

NOTICE OF LAND USE DECISION

You may have received this because you are an adjacent property owner, and this notice is required to be provided pursuant to ORS 215.416. The proposal is identified in this decision and will be located on the subject property.

Coos County Planning 60 E. Second Coquille, OR 97423 http://www.co.coos.or.us/ Phone: 541-396-7770 planning@co.coos.or.us

This decision notice is required to be sent to the property owner(s), applicant(s), adjacent property owners (distance of notice is determined by zone area – Urban 100 feet, Rural 250 feet, and Resource 750 feet), special taxing districts, agencies with interest, or person that has requested notice. Please read all information carefully as this decision. (See attached vicinity map for the location of the subject property).

Date of Notice: Wednesday, February 09, 2022

File No: ACU-21-053

Proposal: Request for Single Family Dwelling in the Beaches and Dunes & Coastal

Shoreland Boundary Overlay Zones.

Applicant(s): Brad & Laura Schumacher

623 Avocet Ave Bandon, OR 07411

Staff Planner: Chris MacWhorter, Planning Staff

Decision: Approved with Conditions. All decisions are based on the record. This decision is final and effective at close of the appeal period unless a complete application with the fee is submitted by the Planning Department at 5 p.m. on Thursday, February 24, 2022. Appeals are based on the applicable land use criteria. Coos County Zoning and Land Development Ordinance (CCZLDO) General Compliance with Sections 1.1.300 Compliance with Comprehensive Plan and Ordinance Provisions and Article 6.1 Lawfully Created Lots or Parcels. The Dwelling Review is subject to Article 4.3.200.30 Zoning Tables for Urban and Rural Residential, Mixed Commercial-Residential, Industrial, Minor Estuary and South Slough; Section 4.3.220 Additional Conditional Use Review Standards criteria. Properties that are in a Special Development Consideration and/or overlays shall comply with the applicable review process identified by that Special Development Consideration and/or overlay located in Article 4.11. Civil matters including property disputes outside of the criteria listed in this notice will not be considered. For more information please contact the staff planner listed in this notice.

Subject Property Information

Account Number: 2895202

Map Number: 29S1501CB-00402

Property Owner: SCHUMACHER, BRADLEY L & LAURA E

Situs Address: No Situs Address Issued

Acreage: 0.24 Acres

Zoning: CONTROLLED DEVELOPMENT-10 (CD-10)

Special Development ARCHAEOLOGICAL AREAS OF INTEREST (ARC)

Considerations and BANDON AIRPORT CONICAL ZONE (ABC)
Overlays: BANDON URBAN GROWTH BOUNDARY (BGB)

BEACHES/DUNES - LIMITED (BDL)

COASTAL SHORELAND BOUNDARY (CSB) NATURAL HAZARD - TSUNAMI (NHTHO) NATURAL HAZARD - WILDFIRE (NHWF) The purpose of this notice is to inform you about the proposal and decision, where you may receive more information, and the requirements if you wish to appeal the decision by the Director to the Coos County Hearings Body. Any person who is adversely affected or aggrieved or who is entitled to written notice may appeal the decision by filing a written appeal in the manner and within the time period as provided below pursuant to Coos County Zoning and Land Development Ordinance (CCZLDO) Article 5.8. If you are mailing any documents to the Coos County Planning Department the address is 225 N. Adams, Coquille OR 97423. Mailing of this notice to you precludes an appeal directly to the Land Use Board of Appeals.

Mailed notices to owners of real property required by ORS 215 shall be deemed given to those owners named in an affidavit of mailing executed by the person designated by the governing body of a county to mail the notices. The failure of the governing body of a county to cause a notice to be mailed to an owner of a lot or parcel of property created or that has changed ownership since the last complete tax assessment roll was prepared shall not invalidate an ordinance. NOTICE TO MORTGAGEE, LIENHOLDER, VENDOR OR SELLER: ORS CHAPTER 215 (ORS 215.513) REQUIRES THAT IF YOU RECEIVE THIS NOTICE, IT MUST PROMPTLY BE FORWARDED TO THE PURCHASER.

