Staff Review, Decision, Conditions of Approval
Case File GEO 2022-02

Date: April 13, 2022

Case File: GEO 2022-02 Reede

Applicant: Terry and Hang Reede
14321 SE Upper Aldercrest Dr
Milwaukie, OR 97267

Property Owner: Terry and Hang Reede
14321 SE Upper Aldercrest Dr
Milwaukie, OR 97267

Situs Address: Unaddressed

Location: West side of NW Jetty Ave, approximately 439 feet north of NW 50th St

Tax Map and Lot: 06-11-34-DD-01000-00

Comprehensive Plan Designation: Single-Family Residential District (R-5)

Zoning District: Single-Family Residential, Roads End (R-1-RE) Zone

Site Size: Approximately 5,000 square feet

Proposal: Request for review of a geotechnical report

Surrounding Land Uses and Zones:
North: detached dwelling; R-1-RE
South: detached dwellings; R-1-RE
East: detached dwellings; R-1-RE
West: Pacific Ocean

Authority: Section 17.76.040 of the Lincoln City Municipal Code (LCMC) states that the review authority for Type II applications shall be the Planning and Community Development Director (Director). Table 17.76.020-1 of LCMC Chapter 17.76 lists geologic hazard report reviews as a Type II application with the Director listed as the review authority.

Procedure: The application was received March 4, 2022. The application was deemed complete on March 7, 2022. Notice of receipt of the application was mailed by the Planning and Community Development Department to the owners of all properties within 250 feet of the site on March 8, 2022. No comments were received.

Applicable Substantive Criteria: LCMC Chapter 17.17 Single-Family Residential, Roads End (R-1-RE) Zone
LCMC Chapter 17.47 Natural Hazards, Beaches and Dunes
LCMC Section 17.77.090 Geologic Hazard Report Review

BACKGROUND

The subject property (site) is unaddressed and undeveloped. The tax lot number is 06-11-34-DD-01000-00 and the lot size is 5,000 square feet. The property owners seek to develop the site with a detached dwelling in the future. The request for the geologic hazard report review did not include any building plans, elevations, or building site plans.

Lincoln City's GIS mapping shows the site is located in the bluff erosion hazard zones. The site is eligible for rip rap. The site does not contain any aesthetic resource, significant wetland, flood zone, or significant riparian areas.

ANALYSIS

Chapter 17.17
17.17.020 Permitted uses

Finding: The property owners would like to construct a new single-unit dwelling. The site is zoned Single-Family Residential, Roads End (R-1-RE) Zone. LCMC Chapter 17.17 lists the permitted uses in the R-1-RE zone; specifically, single-family dwellings are listed as a permitted use as LCMC 17.17.020(A)(1).

17.17.050 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.

17.17.060 Maximum building height
The maximum building height shall be 30 feet, except as provided in LCMC 17.52.190 and 17.52.200.

Finding: This request does not include any building permit applications or requests to review any building permit plans. At the time a building permit application is submitted, the accompanying building elevations shall be reviewed for compliance with the maximum 30-foot building height requirement.

17.17.070 Lot requirements

Finding: The geologic hazard report review does not include any building permit applications or requests to review any building permit plans. At the time a building permit application is submitted, the accompanying building 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.

17.17.075 Landscaping
17.17.080 Signs
17.17.090 Off-street parking and loading
17.17.100 Other required conditions

Finding: This request for a geologic hazard report review does not include any building permit applications or requests to review any building permit plans. At the time a building permit application is submitted, the accompanying plans shall be reviewed for compliance with LCMC Chapter 17.17.

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 Mia Mahedy, who is a

registered professional engineer, and Thomas Wayland, who is a registered geologist, both of whom are licensed to practice in 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*
> 6. *public and private roads, streets, parking lots, driveways, and utility lines, provided work does not extend outside the previously disturbed area;*
> 7. *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 future construction of a dwelling; therefore, the proposed development activity is not exempt and must meet the requirements of LCMC Chapter 17.47.

