Geologic Hazard Report Review
Staff Review, Decision, Conditions of Approval
Case File GEO 2024-04

Date:	September 24, 2024
Case File:	GEO 2024-04
Property Owners:	William and Rebecca Christensen and Jonathan Christensen and Terrana Cliff
Situs Address:	2715 NW Inlet Ave
Location:	Approximately 150 feet south of the junction of NW 28th and NW Inlet
Tax Map and Lot:	07-11-10-AB-01100-00
Comprehensive Plan Designation:	Commercial Tourism (CT)
Zoning District:	Recreation Commercial (RC) Zone
Site Size:	Approx. 9,325 square feet
Proposal:	Request to review a geotechnical report
Surrounding Land Uses and Zones:	North: Hotels; RC South: Hotels; RC East: Houses; RC West: Pacific Ocean
Authority:	Table 17.76.020-1 of Lincoln City Municipal Code (LCMC) 17.76.020 lists a geologic hazard report review application as a Type II procedure with the Planning and Community Development Director (Director) listed as the review authority. LCMC 17.76.040.A states that Type II procedures apply to administrative permits and applications and that decisions on administrative applications are made by the Director, based on reasonably objective approval criteria that require only limited discretion.
Procedure:	The application was received on September 4, 2024. The application was deemed complete on September 5, 2024. On September 6, 2024, pursuant to LCMC 17.76.040.E, the Planning and Community Development Department mailed a notice of application to property owners within 250 feet of the subject property.
Applicable Substantive Criteria:	LCMC Chapter 17.28 Recreation Commercial (RC) Zone LCMC Chapter 17.47 Natural Hazards, Beaches and Dunes LCMC Section 17.76.040 Type II Procedure LCMC Section 17.77.090 Geologic Hazard Report Review

BACKGROUND

The subject property (site) is addressed as 2715 NW Inlet Ave and is in the R-C zone. The tax lot number is 07-11-10-AB-01100-00 and the assessed site size is 9,325 ft square feet, measured to the statutory vegetation line. The property owners seek to construct a small addition and ADA access facilities. The site is currently developed with a single-unit dwelling. The request for the geologic hazard report review includes basic information regarding the site and proposed renovations.

Lincoln City's GIS mapping shows the site contains bluff erosion hazards. The site does not contain aesthetic resources, trails, floodways, or natural resource overlays. The site does have a mapped special flood hazard area at the base of the bluff, but all work is proposed outside of this area.

COMMENTS

No comments were received.

ANALYSIS

Chapter 17.28 Recreation Commercial (R-C) Zone; 17.16 Single-Unit Residential (R1) zone
17.28.020 Permitted uses

Finding: The property owners would like to add a small addition and ADA access facilities to an existing single-family dwelling. LCMC Chapter 17.28 lists the permitted uses in the R-C zone; specifically, single-unit dwellings are listed as a permitted use, if developed under the standards in the R-1-5 Zone .

17.16.050 Restrictions.

Finding: Compliance with the restrictions shall be confirmed at the time of the building permit application review.

17.16.060 Maximum building height
The maximum building height shall be 35 feet, except as provided in LCMC 17.52.190 and 17.52.200.

Finding: Compliance with the height requirements will be confirmed at the time of the building permit application review.

17.16.070 Lot requirements

Finding: At the time a building or structural permit application is submitted, the accompanying site plan shall be reviewed for compliance with the minimum setbacks requirements and maximum coverage requirements. The lot is an existing legal lot, so the minimum lot area, minimum lot width, and minimum lot depth are not applicable.

17.16.075 Landscaping
17.16.080 Signs
17.16.090 Off-street parking and loading
17.16.100 Other required conditions

Finding: At the time a permit application is submitted, the accompanying plans shall be reviewed for compliance with LCMC Chapter 17.28.

Chapter 17.47 Natural Hazards, Beaches and Dunes

17.47.020 Development in identified hazard areas

A. Hazards Identified and Applicability of Standards. Specific natural hazard areas have been identified in Environmental Geology of Lincoln County, Oregon, Bulletin 81 (State of Oregon Department of Geology and Mineral Industries, 1973) and Environmental Hazard Inventory (RNKR Associates, 1978), and other sources. They are depicted on the comprehensive plan natural hazards map, as supplemented by Priest, G.R., and Allan, J.C., 2004. For purposes of this chapter, in cases of conflict between a cited source and the map, as supplemented by the 2004 Priest and Allan report, the map, as so supplemented, will prevail.

Natural hazard areas identified in Environmental Geology of Lincoln County, Oregon, Bulletin 81 (State of Oregon Department of Geology and Mineral Industries, 1973) and Environmental Hazard Inventory (RNKR Associates, 1978) are advisory only. The city does not require analysis or mitigation for property identified as being in these hazard areas, but recommends that developers seek professional advice.