The application, staff report and any conditions can be found at the following link: https://www.co.coos.or.us/planning/page/applications-2021-2. The application and all documents and evidence contained in the record, including the staff report and the applicable criteria, are available for inspection, at no cost, in the Planning Department located at 60 E. Second, Coquille, Oregon. Copies may be purchased at a cost of 50 cents per page. The decision is based on the application submittal and information on record. The name of the Coos County Planning Department representative to contact is Chris MacWhorter, Planning Staff and the telephone number where more information can be obtained is (541) 396-7770.

Failure of an issue to be raised in a hearing, in person or in writing, or failure to provide statements of evidence sufficient to afford the Approval Authority an opportunity to respond to the issue precludes raising the issue in an appeal to the Land Use Board of Appeals.

Reviewed by:_		Date:	Wednesday,	February	09,	<u> 2022</u> .
	Chris MacWhorter, Planning Staff	_				

This decision is authorized by the Coos County Planning Director, Jill Rolfe based on the staff's analysis of the Findings of Fact, Conclusions, Conditions of approval, application and all evidenced associated as listed in the exhibits.

EXHIBITS

Exhibit A: Conditions of Approval

Exhibit B: Vicinity Map

The following exhibits are on file at the Coos County Planning Department and may be accessed by contacting the department. All noticeable decisions are posted on the website for viewing when possible.

Exhibit C: Staff Report -Findings of Fact and Conclusions

Exhibit D: Application and Comments Received

EXHIBIT "A"

The applicant shall comply with the following conditions of approval with the understanding that all costs associated with complying with the conditions are the responsibility of the applicant(s) and that the applicant(s) are not acting as an agent of the county. If the applicant fails to comply or maintain compliance with the conditions of approval the permit may be revoked as allowed by the Coos County Zoning and Land Development Ordinance. Please read the following conditions of approval and if you have any questions contact planning staff.

CONDITIONS OF APPROVAL

- 1. All applicable federal, state, and local permits shall be obtained prior to the commencement of any development activity. If there were comments from any other agency were provided as part of this review, it is the responsibility of the property owner to comply.
- 2. Pursuant to CCZLDO § 5.9.100, a Zoning Compliance Letter shall be required prior to the commencement of construction of the proposed dwelling. This authorization is based on conditions of approval and the conditions that are required to be completed prior obtaining the ZCL are defined in this section. To show compliance with this section the applicant shall submit a letter with the following items to request that staff find the following conditions have been satisfied:
 - a. The property owner is responsible for ensuring compliance, and land use authorization shall remain recorded in the chain of title. The statement needs to include language that the purchaser of the property has been provided a copy of the land use approval containing all conditions or restrictions understands the obligation and agrees to fulfill the conditions unless a modification is approved as provided in this ordinance. The property owner is responsible for ensuring compliance, and land use authorization. The recorded deed convent shall be recorded with the County Clerk and copy provided to the Planning Department.
 - b. A new plot plan shall be submitted with all elements of the application packet indicated along with setbacks defined in for general and specific requirements in the Controlled Development.
 - c. Section 4.11.132.4.4.a: Firebreak: a. This firebreak will be a primary safety zone around all structures. Vegetation within this primary safety zone may include mowed grasses, low shrubs (less than ground floor window height), and trees that are spaced with more than 15 feet between the crowns and pruned to remove dead and low (less than 8 feet from the ground) branches. Accumulated needles, limbs and other dead vegetation should be removed from beneath trees. b. Sufficient Garden Hose to reach the perimeter of the primary safety zone (30 feet) shall be available at all times. c. The owners of the dwelling shall maintain a primary fuel-free break (30 feet) area surrounding all structures and clear and maintain a secondary fuel-free break on land surrounding all structures and clear and maintain a secondary fuel-free break on land surrounding the dwelling that is owned or controlled by the owner in accordance with the provisions in "Recommended Fire Siting Standards for Dwellings and Structures and Fire Safety Design Standards for Roads" dated March 1, 1991, and published by Oregon Department of Forestry and shall demonstrate compliance with Table 1. Table one is addressed in the staff report based on down slope. This can be shown on a plot plan.
 - d. Section 4.11.132.4.4.e: All new and replacement structures shall use non-combustible or fire resistant roofing materials, as may be approved by the certified official responsible for the building permit. If they are not available yet then this will be a condition of approval on the ZCL.
 - e. Section 4.11.132.4.4.h: If the dwelling has a chimney or chimneys, each chimney shall have a spark arrester. A copy of the building plans shall be submitted. If they are not available, then this will be a condition of approval on the ZCL.
 - f. Access to new dwellings shall meet road and driveway standards in Chapter VII. Driveway/ Access Parking/Access permit application shall be signed off by the Coos County Road Department prior to issuance of a Zoning Compliance Letter.