This staff report notes that the request for review of the geologic hazard report does not include any applications for building permits or any building plans, building site plans, or building elevations. The review of building plans, building site plans, and building elevations takes place as part of the building permitting process.

> *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 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 Mia Mahedy and Thomas Wayland, a licensed engineer and a licensed geologist, respectively, to review the site. Ms. Mahedy and Mr. Wayland 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 11, 2021, hereinafter referred to as Report. No development has occurred on the site. The Report has been prepared and submitted prior to construction, as required by LCMC 17.47.020.B. No construction has occurred, there have been no building inspections, and the required update (dated January 31, 2022) has been provided 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 with a history of the site and surrounding areas provided on page 3 of the Report.

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

Finding: The initial pages of the Report provide a description of the site topography, elevations, and slopes noting that the area of the site east of the bluff is relatively flat. The Report adds that the bluff along the western part of the site slopes down to the west very steeply about 80 feet down to the beach. This was calculated using Google Earth. The requirement to provide the information on topography, including elevations and slopes on the property, is met.

> c. *Vegetation cover.*

Finding: Page 4 of the Report lists the site's vegetation cover, noting the following: "The majority of the grade change is accommodated by non-vegetated, vertical slopes." 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 10 of the Report gives the subsurface materials and notes the detailed descriptions and analyses of the geology. Two hand-augured holes were dug and the results reviewed by the authors of the Report. The detailed results are found in the appendix of the Report. 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 and 4 of the Report list the site's oceanfront conditions. This includes a description of detailed historical imagery analysis and the grade changes from the beach to the upper cliff. The Report also documents debris piles at the toe of the slope. 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: No information on drift logs or flotsam was specifically provided. The Report did detail that "the lower slopes of the bluff are buried by a vegetated, sand-and-silt dominated debris pile." Based on the Report, there is no flotsam worth documenting at the site. The Report explained there was no beach protective structure at the site. 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 that no standing water is mapped or was historically mapped at the site. Page 8 of the Report lists Logan Creek and D River as nearby drainage ways. 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 8 of the Report provides the information on headland proximity and influence on beach sediment transport and elevations. The Report specifies the site is with the "Lincoln Littoral" cell that extends from Cascade Head to Cape Foulweather. 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 describes that no beach protective structures have been constructed at the site. 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 provides no specific mention of any significant beach pathway existing at the site, noting that much of the cliff face is a near vertical. 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 3 of the Report states: "No substantial changes to the subject site were observed in the historic aerial imagery. The low-laying vegetation appears to have been cleared form [sic] the inside of the site between 2005-2007, but was then permitted to regrow." 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: The Report does not explicitly address the average widths of the beach, but does say that "the closest beach transects have a 'most likely winter profile' with a beach slope of 0.049 and .073." The Report also provides elevation profiles and pictures of the beach in front of the bluff. The requirement to provide width information are congruent with the intentions of this code section.

b. *Median grain size of beach sediment.*

Finding: Page 3 of the Report indicates the sand in the base of the debris piles was a mixture of sand and silt. Page 8 states that "longshore variations in grain size occurs within the littoral cell. The subject site is positioned near the northern end of the system, with the beach sand comprised of finer grained materials and generally less affected by seasonal beach profile variations." 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 that "the closest beach transects have a 'most likely winter profile' with a beach slope of 0.049 and .073." Accordingly, 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 8 of the Report states: "Climactic cycles (e.g. El Nino Southern Oscillation and longer-term climactic cycles associated with the Pacific Decedal Oscillation) also impact rates or erosion. Erosion of coastal dunes and bluffs cause them to retreat landwards, erosion rates impact retreat rates." 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: No information was provided regarding the significance of rip or currents on erosion. "Longshore variations in grain size occurs within the littoral cell. The subject site is positioned near the northern end of the system, with the beach sand comprised of finer grained materials and generally less affected by seasonal beach profile variations." 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: No information is provided regarding outcroppings at the site, but the aerial photographs included with the Report do not show the presence of rock outcrops or sea stacks. Accordingly, the requirement to provide information on the presence of rock outcrops and sea stacks is met through the included aerial photographs, which show none exisdt.

