Geologic Hazard Report Review
Staff Review, Decision, Conditions of Approval
Case File GEO 2023-01

Date:	March 14, 2023
Case File:	GEO 2023-01
Property Owners:	Charles E. Herman and Rebecca S. Herman
Situs Address:	2808 SW Anchor Ct
Location:	West boundary is SW Anchor Ct, east boundary is SW Anchor Ave, approximately 256 feet south of the junction of SW Anchor Ave and SW Anchor Ct.
Tax Map and Lot:	07-11-22-CD-02801-00
Comprehensive Plan Designation:	Single-Unit Residential District (R-5)
Zoning District:	Single-Unit Residential (R-1-5) Zone
Site Size:	Approx. 9,431 square feet
Proposal:	Request to review a geotechnical report
Surrounding Land Uses and Zones:	North: Houses; R-1-5, VR South: Houses; R-1-5 East: Houses; R-1-5, VR West: Undeveloped Lots, Pacific Ocean; R-1-5
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 February, 15, 2023. The application was deemed complete on February 22, 2023. On February 27, 2023, 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 17.16 Single-Unit Residential (R-1-5) 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) addressed as 2808 SW Anchor Ct and is in the R-1-5 zone. The tax lot number is 07-11-22-CD-02801-00 and the assessed site size is 9,431 square feet. The property owners seek to construct a retaining along the south property line. The site is currently developed with a single-unit dwelling. The request for the geologic hazard report review includes basic information regarding the location of the proposed retaining wall.

Lincoln City's GIS mapping shows the site contains bluff erosion hazards. The site does not contain aesthetic resource, trails, floodway, flood hazard areas, or natural resource overlays.

COMMENTS

Comments were received from Edward and Vergie Olson, via hand delivery, on March 10, 2023. The comments stated concern that the now-demolished retaining wall was removed before the applicants went through the geologic hazard review process, leaving an area of the site without retention. The Olsons also expressed concern with erosion of the road and the impact heavy equipment could have on the road. The approval of the geologic hazard report is based on criteria listed in LCMC Chapter 17.47. There are no criteria in LCMC Chapter 17.47 pertaining to the timing of demolishing a retaining wall, erosion of roads, or impacts of heavy equipment on roads.

ANALYSIS

Chapter 17.16 Single-Unit Residential, Roads End (R-1-5) Zone
17.16.020 Permitted uses

Finding: The property owners would like to construct a new retaining wall on the site that is already developed with a single-unit dwelling. The site is in the R-1-5 zone. LCMC Chapter 17.16 lists the permitted uses in the R-1-5 zone; specifically, single-unit dwellings are listed as a permitted use per LCMC 17.16.020.A.1.

17.16.050 Restrictions.

Finding: This application is not for development; rather, this application is for a geologic hazard report review. Compliance with the restrictions shall be confirmed at the time of a development 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: This request is for a retaining wall. The proposed retaining wall is less than 35 feet tall.

17.16.070 Lot requirements

Finding: The geologic hazard report review does not include any building or structural permit applications or requests to review any building or structural plans. 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 requirement. 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: This request for a geologic hazard report review does not include any permit applications or requests to review any building plans. At the time a permit application is submitted, the accompanying plans shall be reviewed for compliance with LCMC Chapter 17.16.

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 construction of a retaining wall; 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 February 10, 2023, hereinafter referred to as the Report. The Report has been prepared and submitted prior to construction of the proposed retaining wall, 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 existing house was constructed in 1930, with the garage added in 1996. In the proposed construction area, we previously observed an approximately 6.5-foot-high stacked block and mortar retaining wall along the south side of the main driveway that supports a north-facing cut. This wall was tilting 2 to 3 degrees outward and had numerous cracks, indicating that the wall was failing." The following is also stated on page 2: "The subject property is not oceanfront; the area west of the site does not have an oceanfront

protective structure, and lies in an area of high bluffs that generally lack oceanfront protective structures." The required information is provided.