Finding: The site is in an identified natural hazard area. As stated in the code, the city does not require analysis or mitigation for property identified as being in hazard areas but recommends that developers seek professional advice. The property owners have sought the professional advice of Adam Large, with H.G. Schlicker & Associates, Inc., a registered engineering geologist in the state of Oregon.

Development of property identified by Priest, G.R., and Allan, J.C., 2004, as subject to coastal erosion must meet the requirements of this chapter; however, the following activities are exempt:

1. *Maintenance, repair, or alterations to existing structures that do not alter the building footprint or foundation;*
2. *New construction or maintenance, repair, or alterations to existing structures on a portion of the lot that lies outside the coastal erosion zones;*
3. *Exploratory excavation under the direction of a registered engineering geologist or geotechnical engineer;*
4. *Construction for which a building permit is not required;*
5. *Maintenance and reconstruction of public and private roads, streets, parking lots, driveways, and utility lines, provided work does not extend outside the previously disturbed area;*
6. *Activities of emergency responders intended to reduce or eliminate an immediate danger to life or property.*

Finding: LCMC Chapter 17.08 defines development as the alteration of the natural environment through the construction or exterior alteration of any building or structure, whether above or below ground or water, and any grading, filling, dredging, draining, channelizing, cutting, topping, or excavation associated with such construction or modification; the placing of permanent or temporary obstructions that interfere with the normal public use of the waters and lands subject to this code; the division of land into two or more parcels, and the adjustment of property lines between parcels. The property owners are seeking to alter the natural environment through the construction of an addition and ADA access facilities; therefore, the proposed development activity is not exempt and must meet the requirements of LCMC Chapter 17.47.

B. Required Geotechnical Analysis. Development of all types, except beach front protective structures and natural means of beach protection, in coastal erosion hazard areas identified by Priest, G.R., and Allan, J.C., 2004, may not occur until an engineering geologist, certified to practice in Oregon, or geotechnical engineer registered and licensed to practice in Oregon, completes a review of the project site. To the extent the engineering geologist or geotechnical engineer deems necessary, the

review shall incorporate analysis and recommendation of an Oregon-certified coastal engineer and of technical experts from other fields outside of engineering geology. The review shall be prepared at the applicant's expense. The geologist or geotechnical engineer must submit (electronically) the review to the city as a written report that, if written or last updated more than a year prior to the first building inspection, must be updated to reflect current conditions. In reviewing the submitted geotechnical report, the city may consult with, among others, the Oregon Department of Geology and Mineral Industries, the Department of Land Conservation and Development, and a certified engineering geologist or geotechnical engineer. The city assumes no responsibility for the quality or accuracy of a geotechnical report.

Finding: The site is in an identified coastal erosion hazard area. Per LCMC 17.47.020.B, development may not occur until an engineering geologist, certified to practice in Oregon, or geotechnical engineer registered and licensed to practice in Oregon, completes a review of the project site. This requirement has been met by the property owners retaining the services of Adam Large, with H.G. Schlicker & Associates, Inc., a registered engineering geologist in the state of Oregon, to review the site. H.G. Schlicker & Associates, Inc. conducted a geologic hazards and geotechnical investigation of the site and prepared a written report. The written report submitted with this application is dated July 17, 2024, hereinafter referred to as the Report. The Report has been prepared and submitted prior to construction of the improvements, as required by LCMC 17.47.020.B. **Lincoln City assumes no responsibility for the quality or accuracy of the report.**

Report Contents. Any geotechnical report must follow professional guidelines established by the Oregon State Board of Geologist Examiners, and include an explanation of the degree the hazard affects the property use in question, an explanation of the measures to be employed to minimize losses associated with the hazard, including, but necessarily limited to, erosion control, vegetation removal, and slope stabilization, and an explanation of the hazard-associated consequences the development and the loss-minimizing measures will have on the surrounding properties.

For development activities of all types on a property in the coast erosion hazard zones, defined by Priest and Allan, 2004, except for beach front protective structures and natural means of ocean beach protection, the geotechnical report must include, but is not limited, to the following items:

1. *Site Description.*
    a. *The history of the site and surrounding areas, such as previous riprap or dune grading permits, erosion events, exposed trees on the beach, or other relevant local knowledge of the site.*

Finding: The Report provides a site description at the bottom of page 2 stating: "According to Lincoln County records, the two-story house with a finished attic and attached garage was built in 1938. The closest portion of the western edge of the attached two-story deck framing is currently located approximately 33 feet east of the top of the upper bluff edge (Figure 4; Appendix A). The east side of the attached garage is approximately 77 feet east of the bluff edge. Reportedly, portions of the existing foundation have been underpinned with helical piers. However, that work appears to have been completed by others and is not within the scope of this investigation. An asphalt driveway provides access from NW Inlet Avenue to an older exposed aggregate concrete apron at the garage door (Appendix A). The subject property has an oceanfront protective structure consisting of a riprap revetment in an area of bluffs that generally have oceanfront protective structures; however, the structures' age, type, and condition vary. Oceanfront protection continues to the lot immediately north and several lots to the south of the subject lot (Appendix A)." The required information is provided.

