Geologic Hazard Report Review
Staff Review, Decision, Conditions of Approval
Case File GEO 2022-05

Date:	December 13, 2022
Case File:	GEO 2022-05 Wright
Property Owner:	Anthony Wright and Laurie Wright (Trustees)
Situs Address:	1327 NW Harbor Ave
Location:	West side of NW Harbor Ave, approximately 120 feet south of the NW 14th St/NW Harbor Ave intersection
Tax Map and Lot:	07-11-10-DC-80001-00
Comprehensive Plan Designation:	Oceanlake Plan (OP) District
Zoning District:	Oceanlake Plan (OP) District
Site Size:	6,877 square feet
Proposal:	Request to review a geotechnical report for a deck addition
Surrounding Land Uses and Zones:	North: Dwellings; OP South: Dwellings; OP East: Dwellings, undeveloped land; OP 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 November 10, 2022. The application was deemed complete on November 14, 2022. On November 15, 2022, 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 17.50 Ocean Lake Plan (OP) District 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 1327 NW Harbor Ave and is in the Oceanlake (OP) District Ocean Front Area. The tax lot number is 07-11-10-DC-80001-00 and the square footage of the entire site is 6,877 square feet. The property owners seek to add onto an existing deck on an existing oceanfront condominium.

Lincoln City's GIS mapping shows the site contains bluff erosion hazards. The site does not contain any designated aesthetic resources, floodway, or wetlands. The site does contain flood zone at the toe of the bluff, but the project area is outside of the flood zone.

COMMENTS

No comments were received from the public.

ANALYSIS

Chapter 17.50 Ocean Lake Plan (OP) District
17.16.030 Permitted uses

Finding: The property owners plan to construct a deck addition to an existing condominium. The site is zoned OP Ocean Front Area. LCMC Chapter 17.50.030 lists the permitted uses in the OP zone; specifically, new or existing dwelling units are permitted.

17.16.070 Lot Requirements

Finding: The lot is an existing legal lot, so the minimum lot area, minimum lot width, and minimum lot depth are not applicable. This application is not for development; rather, this application is for a geologic hazard report review. Compliance with all other development standards shall be confirmed during review of the building permit application.

17.16.075 Landscaping

Finding: This section is not applicable to the application for geologic hazard report review.

17.16.080 Signs

Finding: No signs are proposed. This section is not applicable.

17.16.090 Off-street parking and loading

Finding: No new construction that requires parking is proposed, so this section is not applicable.

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 sought the professional advice of Rapid Soils Solutions Inc.

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 seek to alter the natural environment through construction of a deck addition; 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. The property owners retained the services of a registered geotechnical engineer, employed Rapid Soil Solutions (RSS), to review the site and prepare a written report. A geotechnical report (hereinafter referred to as the Report) was prepared on 1 July 2022, revised and updated on 6 February 2023, and stamped by Mia C. Mahedy, who is a geotechnical engineer registered and licensed to practice in Oregon. This requirement has been met.

> *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.*
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> *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 starting at the bottom of page 2 with a history of the site and surrounding areas. This requirement has been met.

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

Finding: Page 3 of the Report states: "The property envelope is perched upon a marine terrace graded roughly 5-6 feet lower than NW Harbor Avenue. The Google Earth DEM suggests that the internal slopes on the property are roughly 2%. The bluff west of the site is on slopes of about 45-55 percent. The existing dwelling is positioned at approx. 20-ft from the abrupt slope break at the top of the bluff." 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 bluff is enveloped with thick low-to-medium story vegetation on sandy soils." 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 8 of the Report gives a brief description of the subsurface data collection procedures. The results are logged in the appendix. 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: Page 3 of the Report provides a brief description of the site's oceanfront conditions. The report states: "The property abuts a 40-45 feet tall sea bluff to the west. On-site observations indicate that no shoreline protective structures have been constructed along the bluffs edge. The adjacent beach is a sandy beach, extending from the base of the bluff into the ocean. Literature suggests the beach gradient can reach roughly 7 degrees in winter. The bluff is enveloped with thick low-to-medium story vegetation on sandy soils." 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: "The property is on the BLUFF there are no drift logs or flotsam." Staff concludes this requirement has been met.