- g. Section 5.2.700 Development Transferability Unless otherwise provided in the approval, a land use approval that was obtained through a conditional use process shall be transferable provided the transferor files a statement with the Planning Director signed by the transferee. This document shall be recorded in the chain of title of the property, indicating that the transferee has been provided a copy of the land use approval containing all conditions or restrictions understands the obligation and agrees to fulfill the conditions, unless a modification is approved as provided in this ordinance. The property owner is responsible for ensuring compliance, and land use authorization shall remain recorded in the chain of title to alert a purchaser that development was approved subject to conditions and possible restrictions.
- h. Shall comply with the recommendations set forth in the Geologic Site Evaluation Report performed by Cascadia Geoservices, Inc. A representative from CGS be retained to observe general excavation, stripping, fill placement, footing subgrades, and subgrades and base rock for floor slabs and pavements. A post-construction report, from an Oregon Certified Engineering Geologist, is required that states all recommendations of the Geologic Site Evaluation Report have been complied with.
- i. The applicant will be required to contact the Coquille Indian Tribe to schedule a monitor a minimum of 72-hours prior to project start time.
- j. The proposed dwelling location will need to be adjusted to the correct front setback distance of 20 feet.
- k. A detailed plot plan shall be submitted indicating the proposed development, including parking, septic tank/fields and fuel breaks, contours, and the distance from the development to all property boundaries.

EXHIBIT "B" VICINITY MAP



COOS COUNTY PLANNING DEPARTMENT

Mailing Address: 225 N. Adams, Coquille, Oregon 97423 Physical Address: 60 E. Second, Coquille Oregon Phone: (541) 396-7770 TDD (800) 735-2900

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File: ACU-21-053

Applicant/

Owner: Brad & Laura Schumacher

Date: February 8, 2022

Location: Township 29S Range 15W

Section 01CB TL 402

Proposal: Administrative Conditional Use

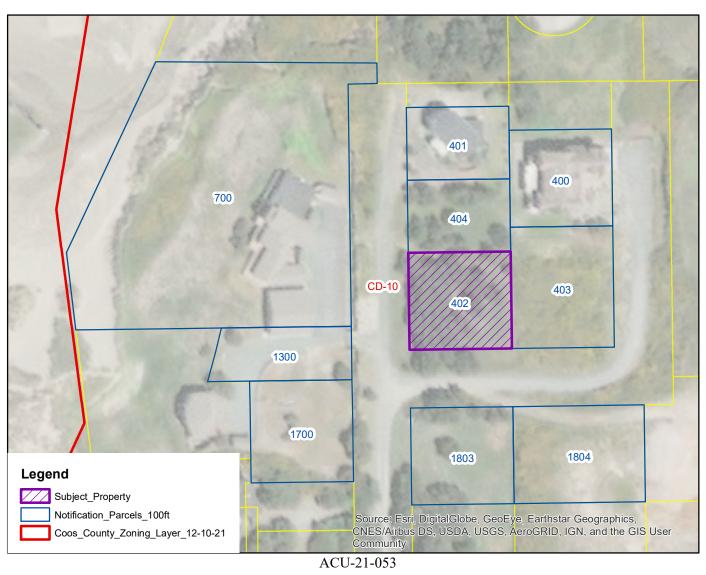


EXHIBIT "C" STAFF REPORT FINDINGS OF FACT AND CONCLUSIONS

I. PROPOSAL AND BACKGROUND/PROPERTY HISTORY INFORMATION AND PRIOR COMPLIANCE:

A. PROPOSAL: According to the application the property owner is seeking approval for a new Single-Family Dwelling and associated development in the Beaches & Dunes with Limited Suitability for Development and Coastal Shoreland Boundary overlay zones. There is no indication that any other development is proposed at this time.

