

Instructions for Geologic Hazard Report Review Application

THIS IS PUBLIC RECORD

1. Complete the attached application in its entirety making sure every blank is completed. If not applicable, write NA on the blank.
2. Every property owner listed on the deed must sign and date the application.
3. If a contract purchase, in addition to the property owners listed on the deed, every individual listed as a contract purchaser on the purchase contract must sign and date the application AND a copy of the purchase contract must be included with the submittal.
4. The topographic map must show, label, and clearly identify the unaltered bluff edge.
5. For an application to be accepted for processing, all of the following must be contained in the application package:
 - The completed application with all property owner signatures
 - The completed geotechnical analysis that has been stamped and signed by an Oregon-licensed geologist/geotechnical engineer and that includes all required information listed in Lincoln City Municipal Code 17.47.020.
 - The topographic survey map that has been stamped and signed by an Oregon-licensed land surveyor and that is dated within the 12 months prior to the date of the geotechnical analysis
 - Fee for Geologic Hazard Report Review with the completed Online Direct Pay Authorization Agreement for Credit/Debit Cards (to pay by phone or check, call 541.996.1232)
 - One pdf of the entire application package, with the Online Direct Pay Authorization Agreement in a separate pdf
6. Applications will NOT be accepted for processing until all items in #5 above are present.



Geologic Hazard Report Review Application

PROPERTY OWNER/CONTRACT PURCHASER (as listed on deed OR purchase contract):

Copy of purchase contract must be included with submittal for application to be accepted.

NAME: Anthony Wright
ADDRESS: [REDACTED]
PHONE: _____
E-MAIL: _____

PROPERTY OWNER/CONTRACT PURCHASER (as listed on deed OR purchase contract):

Copy of purchase must be included with submittal for application to be accepted.

NAME: Laurie Wright
ADDRESS: [REDACTED]
PHONE: _____
E-MAIL: _____

SITE INFORMATION:

ZONING DISTRICT: PT(O-F)
TAX MAP AND LOT: 07-11-10-DC-80001-00
SITE ADDRESS (Location if unaddressed): 1327 NW Harbor Ave, Lincoln City, OR 97367

TOPOGRAPHIC SURVEY AND MAP INFORMATION:

NAME OF OREGON LAND SURVEYOR: S&F Land Services
OREGON LAND SURVEYOR LICENSE NUMBER: 91987PLS
DATE OF TOPOGRAPHIC SURVEY: 10/3/22

(must be conducted within the 12 months prior to the date of the geotechnical analysis)

GEOTECHNICAL ANALYSIS INFORMATION:

NAME OF GEOLOGIST/GEOTECHNICAL ENGINEER: Rapid Soil Solutions inc.
OREGON ENGINEER LICENSE NUMBER: 19244PE
DATE OF REPORT: 8/3/22

(if written or last updated more than a year prior to the first building inspection, must be updated to reflect current conditions)

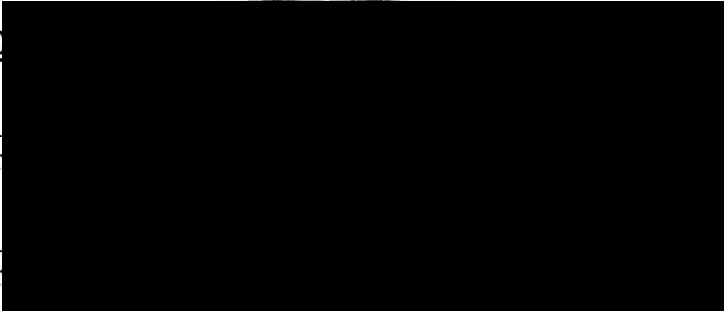
NOTE: THE COMPLETE GEOTECHNICAL ANALYSIS AND THE TOPOGRAPHIC MAP THAT HAS BEEN PREPARED BY AN OREGON-LICENSED LAND SURVEYOR WITHIN 12 MONTHS PRIOR TO THE DATE OF THE GEOTECHNICAL ANALYSIS MUST BE ATTACHED BEFORE THE APPLICATION CAN BE ACCEPTED FOR PROCESSING.



I (We) hereby declare under penalty of perjury under the laws of the State of Oregon that the foregoing information is true, complete, and accurate. If the applicant is a contract purchaser, the applicant must provide written authorization from the current property owner. I (We) have read and fully understand, and agree to meet, the criteria outlined in Lincoln City Municipal Code (LCMC) Section 17.47.020 and reflected in this application.

I (We) acknowledge that providing false information in the application shall be a violation and grounds to deny the application and void the approval.

SIGNATURE



Property Owner

10-24-2022

Date

10-24-2022

Property Owner

Date

Property Owner/Contract Purchaser (signature required)

Date

Property Owner/Contract Purchaser (signature required)

Date

- *All property owners listed on the deed of each parcel/lot must sign the application.*
- *All contract purchasers listed on the purchase contract must sign the application.*
- *If contract purchasers are individuals other than the property owners shown on the deed, all property owners listed on the deed as well as all contract purchasers listed on the purchase contract must sign the application.*

Geotechnical Report for Deck

1327 NW Harbor Drive
Lincoln City, Oregon

Prepared for:
TnT Builders

1 July 2022



3915 SW Plum St
Portland, OR
503-816-3689

PROJECT AND SITE DESCRIPTIONS

Introduction

Rapid Soil Solutions Inc (RSS) has prepared this geotechnical report, as requested, for the proposed deck addition located at the Lincoln County tax lot currently assigned the site address of 1327 NW Harbor Avenue. The subject parcel accommodates 6-unit ocean front townhomes/rowhomes; development area is located on the northernmost end of the parcel (unit6). The purpose of this report is to assess the geotechnical suitability of the subject site and provide geotechnical recommendations based on visual observations, collected soils samples and review of available literatures.

The conceptual layout plan provided to RSS illustrates the new 7'x14' balcony deck adjoining the western end of the existing residence and the existing 4'x7.5' deck. The new deck is to be supported by two 6x6 PT posts, approx. 7-ft tall.

The site is primarily located on the northern city limits of Lincoln City; roughly 770-ft directly west of Oregon Coast Hwy (Hwy 101) and approx. 400-ft east off the coast line. The property is located on the western edge of NW Harbor Ave. and about 155-ft southwest from its intersection with NW 14th Street. Adjacent properties include 1335 NW Harbor Ave. (north) and 1323 NW Harbor Ave. (south).

The subject site can be found in the southwestern region of the southeast quarter of Section 10, Township 7-South, Range 11-West (W.M.) in Lincoln County and distinguished by the tax lot number of 07-11-10-DC-80001-00. The alternate account number of the site is R502363. The legal description of the site is 'Ocean Place Townhouse Condo, Lot Unit 6, DOC202110482.' The latitude and longitude of the site are 44.9747926 and -124.015964 (44°58'29.32"N, 124°0'57.47"W). See Appendix, Figure 1 for site location. Subsequent figures include additional site location information.