    b. *Topography, including elevations and slopes on the property.*

Finding: Page 3 of the Report states: "The area of the subject site east of the top of the bluff slope is gently sloping between approximately 1 and 6 degrees, and the elevation ranges between approximately 50 and 54 feet (NAVD 88) (Figures 3 and 4)." The requirement to provide the information on topography, including elevations and slopes on the property is met.

c. Vegetation cover.

Finding: Page 3 of the Report lists the site's vegetation cover, noting the following: "The upper portion of the site around the house is vegetated with landscape plants and grass. The vegetation on the bluff slope consists of salal, English ivy, grasses, and other brush (Appendix A)." The requirement to provide the information on the site's vegetation cover is met.

d. Subsurface materials – the nature of the rocks and soils.

Finding: Page 6 of the Report states: "In general, we encountered loose sandy silt fill and organic-rich soils to depths up to approximately 3 feet, overlying loose to medium dense silty sand in the area southwest and southeast of the garage. We also probed the site with a tile probe to depths up to approximately 4 feet in areas of the proposed addition where the presence of utilities was suspected; we encountered highly variable resistance over a short distance." Accordingly, the requirement to provide information on the site's subsurface materials is met.

e. Conditions of the seaward front of the property, particularly for sites having a sea cliff.

Finding: Pages 3 of the Report states: "The site is located along an oceanfront bluff slope consisting primarily of marine terrace sands and colluvium. The bluff at the site and many properties along this stretch of beach currently have oceanfront protective structures. An older riprap revetment consisting of breccia stone is present at the site fronted by a transient vegetated foredune. A detailed description of the fronting beach area is provided in Section 3.2, with oceanfront slope stability and erosion discussed in Section 4.0 below." The requirement to provide information on the conditions of the seaward front of the property is met.

f. Presence of drift logs or other flotsam on or within the property.

Finding: Page 3 of the Report states: "At the time of our site visit, we did not observe a substantial accumulation of drift logs or flotsam in the beach area. Satellite imagery indicates that little accumulation of driftwood and flotsam occurs in the vicinity. Staff concludes this required information is provided.

g. Description of streams or other drainage that might influence erosion or locally reduce the level of the beach.

Finding: Page 3 of the Report states: "We did not observe streams in the vicinity of the site. The nearest major stream is the D River, approximately 1.1 miles south of the site. Logan Creek discharges onto the beach approximately 1.6 miles north of the site at Roads End State Park. Along this stretch of beach, culverts and smaller drainages convey water to the beach from the upland." The requirement to provide information on the description of streams or other drainage is met.

h. Proximity of nearby headlands that might block the long shore movement of beach sediments, thereby affecting the level of the beach in front of the property.

Finding: Pages 3 and 4 of the Report state: "Headlands are present approximately 2.8 miles north of the site at the end of Logan Road. The site lies within the Lincoln littoral cell. The sands within the Lincoln littoral cell are believed to have little or no transport beyond Cascade Head north and Government Point, approximately 10.9 miles to the south (Komar, 1997). Smaller rock outcrops and reefs near the shoreline appear to have influenced the seasonal/periodic formation of rip currents and embayments along this section of the coast." The requirement to provide information on the proximity of nearby headlands is met.

i. *Description of any shore protection structures that may exist on the property or on nearby properties.*

Finding: Page 4 of the Report states: "A riprap revetment is present at the site and extends several hundred feet to the south of the site (Appendix A)." The requirement to provide a description of any shore protection structures that may exist on the property or on nearby properties is met.

j. Presence of pathways or stairs from the property to the beach.

Finding: Page 4 of the Report states: "Public beach access is present approximately 290 feet south at the western end of NW 26th Street." The requirement to provide information on the presence of pathways or stairs is met.

k. Existing human impacts on the site, particularly those that might alter the resistance to wave attack.

Finding: Page 4 of the Report states: "The existing riprap revetment at the site increases the site's resistance to ocean wave attack." The requirement to provide information on existing human impacts on the site is met.

2. Description of the Fronting Beach.

a. Average widths of the beach during the summer and winter.

Finding: Pages 4 and 5 of the Report state: "The beach at the site has a width of approximately 100 feet to more than 200 feet in this area during the winter and summer, respectively, depending upon sand transport in any given year. The beach here is dynamic and frequently changes, primarily due to rip current formation and El Niño and La Niña ocean conditions transporting sediment. Typically, the beach is broad and dissipative in summer, becoming narrower and steeper in winter, particularly during prolonged storm cycles." The requirement to provide width information has been met.

b. Median grain size of beach sediment.