B. BACKGROUND/PROPERTY HISTORY:

On September 1, 1994, a zoning compliance letter (ZCL-94-527) was issued for septic site evaluation only. On September 12, 1996, an Administrative Conditional Use (File No. ACU-96-054) application was approved with conditions for siting a dwelling in the Beaches & Dunes with Limited suitability for Development overlay zone.

- **C. LOCATION:** The subject property is located southwest the City of Bandon in the Sunset City area. Sunset City is part of the Bandon Urban Growth Boundary.
- **D. ZONING:** This property is zoned Controlled Development-10 (CD-10).

CONTROLLED DEVELOPMENT (CD)

The intent of the Controlled Development is to reserve areas that are experiencing or are projected to experience limited conversion of residential areas to commercial uses. Urban Growth Areas include Urban Growth Boundaries (UGB) and Urban Unincorporated Communities (UUC) that were developed to urban levels of development and could be included in an Urban Growth Boundary expansion in the future. This designation is applied to specific portions of the following Urban Growth Areas: Bandon, Charleston, Barview and Bunker Hill.

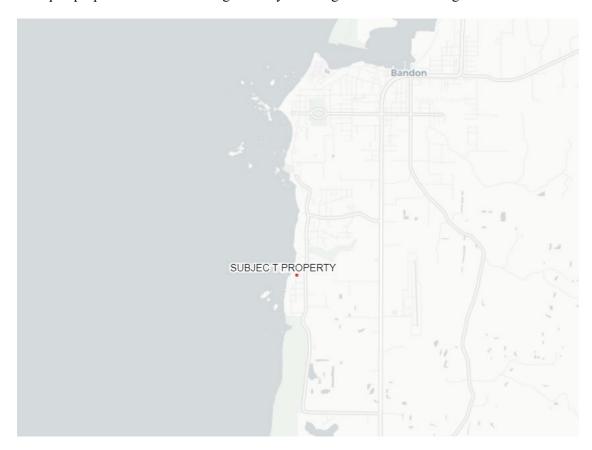
There are two different controlled development zoning districts: Controlled Development-5 (CD-5) and Controlled Development-10 (CD-10). The purpose of the "CD-5" and "CD-10" district is to recognize the scenic and unique quality of selected areas within Urban Growth Boundaries, to enhance and protect the unique "village atmosphere," to permit a mix of residential, commercial, and recreational uses and to exclude those uses which would be inconsistent with the purpose of this district, recognizing tourism as a major component of the County's economy.

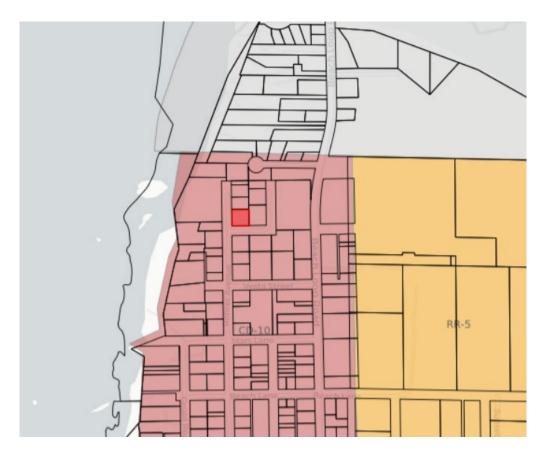
E. SITE DESCRIPTION AND SURROUNDING USES:

The subject property is located within the Plat of Sunset City, which is a pre-ordinance platted subdivision within the City of Bandon Urban Growth Boundary (UGB). The UGB in this area has historically has been serviced by the City of Bandon for water but not public sewer. The property will require an onsite septic treatment system as permitted by Oregon Department of Environmental Quality (DEQ). The subject property is zoned CD-10 and surrounded by the same zoning. The Plat of Sunset City consists of a mixture of Single Family Dwellings both primary and vacation homes, or investment properties such as short-term vacation rentals. There are some undeveloped lots within the plat. The City of Bandon lies directly north of the Plat of Sunset City,