SITE CONDITIONS

Surface Conditions

The subject site is located within a row of residential properties sandwiched between NW Harbor Ave and an ocean-facing bluff. The neighborhood contains a slight west descending slopes. No large trees are present in the local slopes; some small trees, typical of coastal vegetation, are scattered through the local neighborhood. The local parcels are generally 100 feet deep and at least 50 feet wide; originally platted at 50' wide some of the tax parcels comprise more than a single plated lot. Dwellings in the local block range in age, with original construction dates as early as 1930. The access road NW Harbor Ave is a relatively narrow, asphalt-paved street with intermittent curbs and sidewalks.

The bulk of the Lincoln County shoreline, including the shoreline west of the subject site, 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 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.

Historic Site Conditions

Historic aerial imagery dating back to 1982 was referenced as part of this investigation. This imagery indicates that local development began prior to 1982 (earliest homes are dated around 1930s) and continued slowly and intermittently through the most recent image.

Roughly half of the buildable lots appear to be developed in 1982. By 1994, nearly all of the buildable lots in the local neighborhood were developed; including the subject site.

Images from 05/18/2001 and 08/01/2011 include some evidence of seeps flowing to the beach from terminus of NW 15th Street; located about 250-ft due north of the site. A less substantial seeps, only observed in the 2007 imagery, is located 485-ft south of the subject site.

No substantial changes to the subject site were observed in historic aerial imagery. The bluff west of the residence was consistently covered by thick vegetation.



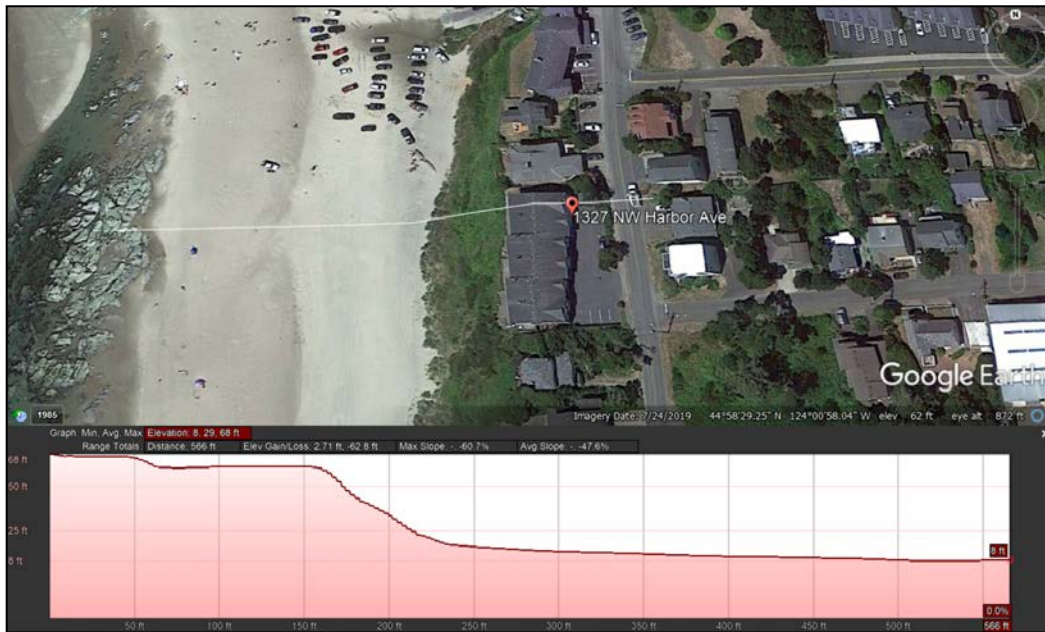
Lincoln County web maps: 2021 aerial image of the site.

General Site Conditions

RSS traversed the slopes on site 26 June 2022 looking for indications of instability which may potentially influence the long-term behavior of the subject site. The subject site consists of a single parcel that spans about 208-239 feet wide and 150-152 feet deep. The parcel accommodates 6-unit oceanfront townhouse; proposed deck is located on Unit6 on the northern end of the property. The eastern majority of the parcel is a paved driveway and designated parking spaces. To the west of the residence is an existing deck and about 15-ft wide concrete patio.

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. 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 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.



Google Earth: satellite aerial image of the site and elevation.

Regional Geology

Current geologic literature classifies the slopes at the subject site as Quaternary marine terrace deposits. These deposits generally consist of unconsolidated to semi-consolidated sands, with some gravel and silt beds. Locally these deposits are overlain by fine grained dune deposits. Typically, the sedimentary materials comprising these terraces were emplaced in high-energy, nearshore environments. Portions of the local marine terraces contain colluvium emplaced by landslides, debris slides, mudflows, and soil creep.

Geologic History

The site is tucked along the westernmost edge of the Oregon Coast Range, just before it plunges into the ocean. The Oregon Coast Range is an uplifted belt of land spanning roughly 200 miles and comprised of moderately high mountains (averaging 1,500' in elevation with a maximum of 4,097') that occupies a roughly 30- to 40-mile-wide swath of land along the Pacific Ocean. The mountains rising above the subject site are comprised primarily of accreted oceanic sediments and synchronously deposited igneous rocks (where the sediments overlay, underlay and are intruded by the volcanic flows). After the accretion of the Siletz Terrane to the edge of North America, a thick pile of silt, sand, and mud accumulated on the adjacent sea floor. Over tens of millions of years, sediment accumulation continued alongside tectonic impacts of the Cascadia subduction zone and sea level fluctuations. Over time the sedimentary material was scraped onto the edge of the continental plate; uplift, faulting and folding (associated with margin-parallel shortening in the Cascadia subduction zone) lifted the thick stack of sedimentary rock into the heights of the modern mountain range.

The western flank of the Coast Range, which includes the area around the subject site, generally contain varied topography, typically dominated by rugged mountains, bold headlands and marine embayments. Steep canyons cut through the local uplands, emptying into the lowland areas along the coast. The lowland areas of the coastal range include marine

embayments, coastal plains and dune areas built up along spits and beaches. The local stretch of coast falls within the lowland category, containing of a bluff-backed sandy beach with adjacent lands underlain by a marine terrace.