Finding: Page 5 of the Report states: "Beach sediment at the site is comprised of primarily fine-grained to lesser medium- grained sand." The requirement to provide information about the median grain size is met.

c. Average beach slopes during the summer and winter.

Finding: Page 5 of the Report states: "The beach slopes west at approximately 2 degrees in the winter and a few degrees in the summer. Based on our review of beach morphology monitoring data available for this section of Oregon's coast from 1997 to 2002, beach elevations varied by 0 to approximately 4 feet from minimum to maximum (Allan and Hart, 2005). The beach elevation can change substantially associated with El Niño and La Niña events. Topographic contours derived from 2016 lidar data provided by NOAA show the elevation above mean sea level of the beach-bluff junction west of the subject property as approximately 20

feet (NAVD 88) (Figure 3), which generally agrees with data from Allan and Hart (2005)." The requirement to provide information on the average beach slopes during the summer and winter is met.

d. Elevations above mean sea level of the beach at the seaward edge of the property during summer and winter.

Finding: Page 5 of the Report states: "Topographic contours derived from 2016 lidar data provided by NOAA show the elevation above mean sea level of the beach-bluff junction west of the subject property as approximately 20 feet (NAVD 88) (Figure 3), which generally agrees with data from Allan and Hart (2005)." The requirement to provide information on elevations above mean sea level is met.

e. Presence of rip currents and rip embayment that can locally reduce the elevation of the fronting beach.

Finding: Page 5 states: "We did not observe rip currents or rip embayments in this area at the time of our site visit. Rip currents and embayments can form, however, as evidenced by our review of historical aerial imagery along this general area of the coast." With the provided information, this requirement has been met.

f. Presence of rock outcrops and sea stacks, both offshore and within the beach zone.

Finding: Page 5 of the report states: "Rock outcrops or sea stacks are not present in the immediate vicinity of the site. Mapping by Priest (1994) shows possible Basalt of Cascade Head outcrops near the shoreline approximately 1,000 feet and greater to the south-southwest of the site." This requirement has been met.

g. Information regarding the depth of beach sand down to bedrock at the seaward edge of the property.

Finding: Page 5 states: "During our site visit, we did not observe any exposed bedrock on the beach. However, we estimate sand and cobble depths along the beach at this time to be about 6 feet thick." This requirement has been met.

3. Analysis of Erosion and Flooding Potential.

a. Analysis of DOGAMI beach monitoring data available for the site.

Finding: Page 9 states: "Discussed in Section 3.2.3 above, beach monitoring data for this section of Oregon's coast shows that beach elevations varied by several feet from minimum to maximum over the monitored period of 1997 to 2002 (Allan and Hart, 2005)." The requirement to provide information on an analysis of DOGAMI beach monitoring data is met.

b. Analysis of human activities affecting shoreline erosion.

Finding: Page 9 of the Report states the following: "The existing riprap revetment reduces the adverse effects of shoreline erosion at the site." The requirement to provide information on analysis of human activities is met.

c. Analysis of possible mass wasting, including weathering processes, land sliding or slumping.

Finding: Page 9 states: "Weathering, landsliding, recession rates, and other erosional processes at this oceanfront site are discussed in Section 4.0 above and Section 4.1.8 below" The requirement to provide information on analysis of possible mass wasting is met.

d. Calculation of wave runup beyond mean water elevation that might result in erosion of the sea cliff or foredune.

Finding: Page 9 of the Report states: "Coastal erosion rates and hazard zones (as referenced in Priest and Allan, 2004) are presented in Section 4.0 above. In the bluff-backed shoreline recession methodology applicable to the subject site, wave erosion at the bluff toe and associated parameters (rock composition, vegetative/protective cover, ballistics of debris, bluff slope angle of repose, etc.) are more critical to erosion zone and rate estimates than calculating wave runup elevation which changes with many variables such as changing beach elevations, presence of transient dunes, etc. Because the existing riprap protects the base of the bluff slope, only minor erosion, if any, is expected with a high wave run-up event at this site. The existing dense vegetation above and below the revetment indicates that it has not been recently overtopped. However, it is the chronic nature of the wave attack hazard that undercuts the toe of the bluff, creating bluff instability, and over an extended period of time, has the potential to undermine the revetment." The requirement to provide information on the calculation of wave runup beyond mean water elevation that might result in erosion has been addressed satisfactorily for the purposes of this report.

e. Evaluation of frequency that erosion-inducing processes could occur, considering the most extreme potential conditions of unusually high water levels together with severe storm wave energy.