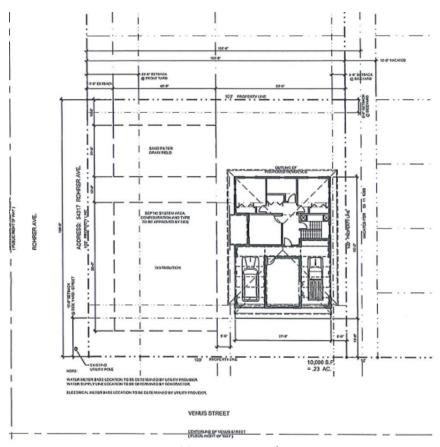
while Devils Kitchen State Park is located south of the subdivision. To the east of the subdivision is lightly developed Rural Residential-5 properties. The Pacific Ocean and State beaches are located to the west of the Plat of Sunset City. There is a public beach access point, on Mars Lane, located southwest of the subject property.

The subject property is a corner lot at the corner of Venus Drive and Rohrer Road. There are undeveloped properties towards the south of subject property. West of the subject property are developed properties with newer single-family dwellings with beach-frontage.









Maps are not to scale

F. COMMENTS:

a. PUBLIC AGENCY: This property required request for comments from the Oregon Department of Aviation and the City of Bandon prior to the release of the decision.

The Oregon Department of Aviation did not respond for this particular application.

The City of Bandon did not respond. However, the application included an approved Zoning Compliance Letter from the City's Planning Department. Staff interprets this to mean that the City has no concerns of the proposed dwelling.

The comments received can be found in Exhibit D.

b. PUBLIC COMMENTS: This property did not require any request for public comments prior to the release of the decision. However, the application was posted on the County website but no comments were received.

LOCAL TRIBE COMMENTS: This property required request for comments from the Coquille Indian Tribe. The Coquille Indian Tribe sent response as follows:

The Coquille Indian Tribe's response is as follows "Our records show known cultural resources within extreme proximity to the project area. Due to the proximity to known cultural resources, we request that the landowner and/or contractor contact our office at

(541) 808-5554 (Kassandra Rippee, Archaeologist/THPO) to schedule a Cultural Resource Monitor to be on site during all ground-disturbing activities. Please schedule the monitor a minimum of 72-hours in advance of anticipated project start time.

The comments can be found in Exhibit D.

II. GENERAL PROPERTY COMPLIANCE:

A. COMPLIANCE PURSUANT TO SECTION 1.1.300:

It shall be unlawful for any person, firm, or corporation to cause, develop, permit, erect, construct, alter or use any building, structure or parcel of land contrary to the provisions of the district in which it is located. No permit for construction or alteration of any structure shall be issued unless the plans, specifications, and intended use of any structure or land conform in all respects with the provisions of this Ordinance, unless approval has been granted by the Hearings Body.

FINDING: Staff has reviewed the property history and available county records to determine at the time of this report this property is compliant. This does not mean that there is not additional information that was unavailable during this review that would make the properties non-complaint.

B. SECTION 6.1.125 LAWFULLY CREATED LOTS OR PARCELS:

- C. "Lawfully established unit of land" means:
 - 1. The unit of land was created:
 - a. Through an approved or pre-ordinance plat;
 - b. Through a prior land use decision including a final decision from a higher court. A higher court includes the Land Use Board of Appeals;
 - c. In compliance with all applicable planning, zoning and subdivision or partition ordinances and regulations at the time it was created.
 - d. By a public dedicated road that was held in fee simple creating an interviewing ownership prior to January 1, 1986;
 - e. By deed or land sales contract, if there were no applicable planning, zoning or subdivision or partition ordinances or regulations that prohibited the creation.
 - f. By the claim of intervening state or federal ownership of navigable streams, meandered lakes or tidewaters. "Navigable-for-title" or "title-navigable" means that ownership of the waterway, including its bed, was passed from the federal government to the state at statehood. If a waterway is navigable-for-title, then it also is generally open to public use for navigation, commerce, recreation, and fisheries.

FINDING: The unit of land was created pursuant to 6.1.125.1.a, through an approved or preordinance plat. The property was later reconfigured when a vacation of the public platted alleyway was approved through File Number, Vacation #508.

Lots 12 through 15, Inclusive, Block 3, Sunset City, Coos County, OR. Together with that portion of the vacated alley vacated by Vacation #508, recorded November 4, 1993, bearing Instrument No. 93-11-0265, which would inure thereto by reason of the vacation thereof.