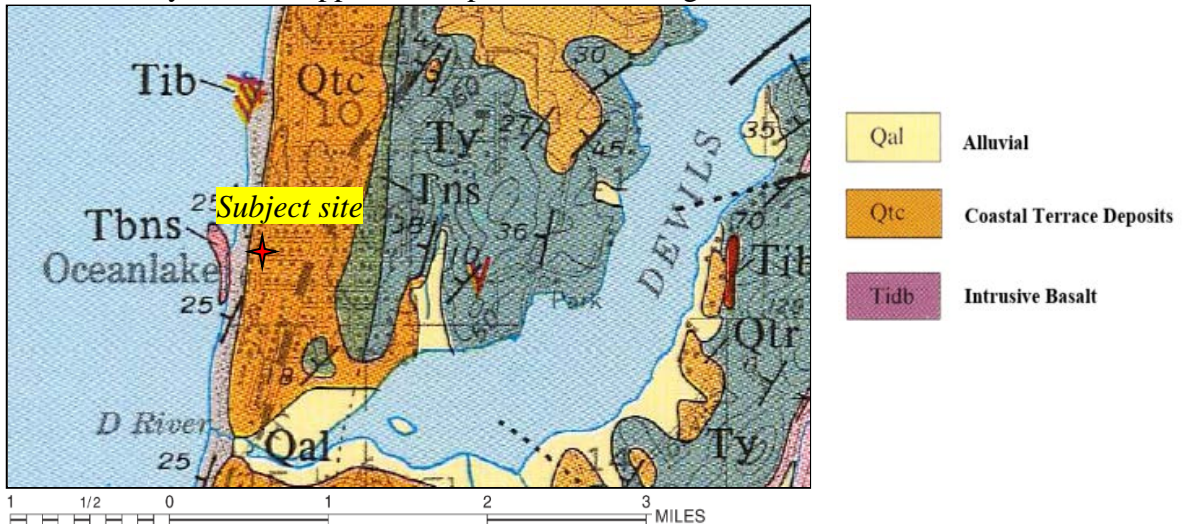
During periods of higher sea level elevation, typical erosional impacts along the coastline occurred at a higher elevation than their modern counterparts. The ongoing wave erosion at these higher elevations cut platforms and benches on the bedrock; as sea level changed these landforms were buried in sediment and abandoned as terraces. When sea level rose, sediments were deposited atop the benches, when sea levels subsequently lowered again, the terrace was left behind. Typical terrace deposits were laid down over wave-cut benches during interglacial stages of the Pleistocene Epoch, when sea level was relatively high. The local terrace was emplaced during the most recent interglacial stage (the Sangamon, just prior to the Wisconsin glacial stage); the local deposits represent a remnant of this terrace. The terraces along the Oregon coast are widest and longest where the local bedrock is sedimentary.

Site Geology

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. Interbedded 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.

Peterson et al (1993) describes the sedimentary deposits exposed ocean-facing bluff as containing convoluted heavy-mineral layers emplaced in a planer foreshore environment. The upper sections of the outcrop include transitional backshore to eolian dune sands, typical of marine transgression.

The local terraces are underlain by the lower Eocene Nestucca Formation. The Nestucca Formation is a tertiary aged siltstone. The unit contains siltstone and sandstone horizons, and is typically thin bedded and tuffaceous. Some sandstone dikes and sills are present in the upper portion of the unit. Thick-bedded arkosic sandstone is observed in places near the base of the unit. Locally this unit appears to dip about 15-20 degrees to the west-northwest.



Geohazard Document Review

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 Oregon HazVu: Statewide Geohazard Viewer was reviewed on 28 June 2022 to investigate mapped geological hazards.

This review indicates that the 100-year floodplain, as mapped by FEMA, extends partway up the base of the bluff, west of the property.

The expected earthquake-shaking hazard is classified as ‘very strong’ across the entirety of the parcel. The earthquake liquefaction hazard is classified as ‘low’. The site is additionally classified as containing a ‘severe’ level of expected shaking during a Cascadia earthquake event. The statutory Tsunami inundation line extends through the western edge of the property. 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 SLIDO does not show any mapped slides at or near the site. Most of the marine terrace upon which Lincoln City is constructed, is free of the massive landslides that are pervasive along the Oregon Coast and in the Oregon Coast Range. Minor slides and slumps are extraordinarily commonly along the bluffs of bluff-backed beaches. The Oregon HazVu suggests that the bluff due west of the site consists of landslide deposits. The debris piles at the base of the bluff are the product of slope failures.

The landslide susceptibility at the subject site is classified as moderate (eastern side of the site) to high (western side of the site).

Beach Sediment Transport and Coastal Erosion

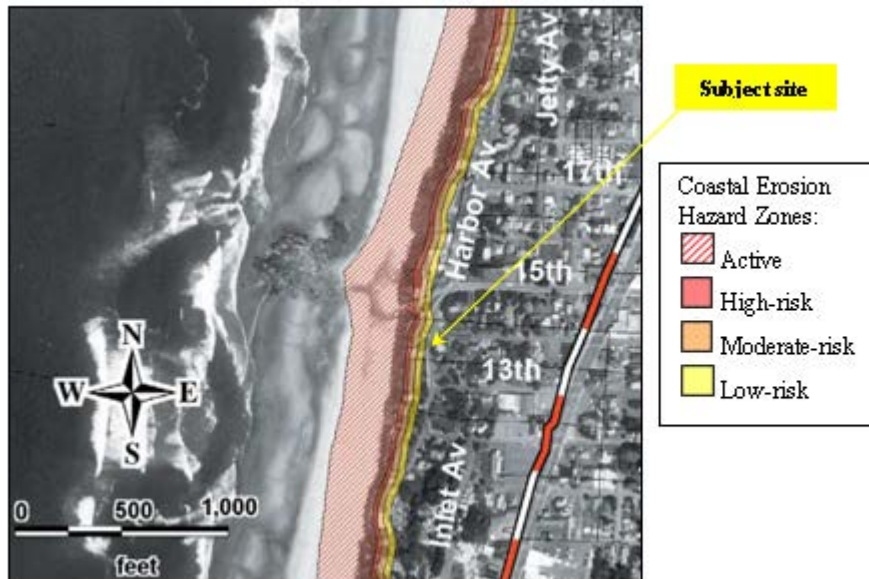
The subject site is located within the Lincoln littoral cell. This littoral cell extends from Cascade Head, 4.8-miles north of the subject site, to Cape Foulweather, 14-miles south of the subject site. Sediment transport outside the Lincoln littoral cell is believed to be extremely limited; the pronounced 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. Shih & Komar (1994) notes that “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.”

Local drainages discharging to the beach include Spring Creek, 0.5-miles east-southeast of the site, and D River, roughly 0.46-miles south of the subject site.