Finding: Page 10 of the Report states: "As discussed in Section 4.0 above, the average annual erosion rate for the unprotected area of the bluff north and south of the site is 0.27 ± 0.34 feet per year (Priest and Allan, 2004). Ocean wave, wind, and rain erosion are continuous and ongoing processes that impact bluff recession." The requirement to provide information on the evaluation of frequency of erosion-inducing processes is met.

f. For dune-backed shoreline, use an appropriate foredune erosion (Komar et al. 1999) or time-dependent erosion model (e.g., Kriebel and Dean, 1993) to assess the potential distance of property erosion, and compare the results with direct evidence obtained during site visit, aerial photo analysis, or analysis of DOGAMI beach monitoring data.

Finding: The site is not a dune-backed shoreline; therefore the requirement to provide information on the dune-backed shoreline is not applicable.

g. For bluff-backed shorelines, use a combination of published reports, such as DOGAMI bluff and dune hazard risk zone studies, aerial photo analysis, and field work, to assess the potential distance of property erosion.

Finding: Page 7 states: "The western portion of the site is mapped in an area of moderate to high landslide susceptibility based on the DOGAMI methodology (Burns, Mickelson, and Madin, 2016). However, the relatively short height of the bluff and the existing revetment protecting the base of the bluff slope from erosion reduces the potential for landsliding." This requirement is met.

h. Description of potential for sea level rise, estimated for local area by combining local tectonic subsidence or uplift with global rates of predicted sea level rise.

Finding: Page 10 states: “Information from NOAA's Garibaldi and Newport/South Beach monitoring stations provides an average sea level rise of approximately 2.15 ± 0.61 mm/year between 1967 and 2023 (NOAA Tides & Currents Sea Level Trends, http://tidesandcurrents. noaa.gov/sltrends, Accessed April 2023). Global climate change can also influence rates of sea-level rise (refer to Section 7.0).” This requirement is met.

i. An estimation of the annual erosion rate at the site.

Finding: Page 10 of the Report notes: “A detailed discussion of recession and estimated erosion rates is in Section 4.0 above; Priest (1994) did not determine an erosion rate at the site but has determined the average annual erosion rate for unprotected areas of the bluff north and south of the site as 0.27 ± 0.34 feet per year.” This requirement is met.

4. Assessment of Potential Reactions to Erosion Episodes.

a. Determination of legal restrictions of shoreline protective structures (Goal 18 prohibition, local conditional use requirements, priority for nonstructural erosion control methods).

Finding: Page 10 states: “According to the Ocean Shores Viewer (http://www.coastalatlas.net/oceanshores/, accessed July 2024), the site appears to be Goal 18 eligible for a beachfront protective structure. As noted in Section 2.0 above, the subject site has an oceanfront protective structure. The subject site and the lots to the north and south of the subject site were generally 'developed' before January 1, 1977; however, this is a legal issue that can have varying interpretations.” The requirement to provide information regarding a determination of legal restrictions of shoreline protective structures is met.

b. Assessment of potential reactions to erosion events, addressing the need for future erosion control measures, building relocation, or building foundation and utility repairs.

Finding: Pages 10 and 11 of the Report state: “Site geologic hazards conclusions and development recommendations are presented in Section 8.0 below, including the recommended oceanfront setback for foundations and a discussion of inherent risks to development in coastal areas with characteristics such as those at the site, as presented and analyzed in Section 4.0 above. Deep foundations, oceanfront protective structures, retaining walls, underpinning of foundations, vegetation management, relocation of structures, and bioengineering can all be potential reactions and control measures to erosion events. When older revetments are severely damaged, replacing them with a new revetment using a modern design and configuration is recommended.” The requirement to provide information on the assessment of potential reaction to erosion events, etc. is met.

c. An annual erosion rate for the property.

Finding: Page 11 states: “The mapped annual erosion rate for the property is effectively 0 feet/yr due to the existing rip rap revetment. For further information, please refer to Sections 4.0 and 4.1.8 above.” The requirement to provide the annual erosion rate is met.

5. Recommendations.

a. Based on results from the above analyses, recommended setbacks, building techniques, or other mitigation to ensure an acceptable level of safety and compliance with all local requirements.

Finding: Pages 14 and 15 state: “Per the City of Lincoln City's requirements, we have determined a 41 feet oceanfront setback based on an average annual erosion rate of 0.60 ft/yr for 60 years and have added Lincoln

City's required additional 5 feet. To help mitigate future recession of the bluff caused by erosion and landsliding, we recommend that new shallow foundations for the retaining wall be set back a minimum of 41 feet east of the upper bluff edge, as shown on Figures 3 and 4. The proposed construction lies well east of this oceanfront bluff setback area." The requirement to provide recommended setbacks, building techniques, and other mitigation is met.

b. A plan for preservation of vegetation and existing grade within the setback area, if appropriate.