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

Finding: On page 6, the Report gives general historical and site conditions regarding the formation of bedrock, but no explicit mention of the depth of sand is mentioned. The Report states: **"**Along the Oregon coast, marine terrace deposits are comprised primarily of loosely cemented sand stone with occasional conglomerates and siltstone beds. Gravels are most commonly found at the base of the formation, directly above the bedrock contact. lnterbedded gravels and conglomerates are less common. In some places, wood is abundant. Where the terraces abut basaltic headlands, layers of angular basalt fragments are present; these fragments represent talus deposits that were emplaced concurrent with the main body of the terrace. The subject site is near the northern end of a long terrace segment; this segment begins at Siletz Bay and extends to the northern edge of Lincoln City, nearly to Roads End Point. Sea cliffs at Lincoln City reach heights of greater than 100 feet. The sandstones are commonly capped by dune sand." Although the information has not been explicitly provided, the Report does give general and historic conditions regarding the relationship between sand accumulation and bedrock.

3. *Analysis of Erosion and Flooding Potential.*
    a. *Analysis of DOGAMI beach monitoring data available for the site.*

Finding: The bottom of page 8 of the Report provides the following: "This review indicates that the 100-year floodplain, as mapped by FEMA, extends partway up the base of the bluff adjacent to the subject site." 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 8 of the Report states the following: "The region has a long and problematic historic with bluff erosion; much of the shoreline along Lincoln Beach has been protected by a combination of riprap structures and to a less extend, vertical seawalls." 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 of the Report states the following: "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." 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: The Report does not give an exact calculation of wave run up, but it does address risks from direct wave action. Page 9 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 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 that "ocean wave, wind, and rain erosion are continuous and ongoing processes that impact bluff recession, along with stating that the average annual erosion rate for unprotected areas of the bluff north and south of the site is 0.27 plus or minus 0.34 feet per year." 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: As shown is section (e) above, the report does provide a range of methodology to assess the risk of property erosion. This standard 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 does give historical sea level rise data on pages 5 and 6, but does not make clear future predictions. Although the criteria is not met directly, predictions of erosion are consistent with other similar reports for properties in the same area.

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

Finding: Page 10 of the Report notes that ocean wave, wind, and rain erosion are continuous and ongoing processes that impact bluff recession, along with stating that the average annual erosion rate for unprotected areas of the bluff north and south of the site is 0.27 plus or minus 0.34 feet per year. The requirement to provide an estimate of the annual erosion rate at the site is met with the stated 0.34 feet per year.

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: Only brief historical mention was given to rip rap and beach protection structures in the areas. Staff has viewed related maps and resources and the site is eligible to rip rap per Goal 18. The requirement to provide information regarding a determination of legal restrictions of shoreline protective structures is partially 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 is focused primarily on assessing the risks of erosion events, and provides solutions and bluff setback information in order to avoid having to relocate any parts of the development in the near future. 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 10 of the Report states that "ocean wave, wind, and rain erosion are continuous and ongoing processes that impact bluff recession, along with stating that the average annual erosion rate for unprotected areas of the bluff north and south of the site is 0.27 plus or minus 0.34 feet per year." 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: The Report gives recommendations for foundation design, excavation, and other building techniques to ensure a potential dwelling is constructed safely. 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: The Report does not directly address vegetation preservation, but it does explain the site is currently vegetated and provides conclusions on drainage to prevent erosion between the home and the bluff. Page 13 states: "RSS concludes that as long as the proper setbacks are followed that construction of a house on this lot will not be a hazard to the site. RSS will review a more detailed site plan once it is completed. This site plan shall include contours and setbacks from the toe of the descending slope. RSS will also require a foundation inspection of the house excavation. At that time we will review with the owner/builder placement of the roof drains so they do not cause any erosion." 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 13 states: "RSS concludes that as long as the proper setbacks are followed that construction of a house on this lot will not be a hazard to the site. RSS will review a more detailed site plan once it is completed. This site plan shall include contours and setbacks from the toe of the descending slope. RSS will also require a foundation inspection of the house excavation. At that time we will review with the owner/builder placement of the roof drains so they do not cause any erosion." The requirement to provide methods to control and direct water drainage away from the ocean is met.