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: "No standing or flowing water is present on the subject site. No standing or flowing water is mapped or was historically mapped at the subject site." 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 6 of the Report mentions the presence of headlands, stating the following: "The subject site is located within the Lincoln littoral cell. This littoral cell extends from Cascade Head, 4.8-miles north of the subject site, to Cape Foulweather, 14-miles south of the subject site. Sediment transport outside the Lincoln littoral cell is believed to be extremely limited; the pronounced headlands effectively make the 24-km long beach a very large pocket beach. Longshore variations in grain size occurs within the littoral cell. The subject site is positioned near the northern end of the system, with beach sand comprised of finer grained materials and generally less affected by seasonal beach profile variations." 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 3 of the Report states: "On site observations indicate that no shoreline protective structures have been constructed along the bluffs edge." 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: The Report does not mention any stairs or pathways. No pathways or stairs were noted by staff in reviewing aerial imagery. Staff concludes that the Report does not mention any stairs or pathways because none are present, based upon a review of the aerial photography.

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

Finding: The Report does not directly mention any human impacts that would alter the resistance to wave impact. Staff assumes that this was omitted because, in the opinion of the geotechnical engineer, there were no human impacts worth noting. 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: Page 9 of the Report states: "The site of the deck is over 100 ft from the edge of the water. There is no impact from any role waves on the site. There is no erosion to the slope or foredune. **See page 7 figure that show this site has LOW RISK for active erosion.**" Staff concludes that the geotechnical engineer does not specifically describe average widths of the beach during the summer and winter and instead includes a figure showing risks for active erosion as a substitute for average beach widths.

    b. *Median grain size of beach sediment.*

Finding: Page 2 of the Report discussed the typical grain size of the beaches in the vicinity. The Report states: "The bulk of the Lincoln County shoreline, including the shoreline west of the property, consists of prominent coastal bluffs, formed in Tertiary sediments, and fronted by wide, gently sloping, sand beaches composed of predominantly fine-grained beach sediments." The requirement to provide information about the median grain size is met.

    c. *Average beach slopes during the summer and winter.*

Finding: Page 3 of the Report states: "Literature suggests the beach gradient can reach roughly 7 degrees in winter. Page 6 states: "The profiles of fine-grained beaches differ little in overall form between summer and winter, being nearly uniform in slope with only a small degree of concavity." This required information is provided.

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

Finding: The Report includes a slope profile provided by google maps, which shows the elevations of the site, bluff, and fronting beach. The requirement to provide elevation information is met.

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

Finding: Page 9 of the Report states: "The purposed deck is on a bluff there for there are no rip currents, or rip embayments to discuss." The requirement to provide rip currents and rip embayment information has been met.

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

Finding: Page 9 of the Report states: "There are no rock outcrops, sea stacks. The geology section and the soils found by RSS, sands match." Rock outcrops are visible in aerial photos and appear to be located directly west of the site. The geotechnical engineer has provided information regarding the presence of outcrops and sea stacks.

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

Finding: Page 9 of the Report states: "Depth to rock is immaterial in this case. All that matters for this deck is that the posts are embedded deep enough into the ground." The geotechnical engineer determined that this information is immaterial. Staff does not verify the accuracy or quality of the Report.

3. Analysis of Erosion and Flooding Potential.

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

Finding: Page 6 states: "Chronic coastal hazards for the Lincoln sandy shore include ocean flooding and erosion, inlet migration, landsliding, sloughing, and sand inundation. Catastrophic hazards include earthquakes and the associated ground shaking, subsidence, landsliding, liquefaction, and tsunamis." Later on the same page the report also states "The nearest active fault, classified as such by DOGAMI, is located roughly 3.26-miles south of the subject site. Numerous additional faults cross cut the Oregon Coast Range much closer to the subject site." The requirement to provide information on an analysis of beach monitoring data is met.

b. Analysis of human activities affecting shoreline erosion.

Finding: No specific mention of human activities affecting the site are in included in the Report. It is assumed that the geotechnical engineer determined that no current human activities are creating a noticeable effect on erosion. 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 8 states: "This slope formed as a result of wave erosion and is subject to ongoing impacts from wave erosion, wind impacts, rain impacts, sloughing, and landsliding." 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: Staff could not find mention of any wave run-up potential that might result in erosion of the sea cliff. The Report does detail historic conditions regarding the role waves played in the formation of coastal headlands and landmasses. Page 9 of the report states: "The site of the deck is over 100ft from the edge of the water. There is no impact from any role waves on the site. There is no erosion to the slope or fore dune. See page 7 figure that show this site has LOW RISK for active erosion." This requirement to calculate wave run-up beyond mean water elevation that might result in erosion of the sea cliff or fore dune is met based on the geotechnical engineer's assessment of the site.