Finding: Pages 18 and 19 of the Report state: "Vegetation should be removed only as necessary, and exposed areas should be replanted following construction. Disturbed ground surfaces exposed during the wet season November 1 through April 30) should be temporarily planted with grasses or protected with erosion control blankets or hydromulch. Temporary sediment fences should be installed downslope of any disturbed areas of the site until permanent vegetation cover can be established. Unless approved by HGSA, the oceanfront slope should remain undisturbed. Exposed sloping areas steeper than 3 horizontal to 1 vertical (3H:1V) should be protected with a straw erosion control blanket (North American Green S150 or equivalent) to provide erosion protection until permanent vegetation can be established. Erosion control blankets should be installed as per the manufacturer's recommendations." The requirement to provide a plan for preservation of vegetation and existing grade is met.

c. Consideration of a local variance process to reduce the building setback on the side of the property opposite the ocean, if this reduction helps to lessen the risk of erosion, bluff failure or other hazard.

Finding: The request does not include consideration of a local variance process, nor does it request a variance.

d. Methods to control and direct water drainage away from the ocean (e.g., to an approved storm water system), or, if not possible, to direct water in such a way so as to not cause erosion or visual impacts.

Finding: Page 19 states: "Vegetation should be removed only as necessary, and exposed areas should be replanted following construction. Disturbed ground surfaces exposed during the wet season November 1 through April 30) should be temporarily planted with grasses or protected with erosion control blankets or hydromulch. Temporary sediment fences should be installed downslope of any disturbed areas of the site until permanent vegetation cover can be established. Unless approved by HGSA, the oceanfront slope should remain undisturbed. Exposed sloping areas steeper than 3 horizontal to 1 vertical (3H:1V) should be protected with a straw erosion control blanket (North American Green S150 or equivalent) to provide erosion protection until permanent vegetation can be established. Erosion control blankets should be installed as per the manufacturer's recommendations." Page 20 states " All roof drains should be collected and tightlined in a separate system independent of the footing drains, or an approved backflow prevention device shall be used. All roof and footing drains should be discharged to an approved disposal point. If water will be discharged to the ground surface, we recommend that energy dissipaters, such as splash blocks or a rock apron, be utilized at all pipe outfall locations. Water collected on the site should not be concentrated and discharged to adjacent properties. Water should not be disposed of along the bluff slope." The requirement to provide methods to control and direct water drainage away from the ocean is met for the purposes of this application.

C. Compliance. Permitted development shall comply with the recommendations in any required geotechnical report and any report required by the building code.

Finding: As a condition of approval and pursuant to LCMC 17.47.020.C, all permitted development shall comply with the recommendations in any required geotechnical report, as well as any report required by the building code.

> *At the time of footing inspection, or, if no footing inspection is required, at the time of the first building inspection, the author of the geotechnical report must certify that the development was constructed in accordance with the report's recommendations.*

Finding: Pursuant to LCMC 17.47.020.C, permitted development shall comply with the recommendations in the Report and any report required by the building code. Additionally, at the time of any required footing inspections, H.G. Schlicker & Associates, Inc. shall certify that the development was constructed in accordance with the Report's recommendations.

D. Bluff Setback. No bluff setback is required for public infrastructure, beach front protective structures, or natural means of beach protection. The footprint of any other new structure or any horizontal addition requiring at least one footing in ocean bluff areas must be set back from the bluff a distance of at least 60 times the average annual erosion rate (determined by the geotechnical analysis) plus five feet. The bluff, for this purpose, shall be determined by the city through inspection of aerial photos, the most recent LIDAR data, and the dividing line between the active and the high-risk erosion zones identified in the 2004 Priest maps referenced above. If the city cannot determine the location of a bluff, the geotechnical analysis, provided at the applicant's expense, shall determine an appropriate site for the structure, if one exists. The bluff setback must be measured from the unaltered bluff edge, as based upon a recent (conducted within the 12 months prior to the date of the geotechnical analysis) topographic survey performed by a land surveyor licensed in the state of Oregon. If damaged, an existing structure that does not conform to the setback may be rebuilt in conformance with Chapter 17.64 LCMC, Nonconforming Situations. Reconstruction shall comply with recommendations provided in a report from an engineering geologist licensed in the state of Oregon or a registered geotechnical engineer licensed in the state of Oregon, or both, as determined necessary by the building official.