This property was also found to be lawfully created. Therefore, at the time of this report the units of land are lawfully created.

III. STAFF FINDINGS AND CONCLUSIONS:

A. SUMMARY OF PROPOSAL AND APPLICABLE REVIEW CRITERIA:

The proposal is for Planning Director Approval of a new *Single Family Conventional Dwelling* in Controlled Development-10 zoning subject to the Beaches & Dunes Area with Limited Development Suitability and Coastal Shoreland Boundary Special Development Consideration area.

B. KEY DEFINITIONS:

ACTIVITY: Any action taken either in conjunction with a use or to make a use possible. Activities do not in and of themselves result in a specific use. Several activities such as dredging, piling and fill may be undertaken for a single use such as a port facility. Most activities may take place in conjunction with a variety of uses.

COASTAL SHORELAND AREA: The lands lying between the Coastal Shorelands Boundary set forth elsewhere in this Plan and the line of nonaquatic vegetation, which is also known as the Section 404 Line.

DEVELOP: To bring about growth or availability; to construct or alter a structure, to conduct a mining operation, to make a physical change in the use or appearance of land, to divide land into parcels, or to create or terminate rights to access.

DEVELOPMENT: The act, process or result of developing.

DUNES, YOUNGER STABILIZED: A wind stable dune with weakly developed soils and vegetation.

LOT, PARCEL, OR TRACT FRONT LOT LINE: In the case of an interior lot, parcel, or tract, a line separating the lot, parcel or tract from the street; in the case of a corner lot, parcel or tract, a line separating a lot, parcel or tract from the street on which the improvement or contemplated improvement will face.

USE: The end to which a land or water area is ultimately employed. A use often involves the placement of structures or facilities for industry, commerce, habitation, or recreation.

ZONING DISTRICT: A zoning designation in this Ordinance text and delineated on the zoning maps, in which requirements for the use of land or buildings and development standards are prescribed.

C. CRITERIA AND STANDARDS

• SECTION 4.3.200 ZONING TABLES FOR URBAN AND RURAL RESIDENTIAL, MIXED COMMERCIAL-RESIDENTIAL, COMMERCIAL, INDUSTRIAL, MINOR ESTUARY AND SOUTH SLOUGH

The zoning table sets out Uses, Developments and Activities that may be listed in a zone and the type of review that is required within that zone. If there is a conflict between uses the more restrictive shall apply. Section 4.3.210 provides an explanation of the use category and the specific criteria that shall apply and if the use is identified as requiring a conditional use. Section 4.3.225 General Siting Standards apply to all regulated Uses, Developments, or Activities, but these are clear and objective standards that do not, in themselves, require a land use notice. Section 4.3.230 Specific Standards list specific siting standards by zones and 4.2.200 Additional Conditional Use Review and Standards for table 4.3.200 contains any additional criteria that applied to a Use, Development or Activity that has been identified by the following table as requiring.

Use # 30. Dwelling – Single Family Conventional – is a Compliance Determination Subject to Section 4.2.210(27)(k)

• SECTION 4.3.210 – CATEGORIES AND REVIEW STANDARDS

(27)(k) Single family dwelling- A single household unit. Construction is characterized by no common wall or ceiling with another unit, including a mobile home unless otherwise allowed by under this ordinance.

Finding: According to the application the property owner is seeking approval for constructing a new Single Family Dwelling on a lot in Controlled Development-10 Zoning District. The Dwelling—single family conventional is t permitted in CD-10 zoning district as a compliance determination subject to Section 4.3.210.27 (k) in Section 4.3.210. A Conditional Use Application was required to be submitted because this proposal includes development within both the Beaches & Dunes Area with Limited Development Suitability and Coastal Shoreland Boundary Special Development Consideration. There is no indication that any other development is proposed at this time.

The applicant's plot indicated they plan on a 15-foot setback from the southern property line (Venus Drive). The plot plan also indicated they intend to use Venus Drive for their driveway access. Based on the definitions for lot, parcel, or tract front lot line; the parcel is facing Vesta Lane, and thus, this will make the southern property line the front property line. As a condition of approval, the applicants will be required to submit a new plot plan indicating the correct front setback distance from the front property line.

According to both the written application and plot plan, the proposed dwelling meets the definition of single-family dwelling. Therefore, these criteria have been addressed.