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

Finding: Pages 2 and 3 of the Report state: "The western portion of the subject site along SW Anchor Court is approximately 50 feet east of the top of a west-facing bluff, and the eastern portion of the site is located on an approximately 15 to 20 feet high east-facing hill slope along SW Anchor Avenue (Figures 2, 3 and 4). Lidar derived elevations at the site range from approximately 80 feet at the base of the eastern hillslope to approximately 104 feet at the upper portion of the site (NAVD 88) (Figure 3). The area of the proposed retaining wall, along the driveway in the southwestern portion of the site, is generally flat to slightly sloping to the west (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 excavated area, proposed for the construction of the retaining wall is devoid of vegetation; however, the top of the cut slope is vegetated with grass, salal and ornamental plants." 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 5 of the Report states: "In general, materials encountered at shallow depths in the area of the proposed retaining wall were loose to medium-dense sand overlain with approximately 6 to 8 inches of loose fill soil. We also observed that concrete remained in the excavated area, which appeared to be remnants of the previous retaining wall footing." Accordingly, the requirement to provide the 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 not identified as an oceanfront property, according to Lincoln County records." The requirement to provide the 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 observed a few drift logs on the beach area west of the site. Satellite imagery indicates that the accumulation of driftwood and flotsam in the vicinity is generally light throughout the year." 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 Siletz River, approximately 1.3 miles south of the site. Canyon Creek discharges onto the beach approximately 0.9 miles north of the site. The beach elevations near the site can be slightly influenced by the mouth of the bay; however, beach elevations west of the site are predominantly influenced by ocean waves and currents." 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: Page 3 of the Report states: "Generally, headlands are not present in this local section of the Oregon Coast and the Lincoln City oceanfront. The site lies within the Lincoln littoral cell. Smaller rock outcrops and reefs near the shoreline appear to have influenced the seasonal/periodic formation of rip currents and rip current embayments along this section of the coast, limiting the ability of rip currents to scour a deep channel to the back beach area. The sands within the Lincoln littoral cell are believed to have little or no transport beyond Cascade Head to the north and Cape Foulweather to the south." 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: "The site is not identified as an oceanfront property, according to Lincoln County records. Oceanfront protection is not present on the lots west of S.W. Anchor Court." 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: "There is no direct access to the beach from the subject site. The nearest public beach access is present approximately 450 feet north of the site off S.W. Anchor Avenue." 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 site is not identified as an oceanfront property, according to Lincoln County records. Based on our observations, direct human impacts are not contributing to the alteration of the resistance of the bluff west of the site from 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 5 and 6 of the Report state: "The beach at the site has a width of approximately 100 feet to more than 300 feet in this area during the winter and summer, respectively, depending upon sand transport in any given year. The beach here is very dynamic and frequently changes, primarily due to rip current formation and El Niño and La Niña ocean conditions. 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 6 of the Report states that "based on our knowledge of the area, beach sediment west of the site is typically comprised of primarily fine-grained to lesser medium-grained sand. At the time of our site visit, much of the sand had been stripped from the beach, and numerous pebbles and cobbles were present in the wave swash zone (Appendix A)." The requirement to provide information about the median grain size is met.

c. Average beach slopes during the summer and winter.

Finding: Page 6 of the Report states that "the beach generally slopes west at approximately 7 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 several feet from minimum to maximum, with minor changes at the beach- bluff junction and dune (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 6 of the Report states: "Elevations for the site derived from the 2016 lidar 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), 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 6 states: "Rip currents and rip current embayments have formed frequently along this stretch of beach within the last decade, as evidenced by our review of historical satellite imagery." With the provided information, staff finds that the intent of this requirement has been met.

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

Finding: Page 6 of the report states "Offshore rock outcrops or sea stacks are not present in the immediate vicinity of the site. Mapping by Priest and Allan (2004) shows Tertiary Intrusive Basalt outcrops approximately 0.2 miles north of the site and 0.6 miles south of the site (Appendix A)." This requirement has been met.