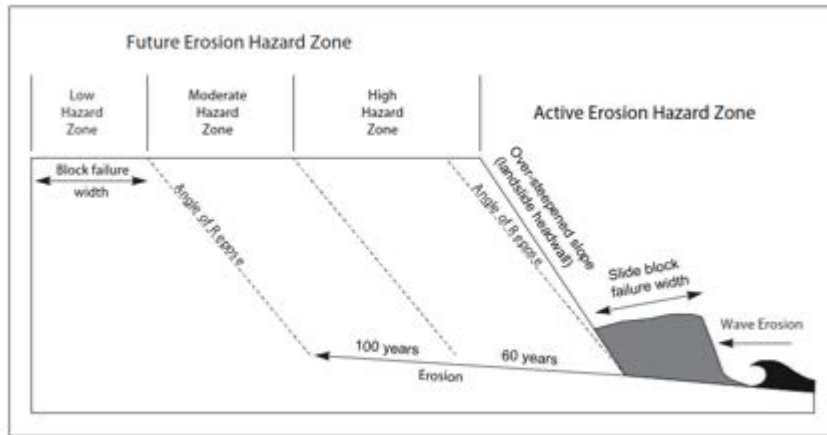
Erosion along the Oregon coast is complex, reflecting processes operating over both short- and long-time scales, and over large spatial scales. Beach, dune and bluff erosion are a common and chronic hazard along the regional coastline, including at the subject site. Erosion is typically gradual, but 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. Climactic cycles (e.g. El Niño Southern Oscillation and longer-term climate cycles associated with the Pacific Decadal Oscillation) also impact rates of erosion. Erosion of coastal dunes and bluffs cause them to retreat landwards, erosion rates impact retreat rates.

The subject site is located directly adjacent to a mapped Active Erosion Hazard Zone (Priest & Allan, 2004: OFR O-04-09). The zone extends from the shoreline to the top of the edge the bluff, and/or to the headwall of active and potentially active shoreline landslides. 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).



Erosion hazard zones of the local coastal environment. Excerpt from Priest and Allan (2004: O-04-09).



Erosion hazard zones schematic illustration, excerpt from Priest and Allan (2004: O-04-09).

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. Priest et al (1994) suggests a local erosion rate of around 0.27 ± 0.34 feet per year. The western edge of the site is positioned within a high-risk coastal erosion hazard zone and abuts the active coastal erosion hazard zone. It should be noted that both the studies conducted by Priest et al (1994) and Priest & Allan (2004) were intended for regional planning use, not site-specific hazard identification.

Coastal Flooding

The risk from coastal flooding is considered to be generally low due to the presence of bluff backed beaches.

Field Exploration and subsurface conditions

The site was investigated by drilling two (2) hand-auger borings. The bore holes are shown on Figure 2 in the appendix. An EIT, engineer-in-training, observed the excavation of the borings and logged the subsurface materials. A registered professional engineer reviewed the results. Boring logs detailing materials encountered is in the appendix. The logs were created using the Unified Soil Classification and Visual Manual Procedure (ASTM-D 2488). RSS found tan, medium to coarse grained poorly-graded SAND on site.

Moisture contents ranged from 2.3% to 8.5%. No groundwater encountered.

Deck Foundation Design Recommendations

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 2ft into the ground to achieve a slope setback of 15ft. See figure below.

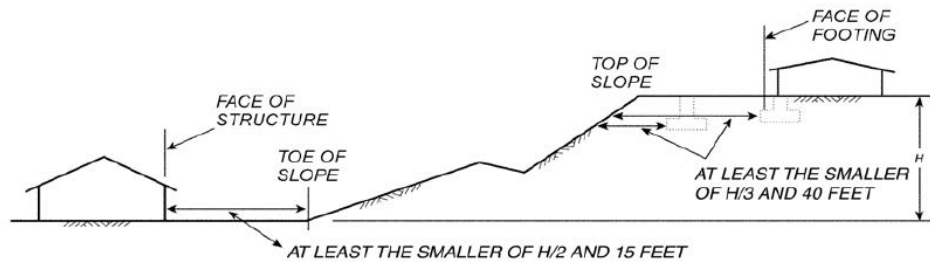


FIGURE 1808.7.1
FOUNDATION CLEARANCES FROM SLOPES

Engineering values summary

| | |
|--------------------------------|----------|
| Bearing capacity SILT | 2,000psf |
| Coefficient of friction - silt | 0.32 |
| Active pressure | 40pcf |
| Passive pressure | 300pcf |

Seismic Design Criteria

The seismic design criteria for this project found herein is based on the ASCE 7-16 and from the USGS Earthquake Hazards Program. A summary of seismic design criterion below using Latitude 44.9747926 Longitude of -124.015964 soil site class D.
Null=see section 11.4.8

| | | |
|---|---------------------|-----------------|
| | Short Period | 1 Second |
| Maximum Credible Earthquake Spectral Acceleration | Ss = 1.332 g | S1 = 0.69 g |
| Adjusted Spectral Acceleration | Sms = 1.598 g | Sm1 = null |
| Design Spectral Response Acceleration Perimeters | Sds = 1.065 g | Sd1= null |

CONCLUSIONS AND RECOMMENDATIONS

Satisfactory earthwork performance depends on the quality of construction. Sufficient monitoring of the activities of the contractor is a key part of determining that the work is completed in accordance with the construction drawings and specifications. I recommend that the geotechnical engineer or her representative should witness the installation of deck supports. Installation of deep deck foundation will ensure they will be straight and level for many years on the existing steep slope. 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.

Limitations

This report has been prepared for the exclusive use of the addressee, and their architects and engineers for aiding in the design and construction of the proposed development. It is the addressee's responsibility to provide this report to the appropriate design professionals, building officials, and contractors to ensure correct implementation of the recommendations. The opinions, comments and conclusions presented in this report were based upon information derived from our literature review, field investigation, and laboratory testing. Conditions between, or beyond, our exploratory borings may vary from those encountered. Unanticipated soil conditions and seasonal soil moisture variations are commonly encountered and cannot be fully determined by merely taking soil samples or soil borings. Such variations may result in changes to our recommendations and may require that additional expenditures be made to attain a properly constructed project. Therefore, some contingency fund is recommended to accommodate such potential extra costs.

If there is more than 2 years time between the submission of this report and the start of work at the site; if conditions have changed due to natural causes or construction operations at, or adjacent to, the site; or, if the basic project scheme is significantly modified from that assumed, it is recommended this report be reviewed to determine the applicability of the conclusions and recommendations.

The work has been conducted in general conformance with the standard of care in the field of geotechnical engineering currently in practice in the Pacific Northwest for projects of this nature and magnitude. No warranty, express or implied, exists on the information presented in this report. By utilizing the design recommendations within this report, the addressee acknowledges and accepts the risks and limitations of development at the site, as outlined within the report.