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 7 of the Report briefly discusses the history of landslides along the bluff in Lincoln City. It states: "Consistent with the current understanding of beach process, building within and along the upper edges of bluff-backed shorelines reflects a considerable risk from direct wave

attack at the bluff toe and slope instability. The site spans across high-risk, moderate-risk, and low-risk hazard zones. The high-risk zone represents a best-case scenario for erosion, assuming a gradual mean erosion rate over 60 years while maintaining a slope at the angle of repose for talus. The low-risk zone represents a possible extent of bluff retreat assuming a maximum erosion rate for 100 years paired with a maximum slope failure (slough/landslide). The ocean facing side of the subject site contains a steep oceanfront bluff slope. This slope formed as a result of wave erosion and is subject to ongoing impacts from wave erosion, wind impacts, rain impacts, sloughing, and landsliding. Mapping indicates that the cliff face is roughly 40-45 feet tall." Although the report does not calculate the exact frequency of erosion events staff believes the analysis is sufficient for the purposes of this application. The requirement to provide information on the evaluation of frequency of erosion-inducing processes has been 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 8 of the Report states" "This slope formed as a result of wave erosion and is subject to ongoing impacts from wave erosion, wind impacts, rain impacts, sloughing, and landsliding. Mapping indicates that the cliff face is roughly 40-45 feet tall. Priest et al (1994) suggests a local erosion rate of around 0.27±0.34 feet per year." The requirement to provide information on potential distance of property erosion has been 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: The Report addresses past conditions of sea level rise on page 4 and 5, but only in a historical context. No mention of future sea level rise rates are discussed. Page 9 does state: "The site is 40-45ft higher than the bottom of the slope and then there is 2-3ft change in grade to the ocean. That's conservatively a grade change of 42ft. If there is a raise in sea levels will not affect the construction of this deck." Staff concludes that these statements are the geotechnical engineer's provision for future sea level rise rates.

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

Finding: Page 8 of the Report states: "Mapping indicates that the cliff face is roughly 40-45 feet tall. Priest et al (1994) suggests a local erosion rate of around 0.27±0.34 feet per year." The requirement to provide an estimate of the erosion is met.

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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: The only mention of shoreline protective structures was on pages 2 and 3 of the Report, stating;

"The region has a long and problematic historic bluff erosion; much of the shoreline along Lincoln Beach has been protected by a combination of riprap structures and to a less extent, vertical seawalls and "On site observations indicate that no shoreline protective structures have been constructed along the bluffs edge." 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: The Report does provide general analysis of erosion potential at the site. Page 6 states: "Erosion is typically gradual, but produces a substantial amount of cumulative damage. Severe weather may dramatically increase the rate and impact of erosion as it produces high surf, heavy rainfall, and/or high winds." Page 9 states " The site of the deck is over 100ft from the edge of the water. There is no impact from an role waves on the site. There is no erosion to the slope or foredune. See page 7 figure that show this site has LOW RISK for active erosion." The report also gives a brief description of some erosion control measures on page 10 stating, "Continued removal of ivy and planting native plants and ground covers will assist with erosion protection as well as slope stability. As native plants and ground covers root systems grow in the slope assisting with stabilization." No building relocation, or foundation measures are discussed. The requirement to provide information regarding assessment of potential reactions to erosion events has been met.

c. An annual erosion rate for the property.

Finding: Page 8 of the Report states: "Mapping indicates that the cliff face is roughly 40-45 feet tall. Priest et al (1994) suggests a local erosion rate of around 0.27±0.34." The requirement to provide an 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: The report gives recommendations for foundation design. Specifically, page 8 of the Report states: "The new deck must be embedded into the slope following the building code. The observed total change in elevation from the top of the existing slab to the southern boundary line is 45 feet. The slope setback is (H/3=45/3=15). The proposed edge of the deck will be 13ft from the edge of the slope. The deck post shall be embedded 2 ft into the ground to achieve a slope setback of 15 ft." Page 9 states "RSS does describe the slope and required setback for the posts on page 8 in the report. The slope of the each does not matter as the slope to the beach from the deck is what governs the setback requirements of the deck. See the figure on page 8." The analysis on this page and in the conclusions section of the report only references building code setbacks and regulations, but does not include any erosion rate based setbacks. The required erosion rate based setback is addressed later in this staff report.