Finding: The submitted materials included a survey map stamped by Joe Cota, a licensed land surveyor in the state of Oregon with K & D Engineering, Inc. The topographical data clearly show bluff elevations west of the site and the bluff edge. The Report states in section 4.2.3 that the erosion rate for the site is "effectively 0 feet/yr due to the existing rip rap revetment" Section 8.2 of the Report states " We have calculated a setback using an average annual erosion rate of 0.44 ft/yr, which consists of the mapped erosion rate for unprotected bluff plus approximately ½ of the error determined by Priest and Allan (2004); Lincoln City's required additional 5 feet was added to this. The setback for new shallow foundations, as measured east from the upper edge of the bluff slope, should be a minimum of 30 horizontal feet, as shown on Figures 3 and 4. New foundations more than approximately 30 feet and greater from the upper bluff edge can utilize standard continuous and isolated shallow spread footings on dense sandy soils or structural fill placed on these sandy soils" The western portion of the existing structure is roughly 38.5 ft from the top of the bluff edge as shown on the topographical survey. Based on the slope profiles available, contour and other site data, the unaltered bluff edge is between 53' and 51.66' above MSL running North to South, as shown on the submitted survey. All analysis has been done in accordance with the above requirements, and all proposed construction clearly exceeds the required bluff setback. This requirement has been met.

E. Other Policies That Apply. If structures to protect shorelands, beaches and dunes, or flood areas are proposed, comprehensive plan "Shorelands, Beaches, Dunes, Estuaries, and Ocean Resources" Policies 7, 8, 9, 21 and 22 also apply.

Finding: The other policies do not apply to this request because no structures to protect shorelands, beaches and dunes, or flood areas are proposed.

Chapter 17.76 Procedures
17.76.040 Type II procedure

A. General Description. Type II procedures apply to administrative permits and applications. Decisions on administrative applications are made by the director, based on reasonably objective approval criteria that require only limited discretion. Type II procedures require public notice and an opportunity for appeal, but do not require a public hearing or a public meeting.

B. When Applicable. Table 17.76.020-1 identifies Type II applications. Applications not listed in Table 17.76.020-1 may be identified as Type II by the director based on the general description in this section.

C. Pre-Application Conference. A pre-application conference is not required for Type II procedures.

Finding: A pre-application conference is not required, nor was one held.

D. Application Requirements. Type II applications shall:

1. Be submitted on application forms provided by the department and shall include all information, exhibits, plans, reports, and signatures requested on the application forms.

2. Be accompanied by the required fee as adopted by city council resolution.

3. Be subject to the completeness review procedure set forth in LCMC 17.76.110(D) and (E).

Finding: The required application forms and materials were submitted, along with the required fee. The application was deemed complete in accordance with LCMC 17.76.110.D and E.

E. Public Notice of Application and Comment Period. Type II applications require public notice of receipt of a complete application with an opportunity for area property owners and other interested parties to provide written comment prior to issuance of the decision.

1. After a Type II application has been accepted as completed under LCMC 17.76.110(E), the department shall mail a written public notice to the following:

a. The applicant and applicant's representative;

b. The owners of record of the subject property;

c. Property owners of record within 250 feet of the perimeter property line of the property or properties subject to the application, using the most recently provided property tax assessment roll of the Lincoln County assessor's office as provided to the city to determine property owners of record; and

d. Any neighborhood or community organization or association recognized by the governing body and whose boundaries include the site.

Finding: The Planning and Community Development Department mailed the public notice of a complete application to the parties noted in LCMC 17.76.040.E.1.a through d.

2. The written public notice shall include the following:

a. A brief description of the request;

b. The applicable criteria from the ordinance and the comprehensive plan that apply to the application at issue;

c. The street address or other easily understood geographical reference to the subject property;

d. Statement that failure of an issue to be raised in writing prior to the expiration of the public comment period, or failure to provide statements or evidence sufficient to afford the review

authority an opportunity to respond to the issue precludes appeal to the Land Use Board of Appeals (LUBA);

e. The name of a department staff member to contact and the telephone number where additional information may be obtained; and

f. Statement that a copy of the application, all documents and evidence submitted by or on behalf of the applicant, and applicable criteria are available for inspection at no cost and will be provided at reasonable cost.

3. The failure of a property owner to receive notice does not invalidate the land use action if the notice was sent.

4. Public notices for receipt of complete Type II applications shall include a written comment period of 14 days from the date the notice was mailed for the submission of written comments before the decision is issued.

Finding: The written public notice contained all the information required in LCMC 17.76.040.E.2.a through f. The written public notice included the written comment period of 14 days.

F. Review Authority. The review authority for Type II applications shall be the director.

Finding: The Director reviewed the submitted Type II application.

G. Decision.

1. Based on the criteria and facts contained within the record, the director shall approve, approve with conditions, or deny the request. The decision shall address all relevant approval criteria and consider written comments submitted before the close of the comment period.

Finding: The relevant approval criteria are addressed in detail throughout this staff report. Consideration of the written comments received, if any, is given at the beginning of this report.

2. The decision is considered final for purposes of appeal on the date the notice of the decision is mailed. Within seven days after the director has issued the decision, a notice of the decision shall be sent by mail to the following:

a. The applicant and applicant's representative;

b. The owners of record of the subject property;

c. Any person, group, agency, association, or organization who submitted written comments during the comment period; and

d. Any person, group, agency, association, or organization who submitted a written request to receive notice of the decision.