APPENDIX

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LINCOLN CITY QUADRANGLE
OREGON-LINCOLN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

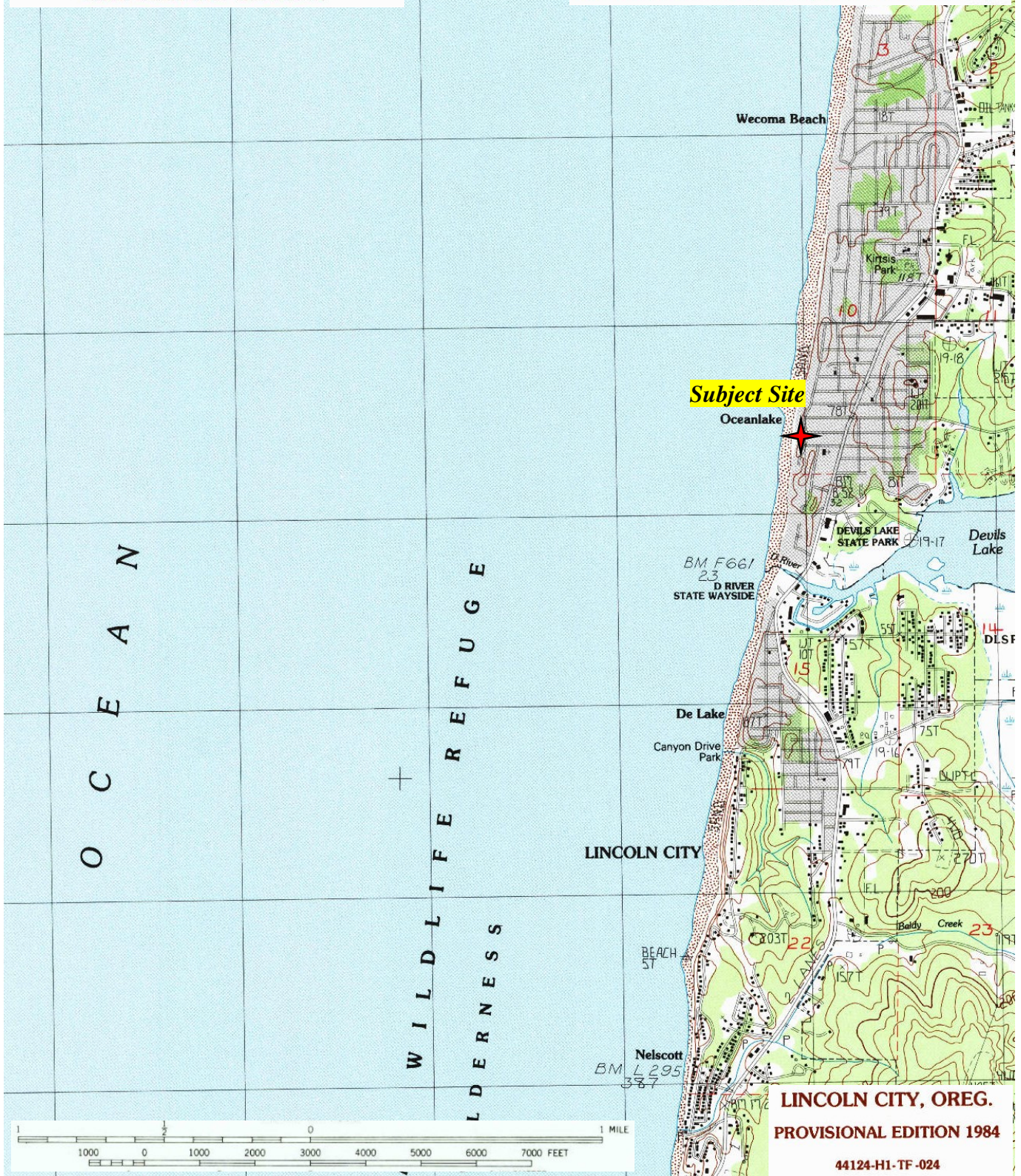


Figure 1: Subject site location on the northeast quarter of the Lincoln City Quadrangle

