



FINDINGS OF FACT STAFF REPORT

Date: July 2, 2004

OPRD Coastal Land Use Coordinator: Steve Williams

OPRD File Number:

BA-588-04

County: Lincoln

Applicants: Bruce Overbeck and
Beverly Verna

Project Location:

159 Nebraska Street, Yachats
Lincoln County Assessor's Map #14S-12W-11BA, tax lot 400.

Brief Project Description:

The proposed project involves the construction of a riprap revetment, approximately 100 feet in length, and approximately 15 feet in height above beach level, with a slope of 1.5H to 1 V. The visible portion of the riprap revetment will project out onto the ocean shore between 10 and 25 feet, depending on the height of fluctuating beach sand levels.

ADMINISTRATIVE RULE STANDARDS AND RELEVANT FACTS

I. 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.

According to the permit application and the accompanying geologic report (Horning Geosciences, February 20, 2004) bluff retreat rates have recently peaked due to extreme beach erosion. Sea caves as deep as 12 feet have formed in the bluff, and block fall has caused as much as 8 feet of retreat along the north end of the property. During the previous winter, the two sea caves were filled with rock as a temporary measure. The existing single family dwelling is located as close as 24 feet to the edge of the bluff, and 17 feet from the back edge of the larger sea cave. Continued erosion poses a threat to the existing house. The geologist has recommended placement of riprap to limit shoreline erosion.

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 riprap will occupy an approximate 25-foot width of beach area along the base of the 26-foot high bluff. The riprap will tie in to existing riprap on the adjacent property to the south, and will be tapered in on

the north end, to reduce wave reflection. Usually the beach at this site is quite wide, so public recreational uses should not be affected under normal conditions. The presence of the riprap will not affect public ownership or easement rights on the ocean shore.

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

The Lincoln County Planning Division has certified that the project is in compliance with the Lincoln County Comprehensive Plan and Land Use Code. State of Oregon regulations are being addressed under the review of this permit. Federal regulations could potentially involve a U.S. Army Corps of Engineers permit, however a Corps permit is usually not required for this type of project. A condition of the permit will require that the applicants obtain any required permits from the Corps, if applicable.

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.

Relocation of the home was not considered a viable option due to the high cost and difficulty of moving the structure. A statement on the contractor's estimate explains "the task of moving the house on the property, though not impossible, would be complex and approach the cost of new construction. A big concern would be that due to its post and beam construction and its dual level design, the structural integrity of the house could be seriously compromised." The cost to move the structure is estimated at \$250,000.00.

The geologic report states that wave energies are presently too high for the use of sand embankments, soils, or gravels/pit run rock (dynamic revetments). As stated in the report, it is likely that these would all wash out within one storm season. Some attempts have been made to use vegetative stabilization in the dune sands at the base of the marine terrace bluff, however, the vegetation (European beach grass) was washed away after 1998. Use of Hooker's willow has been successful on other parts of the coast. At this site, however, the dune and terrace sands would not be favorable to the growth of willow, as the sand would be unlikely to hold enough moisture during the dry summer months. Vegetative stabilization or sand alteration would not be sufficient to substantially slow or halt erosion, or to stabilize the bluff slope.

The geologic report recommends a riprap revetment to limit additional shoreline erosion. Considering the above factors, the use of riprap shore protection constitutes the most reasonable option for controlling erosion at this site.

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.

Alternative shore protection methods other than riprap have been discussed above. These alternatives are not considered reasonable special measures, as they would fail to provide the needed long-term protection for the property.

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.

Lincoln County has certified that the project is in compliance with the Lincoln County Comprehensive Plan and

Land Use Code, which are acknowledged by LCDC as meeting the Statewide Planning Goal requirements.

II. 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 natural features of the beach in the general vicinity will remain intact, and no significant landforms such as headlands, sea stacks, or streams will be affected. The natural eroding bluff will be partially covered with the riprap revetment, however, the overall scenic attraction of the beach and surrounding landforms will remain.

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

There is no existing vegetation that will be affected by the riprap placement. The project includes covering the riprap with sand and planting vegetation, which will help give the riprap revetment a more natural appearance. Eventually, winter storms may scour the sand and vegetation from all or part of the riprap.

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

The riprap will not affect existing views from adjacent properties.

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

The applicant has proposed covering the revetment with sand and planting vegetation, which would allow it to blend in with the existing terrain and vegetation. If the riprap is washed clean of the sand and vegetation, then it will be more noticeable. Existing riprap revetments begin on the adjoining property to the south and extend approximately 470 feet southward. The proposed riprap will be similar to the existing revetments adjacent to the subject site and will blend in reasonably well with the existing scenery.

III. 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 riprap will occupy some beach area, but will not significantly affect public recreation use opportunities. During storm events or winter high tides, wave run-up may reach the riprap structure. During normal conditions, however, the existence of the riprap will not be a detriment to typical recreation uses.

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.

The project will not extend out onto the ocean shore to cause an obstruction to public access along the shoreline during normal ocean conditions.

IV. 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 proposed design indicates that the riprap will be structurally safe and not an obstructive hazard. Rocks will be placed individually to form an interlocking structure, as is the standard practice for revetment design.

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

The beach at this site is typically quite wide, and the proposed riprap is not expected to obstruct pedestrian or vehicle access during normal ocean conditions.

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

In order to minimize the chance of enhanced erosion or flank scour on adjoining properties, the riprap design includes a tapering of the riprap height and width at the north end, to help minimize the possibility of end effects or flank scour. At the north end, the riprap will be tied into the existing adjacent riprap structure.

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 purpose of the revetment is to provide protection to the upland property.

V. 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.

Estuarine values and navigation interests.

The project is not adjacent to an estuary, and does not affect navigable water on the ocean.

Historic, cultural and archeological sites.

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

Natural areas (vegetation or aquatic features).

There is no existing significant vegetation or aquatic features that will be impacted by the proposed riprap.

Air and water quality of the ocean shore area.

The project will take place above the ordinary high tide line, and will not cause foreign materials or pollutants to enter the water. Riprap placed at the site will be free of debris or foreign materials. The proposed project will not adversely affect water quality on the ocean shore. Air quality will not be affected, except for a negligible amount of exhaust from the use of heavy equipment during the construction period.

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

None of these features have been identified at the site.

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.

The site is within a developed residential area, and there are no known protected native plant communities or fish and wildlife habitat on or adjacent to the subject property.

VI. 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. OPRD received four requests for a public hearing, however, three of these requests were subsequently withdrawn. A hearing was not held as the number of requests fell short of the ten required to hold a hearing. One additional letter stated a general opposition to riprap as a form of erosion control.

VII. Findings Summary

Project Need – The proposed riprap is necessary to provide protection to the upland property from ocean-caused erosion. Bluff conditions and proximity of the houses to the bluff edge have caused the geologist to recommend the riprap revetment. There is evidence of significant active erosion, in the form of developing sea caves, and block fall from the bluff. Relocating the houses is not a reasonable alternative due to the high cost and difficulty in moving the structure. Other types of less structural methods would not provide the protection necessary to control wave erosion at the toe of the slope.

Based on the above considerations, OPRD finds that there is adequate justification for the project to occur on and alter 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"/>

VIII. 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

Steve Williams,
Coastal Land Use Coordinator