Finding: Within seven days after the Director has issued the decision, the notice of that decision shall be mailed by the Planning and Community Development Department, pursuant to LCMC 17.76.040.G.2.

3. The notice of the decision shall include the following:

a. A brief description of the request;

b. A statement of the decision and the applicable approval criteria used in making the decision;

c. The street address or other easily understood geographical reference to the subject property;

d. A statement that the decision is final, unless appealed as provided in LCMC 17.76.180;

e. The requirements for filing an appeal of the decision, including a statement of the date and time by which an appeal must be filed;

f. A statement that the complete file is available for review; and

g. The name of a department staff member to contact and the telephone number where additional information may be obtained.

Finding: The Planning and Community Development Department will issue the notice of decision that shall contain all the information noted in LCMC 17.76.040.G.3.a through g.

Chapter 17.77 Applications
17.77.090 Geologic hazard report and/or beach protective structure review – Natural resources development review

A. Procedure. Geologic hazard report, beach protective structure review, and natural resources development review are subject to the Type II procedure as described in LCMC 17.76.040.

Finding: A geologic hazard report was submitted for review. Pursuant to LCMC 17.76.040, the request is subject to the Type II procedure and has been processed accordingly.

B. Submittal Requirements. Type II application submittal requirements are set forth in LCMC 17.76.040 and more specific submittal requirements are provided on application forms and checklists as authorized in LCMC 17.76.100, as well as Chapters 17.46 and 17.47 LCMC.

Finding: The required documents were submitted.

C. Approval Criteria.
1. See Chapter 17.47 LCMC for approval criteria for geologic hazard report and beach protective structure review.

Finding: The submitted geologic hazard report has been analyzed against the applicable criteria in LCMC Chapter 17.47, as detailed earlier in this staff report.

2. See LCMC 17.46.050 for approval criteria for natural resources development review.

Finding: This standard is not applicable to this application for a geologic hazard report review.

D. Conditions of Approval. The review authority may impose conditions of approval to ensure compliance with the approval criteria.

Finding: Conditions of approval have been imposed to ensure compliance with applicable criteria.

DECISION

Based upon an analysis of the submitted application and accompanying materials against applicable criteria, the Director concludes that all criteria have been or will be met, and thus **APPROVES WITH CONDITIONS** the geologic hazard report review request, subject to the following conditions:

1. The developer, applicant, and/or property owner are responsible for compliance and conformance with all city, state, and federal requirements, rules, regulations, standards, and ordinances.
2. The 30-foot bluff setback line, the bluff edge, and the footprint of the proposed construction must be clearly depicted on the site plan and submitted as part of the building permit application, prior to review, approval, or issuance of the building permit.
3. The footprint (footprint is defined in LCMC Chapter 17.08 as the square footage of a building that rests, directly or indirectly, on the ground, including, for example, cantilevers, bay windows with floor space, and chimneys) of any new structure shall be placed to the east of the 30-foot bluff setback line, said 30-foot setback line as measured from the unaltered bluff edge. The site plan for any

structural permit shall clearly depict the unaltered bluff edge, the 30-foot bluff setback line, and the footprint in compliance with the 30-foot bluff setback line.

4. Any horizontal addition requiring at least one footing in ocean bluff areas must be to the east of the 30-foot bluff setback line as measured from the unaltered bluff edge. Any site plan for any structural permit shall clearly show and label the unaltered bluff edge and the 30-foot bluff setback line, with clear depiction of any horizontal addition in compliance with the 30-foot bluff setback.
5. The 30-foot bluff setback line, measured from the unaltered bluff edge, shall be flagged on the site by a licensed land surveyor, and the flagging shall remain in place until development is complete to help ensure that no development takes place to the west of the 30-foot bluff setback line.
6. A representative of H.G. Schlicker & Associates, Inc. shall observe and approve footing and slab excavations prior to placing fill, or forming or pouring concrete, as H.G. Schlicker & Associates, Inc indicated in the Report.
7. Permitted development shall comply with the recommendations in any required geotechnical report and any report required by the building code.
8. Pursuant to LCMC 17.47.020.B, H.G. Schlicker & Associates, Inc. or the applicant must submit to the city, through ePermitting as an attachment to the structural permit file number, an updated report to reflect current conditions if the first building inspection occurs after July 17, 2025.
9. In addition to city requirements for proper drainage and erosion control, plans shall incorporate proper drainage and erosion control, as discussed in the applicable sections of the Report.
10. Development of the site shall adhere to and comply with all recommendations noted in the entire Report and subsequent updates.
11. If there are any conflicts in the conditions, the strictest shall apply.

Prepared by: Weston Fritz, Associate Planner

Approved by:

Richard Townsend 9/24/2024

Richard Townsend, Director Date
Planning and Community Development