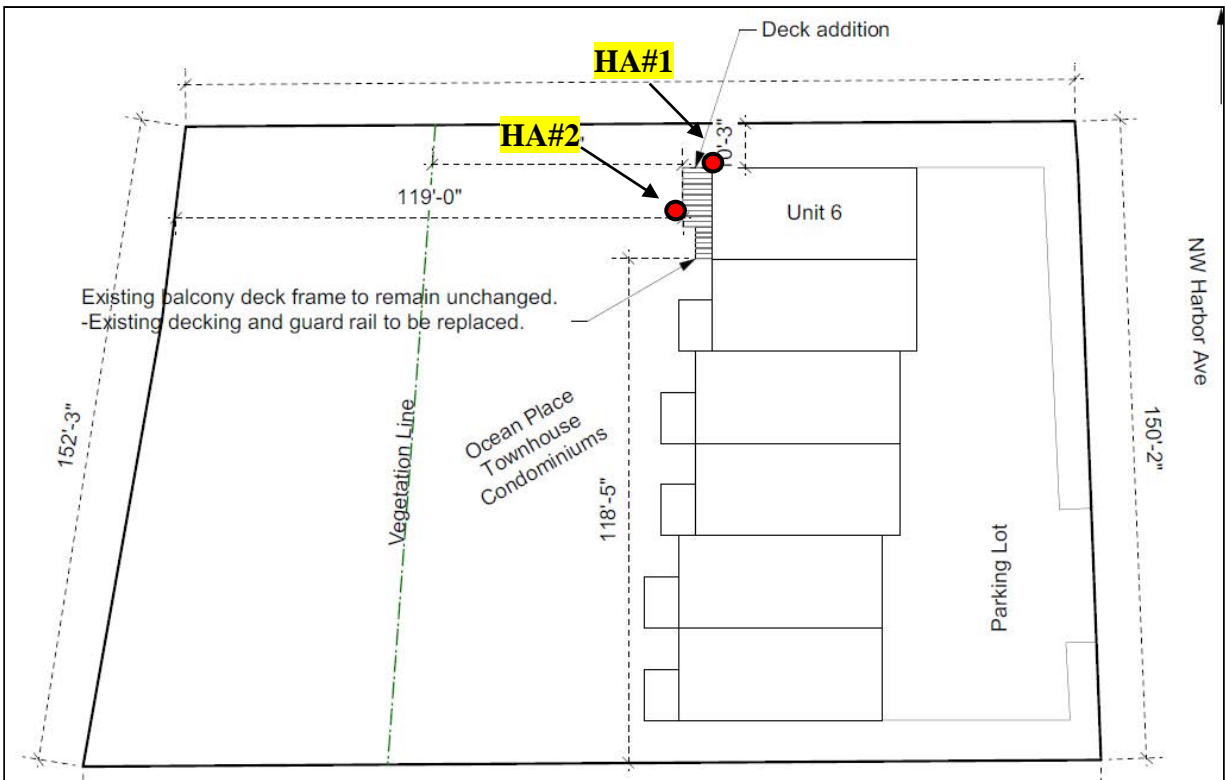


Figure 2: Testing Locations

Lab Results

Project Name: 1327 NW Harbor Ave Lincoln City

Sample Date 6/26/2022

Moisture

| Sample number | HA-1A | HA-1B | HA-2 |
|-----------------------------|---------------------|---------------------|---------------------|
| 1 Date and time in oven | 6/28/2022 - 9:15AM | 6/28/2022 - 9:15AM | 6/28/2022 - 9:15AM |
| 2 Date and time out of oven | 6/29/2022 - 11:06AM | 6/29/2022 - 11:06AM | 6/29/2022 - 11:06AM |
| 3 Depth (ft) | 2 | 4 | 2 |
| 4 Tare No. | 4 | 5 | 6 |
| 5 Tare Mass | 231 | 235 | 234 |
| 6 Tare plus sample moist | 1286 | 996 | 996 |
| 7 Tare plus sample dry | 1262 | 969 | 936 |
| 8 Mass of water (g) | 24 | 27 | 60 |
| 9 Mass of soil (g) | 1031 | 734 | 702 |
| 10 Water Content (%) | 2.3 | 3.7 | 8.5 |

Grain Size Analysis: Dry Sieve Method

Sample Number: HA-1A
 Total Sample Weight (g): 928.00

| Sieve # | Weight (g) | % Retained |
|-------------|------------|------------|
| >1/4" | 0.00 | 0.00 |
| 1/4" to #40 | 856.00 | 92.24 |
| #40 to #200 | 72.00 | 7.76 |
| < #200 | 0.00 | 0.00 |
| > #200 | 928.00 | 100.00 |

Gravels and Larger
 Medium-Coarse Sand
 Fine Sand
 Fines (Silt & Clay)
Classification: SP



HA-1

Surface Elevation:
 Boring Date: 26 June 2022
 Boring Location: Lincoln City, OR
 Drilling Method: Hand Auger

Superflog CivilTech Software, USA www.civiltech.com File: C:\Users\Chelsea\Desktop\2022\Geotech\Reports\Lincoln City, OR\1327 NW Harbor Ave\KAS-1327 NW Harbor Ave.bag Date: 6/29/2022

| Depth | Remarks | Moisture (%) | Dry Density | Blow Counts | Sample Type | Water Table |
|-------|---|--------------|-------------|-------------|-------------|---|
| 0 | | | | | TP | Top Soil: Dry, tan, medium to coarse grained, scattered grass roots, medium dense, poorly-graded SAND |
| 0.5 | | | | | MH | Dry, tan, medium to coarse grained, medium dense, poorly-graded SAND |
| 2.0 | 92.24% medium-to-coarse grained SAND | 2.3 | | | | |
| 4.0 | | 3.7 | | | | |
| 4.0 | Boring completed at depth of 4ft | | | | | |
| 7 | | | | | | |

LOG OF BORING

| | | |
|-----------------------------|--|---------|
| <i>Rapid Soil Solutions</i> | 1327 NW Harbor Avenue TnT Builders Inc. | Plate 1 |
|-----------------------------|--|---------|

HA-2

Superficial Software, USA www.civiltech.com File: C:\Users\Chales\Desktop\2022\Geotech\Reports\Lincoln City, OR\1327 NW Harbor Avenue\1327 NW Harbor Avenue.bor Date: 6/29/2022

| Depth | Remarks | Moisture (%) | Dry Density | Blow Counts | Sample Type | Water Table | |
|-------|---------|--------------|-------------|-------------|-------------|-------------|---|
| 0 | | | | | | | TP Top Soil: Dry, tan, medium to coarse grained, scattered grass roots, medium dense, poorly-graded SAND |
| 1 | | | | | | | MH Dry, tan, medium to coarse grained, medium dense, poorly-graded SAND |
| 2 | 8.5 | | | | | | Boring completed at depth of 2ft |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |

LOG OF BORING

| | | |
|-----------------------------|--|---------|
| <i>Rapid Soil Solutions</i> | 1327 NW Harbor Avenue TnT Builders Inc. | Plate 2 |
|-----------------------------|--|---------|

TOPOGRAPHIC SURVEY

OCEAN PLACE TOWNHOUSE CONDO, COMMON ELEMENTS,
 MF148-2187 & MF226-0060
 SW 1/4, SE 1/4, S10, T7S, R11W, W.M.,
 LINCOLN COUNTY
 10/03/2022

FOUND MONUMENT TABLE:

- ⑩2 FOUND 5/8" IRON ROD WITH UNREADABLE YELLOW PLASTIC CAP, SET PER SURVEY, BOOK 1 PAGE 103.
- ⑩4 FOUND 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED, "RLS 1285", SET PER SURVEY, BOOK 1 PAGE 103.
- ⑩5 FOUND 1/2" IRON PIPE, ORIGIN UNKNOWN
- ⑩6 FOUND 5/8" IRON ROD WITH NO CAP BENT TO THE EAST, ET PER SURVEY, BOOK 1 PAGE 103.

NOTE:

BOUNDARY IS BASED UPON FOUND MONUMENTS AND THE PLAT OF OCEAN PLACE CONDOMINIUMS, BOOK 1 PAGE 103B, LINCOLN COUNTY RECORDS.

LEGEND:

| | | | |
|--|----------------------|--|-------------------------------------|
| | BUILDING | | POWER POLE |
| | BUILDING OVERHANG | | POWER POLE W/ LIGHT |
| | BUILDING DECK | | GUY ANCHOR |
| | TV | | POWER JUNCTION BOX |
| | GAS | | WATER METER |
| | SANITARY SEWER | | GAS METER |
| | RIGHT OF WAY | | CATV RISER |
| | BOUNDARY LINE | | FOUND MONUMENT NO. |
| | WOOD FENCE | | FOUND MONUMENT - SEE MONUMENT NOTES |
| | WATER | | CONTROL MAGNAIL/PK NAIL |
| | EDGE PAVEMENT | | CONTROL POINT - REBAR AND CAP SIGN |
| | PARKING STRIPES | | TREE - DECIDUOUS |
| | UNDERGROUND ELECTRIC | | TREE - CONIFER |
| | OVERHEAD POWER | | POWER METER |
| | CARPORT | | STORM AREA DRAIN |
| | TOP OF SLOPE | | SEWER MAN HOLE |
| | MAJOR CONTOUR | | POWER GUY POLE |
| | MINOR CONTOUR | | POWER GUY ANCHOR |
| | CONCRETE HATCH | | |