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

Finding: Page 9 of the Report provides a brief discussion regarding vegetation preservation. It states: "Continued removal of ivy and planting native plants and ground covers will assist with erosion protection as well as slope stability. As native plants and ground covers root systems grow in the slope assisting with stabilization." 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 3 of the Report provides a brief description of the natural drainage present at the site stating: "No standing or flowing water is present on the subject site. No standing or flowing water is mapped or was historically mapped at the subject site." No mention is made about methods to control an direct water drainage away from the ocean. As a condition of approval, the building permit application shall include the method to control and direct water drainage away from the ocean, or, if not possible, the method to direct water in such a way to not cause erosion or visual impacts.

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, in so far as the recommendations do not contradict any requirements of Title 17.

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 the footing inspection, RSS shall certify that the development was constructed in accordance with the Report's recommendations, in so far as the recommendations do not contradict any requirements of Title 17.

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 include a map of a topographic survey performed by S & F Land Services. The bluff edge is labeled on the survey as the 59-foot contour. Staff accepts this call-out of the 59-foot contour as being the location of the bluff edge. The Report provides an average annual erosion rate of .27 +/- .34 feet a year. Based on the lowest end of the average annual erosion rate, the required setback from the bluff edge is 21.2 feet (0.27 x 60 = 16.2 plus 5 = 21.2). Page 13 of the Report states: "The new deck must be embedded into the slope following the building code. The observed total change in elevation from the top of the existing slab to the southern boundary line is 45 feet. The slope setback is (H/3=45/3=15). The proposed edge of the deck will be 13 ft from the edge of the slope." The location of the proposed deck does not comply with the required bluff erosion setback from the unaltered bluff edge, per 17.47.020(D). As a condition of approval, the building permit application shall contain a site plan showing the location of the any development meeting the 21.2-foot bluff setback requirement.

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: None of these other policies 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: This finding is not applicable.

DECISION

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

1. The developer, applicant, and/or property owner(s) is/are responsible for compliance and conformance with all city, state, and federal requirements, rules, regulations, standards, and ordinances.
2. The site plan included with any building permit application shall be depict the unaltered bluff edge as depicted on the topographic survey map that was included with this geologic hazard report application. Specifically, the site plan shall depict the surveyed contours, including the 59-foot elevation contour just west of the site, and shall label the 59-foot contour west of the site as the unaltered bluff edge. Additionally, the site plan shall clearly depict the 21.2-foot bluff setback line from the unaltered bluff edge, with the proposed building footprint of the proposed construction to the east of the 21.2.-foot bluff setback line.
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 21.2-foot bluff setback line, said 21.2-foot bluff setback line as measured from the unaltered bluff edge. The site plan for any structural permit shall clearly depict the unaltered bluff edge (the 59-foot contour west of the site), the 21.2-foot bluff setback line, and the footprint in compliance with the 21.2 -foot bluff setback line.
4. Any horizontal addition requiring at least one footing in ocean bluff areas must be to the east of the 21.2-foot bluff setback line as measured from the unaltered bluff edge (the 59-foot contour west of the site). Any site plan for any structural permit shall clearly show and label the unaltered bluff edge (the 59-foot contour west of the site) and the 21.2-foot bluff setback line, with clear depiction of any horizontal addition in compliance with the 21.2-foot bluff setback line.
5. The 21.2-foot bluff setback line, measured from the unaltered bluff edge (the 59-foot contour west of the site), shall be flagged on the site by a licensed land surveyor, and the flagging shall remain in place until development is complete to ensure that no development takes place to the west of the 21.2-foot bluff setback line.
6. A representative of Rapid Soil Solutions Inc shall observe and approve footing and slab excavations prior to placing fill, or forming or pouring concrete, as 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, as well as all conditions of approval contained herein.
8. Pursuant to LCMC 17.47.020(B), Rapid Soil Solutions Inc or the applicant/property owner(s) 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 6 February 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. The building permit application shall include a description of how water drainage is being controlled and directed away from the ocean, or directed in such a way to not cause erosion or visual impacts.

10. Development of the site shall adhere to and comply with all recommendations noted in the entire Report and subsequent updates, as well as all conditions of approval contained herein.
11. If there are any conflicts in the recommendations or conditions, or between the recommendations and 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: 2023.02.22 15:13:11-08'00'

Anne Marie Skinner, Director — Date
Planning and Community Development