegetation on the ocean shore.

View Obstruction – The project shall avoid or minimize obstruction of existing views of the ocean and beaches from adjacent properties.

The cable facilities will be installed underground, and will have no impact on existing views of the ocean and beaches.

Compatibility with Surroundings – The project shall blend in with the existing shoreline scenery (type of construction, color, etc.).

The cable and conduit will be completely hidden from view, and will not affect the scenery of the area.

5. RECREATION USE STANDARDS, OAR 736-020-0020

Recreation Use – The project shall not be a detriment to public recreation use opportunities within the ocean shore area except in those cases where it is determined necessary to protect sensitive biological resources such as state or federally listed species.

The cable and conduit will be hidden from view and buried to a minimum depth of 43 feet below the beach, so that there will be no impacts to traditional recreational uses on the beach.

Recreation Access – The project shall avoid blocking off or obstructing public access routes within the ocean shore area except in those cases where it is determined necessary to protect sensitive biological resources such as state or federally listed species.

There will be no above ground structures or facilities on the ocean shore that could cause an obstruction to recreation access along the ocean shore.

6. SAFETY STANDARDS, OAR 736-020-0030

The project shall be designed to avoid or minimize safety hazards to the public and shoreline properties. The following safety standards shall be applied, where applicable, to each application for an ocean shore permit.

Structural Safety – The project shall not be a safety hazard to the public due to inadequate structural foundations, lack of bank stability, or the use of weak materials subject to rapid ocean damage.

The cable and conduit are extremely durable, and will be buried to a depth of at least 43 feet below beach level. The location of the beach manhole facility where the drilling operation will be staged is approximately 300 feet landward of the toe of the foredune. The depth of the installation and the setback distance of the manhole facility appear to be adequate to avoid the most severe dune erosion possible at this site. If, however, due to unforeseen circumstances the cable becomes exposed, a condition of the permit approval will require that the owners of the cable re-install the cable to an adequate depth or remove the installation from the ocean shore to eliminate any hazardous or detrimental condition.

Obstructional Hazards – the project shall minimize obstructions to pedestrians or vehicles going onto or along the ocean shore area.

Across the entire width of the ocean shore, the project is limited to a subsurface installation; therefore there will be no obstructions to beach access or to pedestrian or vehicle travel north or south along the ocean shore.

The western entrance to the beach at the end of Pacific Avenue is used as a pedestrian and four-wheel-drive vehicle beach access. This is not an improved beach access, and consists of a wide and soft track through the sand, dropping over the steep foredune. The upland drilling operation will be located in the beach road access

and will require the temporary re-routing of pedestrians and vehicles around the work site during the construction period. The application states that a 15' foot corridor will be maintained outside the work area for safe pedestrian and vehicle beach access.

Neighboring Properties – The project shall be designed to avoid or minimize ocean erosion or safety problems for neighboring properties.

The cable and conduit will be located under the beach. There are no associated safety hazards to the public and surrounding property owners from this buried infrastructure.

Property Protection – Beachfront property protection projects shall be designed to accomplish a reasonable degree of increased safety for the on-shore property to be protected.

The proposed project is not for beachfront property protection.

7. NATURAL AND CULTURAL RESOURCE STANDARDS, OAR 736-020-0030

Projects on the ocean shore shall avoid or minimize damage to the following natural resources, habitat, or ocean shore conditions, and where applicable, shall not violate state standards:

Fish and wildlife resources including rare, threatened or endangered species and fish and wildlife habitats.

There are no reported fish and wildlife resources that will be impacted by the proposed project. The project is located within a previously disturbed residential area and high use vehicle and pedestrian access with no sensitive vegetation or habitat.

Estuarine values and navigation interests.

The project will not be located in an estuary. Oregon Division of State Lands and the Corps of Engineers will review fishing and navigation issues for the installation of the cable on the seafloor, and will be requiring the permittee to enter an agreement with OFCC. (Finalization of this agreement will also be a required condition on the OPRD permit.) The project will have no affect on fishing or navigation interests within the ocean shore area, which extends between the line of extreme low tide and the vegetation line.

Historic, cultural and archeological sites.

Notice of the application was provided to the State Historic Preservation Office, and to the Confederated Tribes of the Siletz and Grand Ronde Indians. There were no reports of historic, cultural, or archeological sites at this location.

Natural areas (vegetation or aquatic features).

The method of boring the conduit below the ocean shore will prevent any disturbance of natural areas or vegetation. Some disturbance will take place at the upland drilling site, which is outside of the ocean shore boundaries.

Air and water quality of the ocean shore area.

All work within the ocean shore will be subsurface and will cause no impacts to the air and water quality of the ocean shore area.

Areas of geologic interest, fossil beds, ancient forest remnants.

The area is comprised of sand dune backed shoreline, and none of these features will be affected by the cable installation.

When necessary to protect native plant communities or fish and wildlife habitat on the subject or adjacent properties, only native, non-invasive, plant species shall be used for revegetation.

Work on the ocean shore will be limited to subsurface boring, and will not affect vegetation within the ocean shore boundaries.

8. PUBLIC COMMENT

Notice of the proposed project was posted at the site for 30 days in accordance with ORS 390.650. Individual notification and a copy of the application were mailed to government agencies and individuals on OPRD's ocean shore mailing list. One letter of comment was received requesting OPRD to consult with Oregon Fish and Wildlife (ODFW) on the best work window for project construction. The letter also suggested that OPRD contact Oregon State University staff regarding Chinook salmon smolt use of the surf zone, as well as verifying sound attenuation information to ensure reduced noise to avoid whale impacts. These concerns will be addressed by the Division of State Lands and U.S. Army Corps of Engineers as these potential impacts are located within their jurisdictional boundaries and are outside of the ocean shore area.

9. Findings Summary

Project Need – The proposed pipe conduit and fiber optic cable placement and landing is necessary, according to the application, to provide the U.S. ocean sciences research community with basic sensors and infrastructure required to make sustained, long-term and adaptive measurements in the oceans. The conduit pipe will be bored to 43 feet below the beach level; and will avoid possible disturbances to the beach and provide maximum protection to the cables in the surf zone

Because the project will be located well beneath the beach level, there will be no visible encroachment on the ocean shore, and no impacts to ocean shore resources.

Based on the above considerations, OPRD finds that there is adequate justification for the project to occur on the ocean shore area.

The following checklist summarizes whether the application satisfies the general, scenic, recreation, safety and natural and cultural resource standards as defined in OAR 736-020-0010 through 736-020-0030:

Standard	Yes	No	Standard	Yes	No
Project Need	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Structural Safety	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Protection of Public Rights	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Obstructional Hazards	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Public Laws	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Neighboring Properties	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Alteration and Project Modifications	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Property Protection	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Public Costs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fish and Wildlife Resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Compliance with LCDC Goals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Estuarine Values and Navigation Interests	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Natural Features	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Historic, Cultural and Archeological Sites	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Shoreline Vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Natural Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>
View Obstruction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Air and Water Quality of the ocean shore	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Compatibility with Surroundings	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Areas of Geologic Interest	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recreation Use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use of Native Plant Species when Necessary	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recreation Access	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

10. STAFF RECOMMENDATION:

Based on an analysis of the facts and in consideration of the standards evaluated under OAR-736-020-0005 through OAR 736-020-0030, I recommend the following action:

- Approval
- Approval with conditions
- Denial

Tony Stein,
Ocean Shores Coordinator