VERTICAL DATUM:

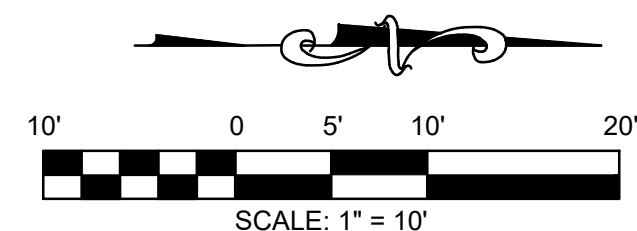
NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

UTILITY NOTE:

THE LOCATION OF EXISTING UNDERGROUND UTILITY FACILITIES SHOWN HEREON ARE BASED ON LOCATE MARKS REQUESTED FOR THIS SURVEY PER ONE CALL PUBLIC LOCATE TICKET 2223351. THE SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND UTILITIES BY THE RESPECTIVE UTILITY OWNERS, NOR FOR THE EXISTENCE OF BURIED OBJECTS WHICH ARE NOT SHOWN ON THE PLAN. ALL UTILITY LOCATIONS SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

SEWER STRUCTURE TABLE

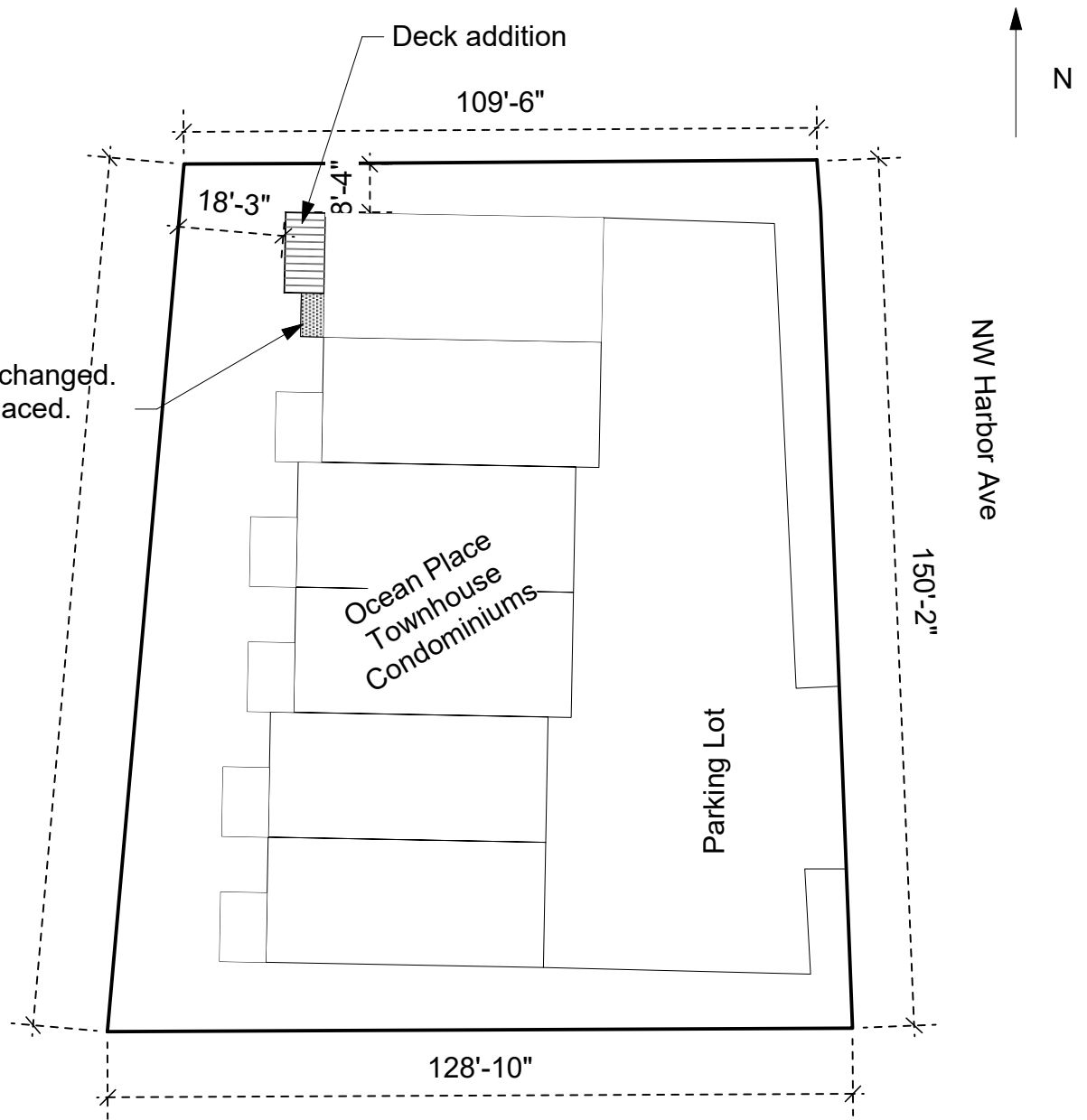
| |
|-------------------------------|
| ① SAN MH RIM: 67.47' |
| IE 8" CONCRETE IN(N): 53.33' |
| IE 8" CONCRETE IN(W): 53.52' |
| IE 8" CONCRETE OUT(S): 52.99' |
| ② SAN MH RIM: 59.30' |
| IE 8" CONCRETE IN(N): 51.91' |
| IE 8" CONCRETE IN(W): 52.34' |
| IE 8" CONCRETE OUT(S): 51.57' |