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

Finding: Pages 6 and 7 state: "During our site visit, we did not observe any exposed bedrock on the beach immediately west of the subject site. However, the presence of pebbles and cobbles on the beach indicates that the wave cut platform was likely only a few feet below the beach surface at the time of our site visit. Beach sand depths here can reach about 8 feet or more in some years and be scoured to bedrock in other years." 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: The bottom of page 9 of the Report states the following: "Human activity has not significantly altered wave attack resistance of the bluff west of 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 10 states: "Ocean wave, wind and rain erosion are continuous and ongoing processes which impact bluff recession. Future landsliding at the subject site would cause additional recession of the upper bluff. We anticipate that future landslides could fail back 5 to 10 feet at a time if not mitigated; however, these would be very infrequent and impossible to predict when they will occur." 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 10 of the Report states: "In the bluff-backed shoreline recession methodology applicable to the area west of the subject site, wave erosion at the bluff toe and associated parameters such as 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 of wave run-up elevation which changes with many variables such as changing beach elevations, presence of transient dunes, etc." 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 notes: "As discussed in Section 4.0, the average annual erosion rate for the site is 0.27 ± 0.34 feet per year and is currently estimated at 0.60 feet per year, resulting in 36 feet of setback over a 60-year period for erosion plus a regulatory required 5-foot setback for a total of 41 feet of setback from the upper bluff edge based on erosion. Ocean wave, wind and rain erosion are continuous and ongoing processes which impact bluff recession. Future land sliding at the subject site would cause additional recession of the upper bluff. We anticipate that future landslides could fail back 5 to 10 feet at a time if not mitigated; however, these would be very infrequent and impossible to predict when they will occur." 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 10 states: "As discussed in Section 4.0, the average annual erosion rate for the site is 0.27 ± 0.34 feet per year and is currently estimated at 0.60 feet per year, resulting in 36 feet of setback over a 60-year period for erosion plus a regulatory required 5-foot setback for a total of 41 feet of setback from the upper bluff edge based on erosion." 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 2.11 ± 0.67 mm/year between 1967 and 2021 (NOAA Tides & Currents Sea Level Trends http://tidesandcurrents.noaa.gov/ sltrends/sltrends.html). 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: "As discussed in Section 4.0, the average annual erosion rate for the site is 0.27 ± 0.34 feet per year and is currently estimated at 0.60 feet per year, resulting in 36 feet of setback over a 60-year period for erosion plus a regulatory required 5-foot setback for a total of 41 feet of setback from the upper bluff edge based on erosion." 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 11 states: "According to Lincoln County records, the site is not identified as an oceanfront property and therefore is not eligible for a shoreline protective structure. According to the Ocean Shores Viewer (http://www.coastalatlas.net/oceanshores/, accessed February 2023), the tax lots west of the site appear to be Goal 18 eligible for beachfront protective structures; however, the potential to receive a permit for oceanfront protection is dependent upon meeting certain regulatory requirements in addition to the Goal 18 eligibility requirement." 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: Page 11 of the Report states: "Site geologic hazards conclusions and development recommendations are presented in Section 8.0 below, which includes recommended oceanfront setbacks for foundations along with discussion of inherent risks to the development of sites with engineering geologic characteristics such as those at the site, as presented and analyzed in Section 4.0 above. Deep foundations, retaining walls, underpinning of foundations, vegetation management, relocation of structures and bioengineering can all be potential reactions and control measures to erosion events." 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: "Priest (1994) has determined the average annual erosion rate for the oceanfront bluff segments in the site area as 0.27 ± 0.34 feet per year. For further information please refer to Sections 4.0 and 4.1.8 above and Section 8.2 below." 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: Page 11 of the Report states: "Deep foundations, retaining walls, underpinning of foundations, vegetation management, relocation of structures and bioengineering can all be potential reactions and control measures to erosion events." It's important to note that the site does not front on the bluff, so vegetation management on the bluff slope is out of control of the property owner. 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 16 states: "Drainage of the retaining wall should consist of slotted drains placed at the base of the wall on the backfilled side and backfilled with free-draining crushed rock (less than 5% passing the 200 mesh sieve using a washed sieve method) protected by non-woven filter fabric (Mirafi® 140N, or equivalent) placed between the native soil and the backfill. " As stated previously in the Report, the site is not on the ocean front, but across the street from the bluff. 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 Craig Newton, a licensed land surveyor in the state of Oregon with Terra Calc Land Surveying. The topographical data clearly show bluff elevations west of the site and the bluff edge. The Report uses an average annual erosion rate of 0.60 feet per year in the determination of oceanfront setbacks for the site. Using the annual erosion rate of 0.60 and multiplying by 60, then adding LCMC's required additional 5 feet, the result is a minimum setback of 41 feet from the unaltered bluff edge. Based on the slope profiles and available contour and other site data, the unaltered bluff edge is at the 95 contour west of the site, lying about 68 feet west of the construction area. 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 41-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 41-foot bluff setback line, said 41-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 41-foot bluff setback line, and the footprint in compliance with the 41-foot bluff setback line.
4. Any horizontal addition requiring at least one footing in ocean bluff areas must be to the east of the 41-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 41-foot bluff setback line, with clear depiction of any horizontal addition in compliance with the 41-foot bluff setback.
5. The 41-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 41-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 February 10, 2024.
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: Anne Marie Skinner

Digitally signed by Anne Marie Skinner
DN: C=US, E=askinner@lincolncity.org, O=City of Lincoln City, OU=Planning & Community Development, CN=Anne Marie Skinner
Date: 2023.03.17 00:15:16-07'00'

Anne Marie Skinner, Director Date
Planning and Community Development