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 the footing inspection, Rapid Soil Solutions, 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 maximum 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 on March 11, 2021, by LEI Engineering and Surveying. There are no official stamps on the map to signify that it was prepred by a land surveyor licensed in the state of Oregon, the elevations appear to be off by 100 feet, and the unaltered bluff edge is not shown or labeled. The Report uses an average annual erosion rate of 0.34 feet per year in the determination of oceanfront setbacks for the site. Using the annual erosion rate of 0.34 and multiplying by 60, then adding LCMC's required additional 5 feet gives a minimum setback of 25.4 feet from the unaltered bluff edge. Based on the slope profiles and available contour and other site data, the unaltered bluff edge is at 90 feet in elevation, lying just west of the subject property.

Staff notes that there is no such thing as a maximum annual erosion rate. To have a maximum annual erosion rate, the rate of erosion would have to be measured consistently every year with all the data recorded and preserved. Aerial photography and topographic maps could be used in lieu of physical measurements; however, aerial photographs and topographic maps are not available for every past year. Without having the erosion rate of every past year, it is not possible to state a maximum annual erosion rate. Accordingly, the industry standard for calculating erosion rate is based on an average. The average annual erosion rate is based on the time period between known measurements, sets of aerial photographs, and topographic maps. For example, if there has been one foot of erosion at a site in a ten-year period as determined by reviewing available past measurement data, aerial photographs, and topographic maps available for that specific ten-year period, then the one foot of erosion in 10 years equals an average erosion rate of 0.10 feet per year.

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.
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 receipt 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. An affidavit of mailing of the public notice of receipt of a complete application shall be prepared with the mailing date noted and the list of parties to whom the notice was mailed attached to the affidavit, along with the notice itself.
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 of receipt of a complete application was mailed on March 8, 2022, contained all the information required in LCMC 17.76.040.E.2 and 4. The required affidavit of mailing was prepared, pursuant to LCMC 17.76.040.E.3.

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. No written comments were received during the 14-day comment period.

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 subsection 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: The applicant submitted a geologic hazard report 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 by the applicant.

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 AND CONDITIONS

Based upon an analysis of the submitted application and accompanying materials against applicable criteria, the Director concludes all criteria have been 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 topographic survey map included in the application materials shall be revised to depict the unaltered bluff edge, which lies at the 90-foot elevation contour, just west of the site. The 25.4-foot

bluff setback line from the unaltered bluff edge, and the proposed building footprint of the proposed construction must also be clearly depicted. The map showing the required features shall be stamped by a land surveyor who is licensed in the state of Oregon, and submitted as part of the building permit application, and 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 25.4-foot bluff setback line, said 25.4-foot line as measured from the unaltered bluff edge. The site plan for any structural permit shall clearly depict the unaltered bluff edge, the 25.4-foot bluff setback line, and the footprint in compliance with the 25.4-foot bluff setback line.
4. Any horizontal addition requiring at least one footing in ocean bluff areas must be to the east of the 25.4-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 25.4-foot bluff setback line, with clear depiction of any horizontal addition in compliance with the 25.4-foot bluff setback.
5. The 25.4-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 25.4-foot bluff setback line.
6. A representative of Rapid Soils Solutions, Inc shall observe and approve footing and slab excavations prior to placing fill, or forming or pouring concrete, as Rapid Soils Solutions, 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, Rapid Soils Solutions, 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 January 31, 2023.
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.

Approved by:_____ April 14, 2023

Anne Marie Skinner, Director **Date**