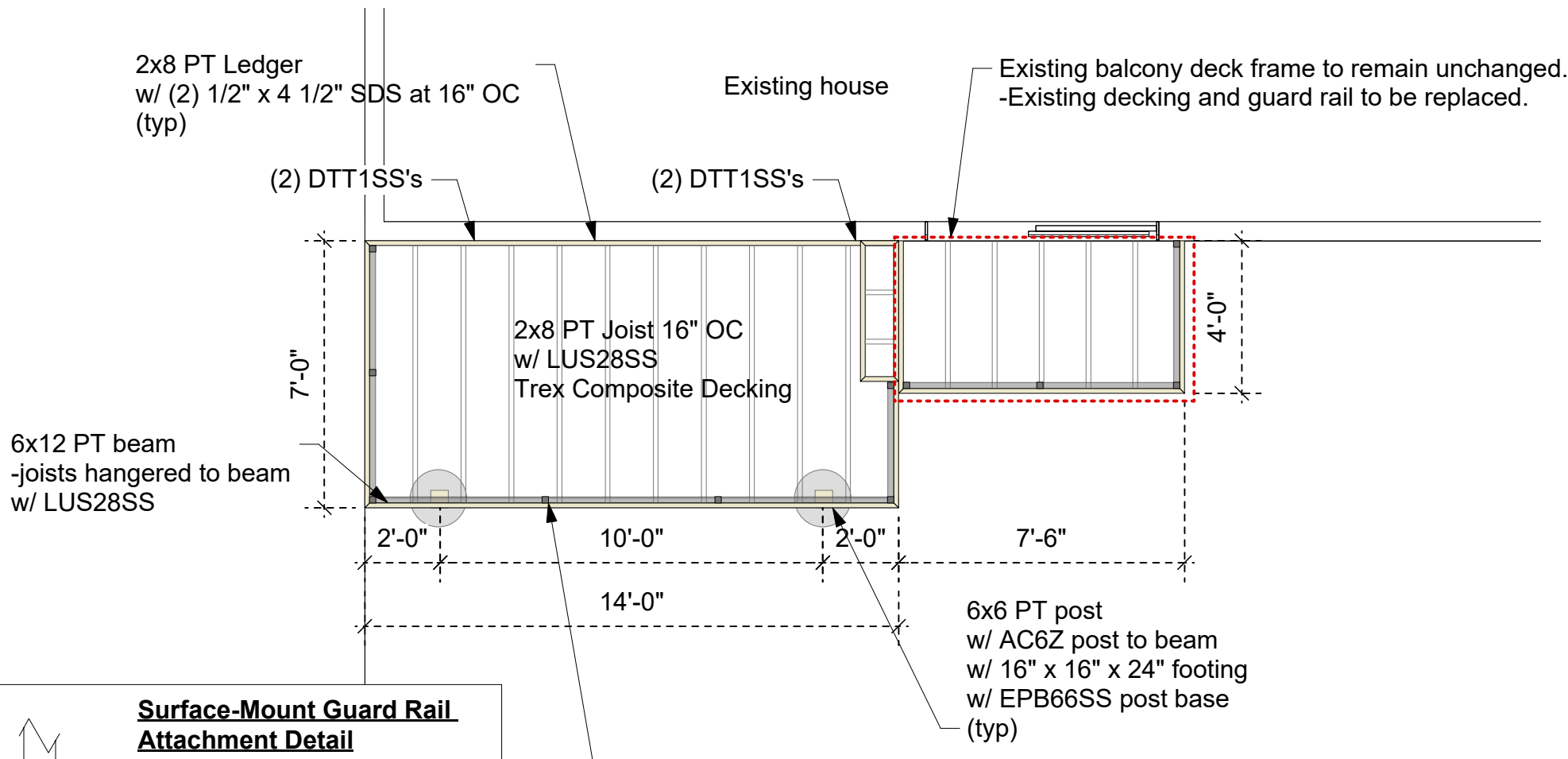
| | | | |
|--|--|--|--|
| PORTLAND, VANCOUVER, BEND, SEASIDE 1725 N ROOSEVELT DR, STE B, SEASIDE, OR 97138 (503) 738-3425 WWW.SFLANDS.COM EMAIL: INFO@SFLANDS.COM | SURVEY FOR: BRENT MOSSER TNT BUILDERS, INC. OCEAN PLACE TOWNHOUSE CONDO, COMMON ELEMENTS, MF148-2187 & MF226-0060SW, SW 1/4, SE 1/4, S10, T7S, R11W, W.M., LINCOLN COUNTY | | REGISTERED PROFESSIONAL LAND SURVEYOR OREGON SEPTEMBER 10, 2019 JACK L. WHITE II 91987PLS EXPIRES 6/30/24 |
| | DATE: OCT. 03, 2022 JOB NO.: 220588-02 FIELD: JPW/GAH DRAWN: TLO CHECKED: JLW | | |

220588-02 wright - 24x36.dwg

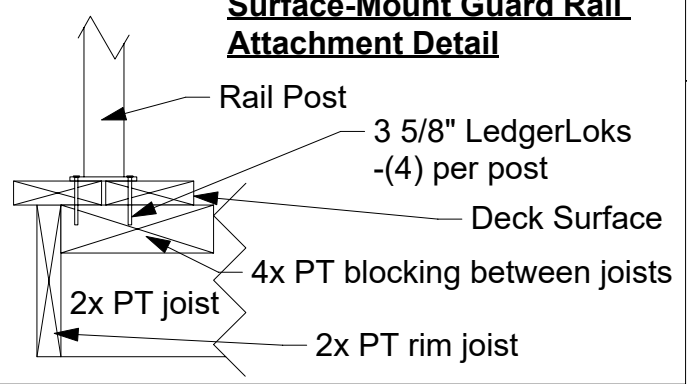
Existing balcony deck frame to remain unchanged.
 -Existing decking and guard rail to be replaced.



| | | | | |
|--|--|---|---|--|
|  <p>TnT Builders deck and patio cover experts</p> | <p>General Contractor TnT Builders Inc 620 Queen Ave. SW Albany, OR 97322 CCB #105770</p> | <p>Project Title Wright Deck Modification 1327 NW Harbor Ave Lincoln City, OR 97367</p> | <p>Project Manager Brent Mosser</p> | <p>Drawing Title Site Plan</p> |
| | | | <p>Date October 24, 2022</p> | <p>Scale 1" = 30'</p> |
| | | | <p>Phone (541) 926-3117</p> | |



Surface-Mount Guard Rail Attachment Detail



42" aluminum guard rail
w/ tempered glass infill
-no gaps to allow passage of 4" sphere
-See Guardrail Attachment Detail at left
(typ)

| | | | | |
|--|---|--|--|--|
| | General Contractor TnT Builders Inc 620 Queen Ave. SW Albany, OR 97322 CCB #105770 | Project Title Wright Deck Modification 1327 NW Harbor Ave Lincoln City, OR 97367 | Project Manager Brent Mosser | Drawing Title Framing Plan - Revised |
| | | | Date July 5, 2022 | Scale 1/4" = 1' |
| | | | Phone (541) 926-3117 | |



To be horizontal stainless steel cable infill
-no gap to allow the passage of 4" sphere

approx.
7'-0"

Exact height TBD on site

TnT Builders



deck and patio cover experts

General Contractor

TnT Builders Inc
620 Queen Ave. SW
Albany, OR 97322
CCB #105770

Project Title

Wright Deck Modification
1327 NW Harbor Ave
Lincoln City, OR 97367

Project Manager

Brent Mosser

Date

May 18, 2022

Phone

(541) 926-3117

Drawing Title

Elevation Plan

Scale

1/4" = 1'