• SECTION 4.3.220 ADDITIONAL CONDITIONAL USE REVIEW STANDARDS FOR USES, DEVELOPMENT AND ACTIVITIES LISTED IN TABLE 4.3.200. THIS SECTION HAS SPECIFIC CRITERIA SET BY THE ZONING DISTRICT FOR USES, ACTIVITIES AND DEVELOPMENT:

FINDING: While this property requires a discretionary review for the Special Development Consideration the use proposed is permit and not subject to any special conditional use review. Therefore, this section is not applicable.

• SECTION 4.3.225 GENERAL SITING STANDARDS

All new USES, activities and development are subject to the following siting standards:

- (1) Agricultural and Forest Covenant Any applicant for a dwelling permit adjacent to a Forest or Exclusive Farm Zone shall sign a statement on the Compliance Determination or Zoning Clearance Letter acknowledging that: "the normal intensive management practices occurring on adjacent resource land will not conflict with the rural residential landowner's enjoyment of his or her property.
- (2) Fences, Hedges, and Walls: No requirement, but vision clearance provisions of Section 7.1.525 apply.
- (3) Limitation on uses of manufactured dwellings/structures for commercial purposes pursuant to ORS 466 et seq. Manufactured dwellings shall not be used for commercial purposes except:
 - (a) Where use of the manufactured dwelling for commercial purposes is authorized by the Building Codes Agency.
 - (b) Where used as a temporary sales office for manufactured structures; or
 - (c) As part of an approved home occupation. [OR-92-07-012PL]

- (4) New lots or parcels Creation of lots or parcels, unless it meets the circumstances of § 5.6.130, shall meet the street frontage, lot width, lot depth and lot size. Minimum road frontage/lot width shall be met unless waived by the Planning Director in consultation with the County Surveyor and County Roadmaster due to creating an unsafe or irregular configuration:
 - (a) Minimum Street frontage should be at least 30 feet; and
 - (b) Minimum lot width and Minimum lot depth is 50 feet.

Minimum parcel/lot size cannot be waived or varied unless otherwise provided by a specific zoning regulation. Tax lot creation and consolidations do not change the legally created status of a lot or parcel.

- (5) Parking Off-street access, parking and loading requirements per Chapter VII apply.
- (6) Riparian -
 - (a) Riparian vegetation setback within 50 feet of a estuarine wetland, stream, lake or river, as identified on the Coastal Shoreland and Fish and Wildlife habitat inventory maps, shall be maintained except:
 - i. Trees certified as posing an erosion or safety hazard. Property owner is responsible for ensuring compliance with all local, state and federal agencies for the removal of the tree.
 - ii. Riparian vegetation may be removed to provide direct access for a waterdependent use if it is a listed permitted within the zoning district;
 - iii. Riparian vegetation may be removed in order to allow establishment of authorized structural shoreline stabilization measures;
 - iv. Riparian vegetation may be removed to facilitate stream or stream bank clearance projects under a port district, ODFW, BLM, Soil & Water Conservation District, or USFS stream enhancement plan;
 - v. Riparian vegetation may be removed in order to site or properly maintain public utilities and road right-of-ways;
 - vi. Riparian vegetation may be removed in conjunction with existing agricultural operations (e.g., to site or maintain irrigation pumps, to limit encroaching brush, to allow harvesting farm crops customarily grown within riparian corridors, etc.) provided that such vegetation removal does not encroach further into the vegetation buffer except as needed to provide an access to the water to site or maintain irrigation pumps; or
 - vii. The 50 foot riparian vegetation setback shall not apply in any instance where an existing structure was lawfully established and an addition or alteration to said structure is to be sited not closer to the estuarine wetland, stream, lake, or river than the existing structure and said addition or alteration is not more than 100% of the size of the existing structure's "footprint".
 - (b) Riparian removal within the Coastal Shoreland Boundary requires an Administrative Conditional Use application and review. See Special Development Considerations Coastal Shoreland Boundary.
 - (c) The 50' measurement shall be taken from the closest point of the ordinary high water mark to the structure using a right angle from the ordinary high water mark.
- (7) Setbacks:
 - (a) All Development with the exception of fences shall be set back a minimum of thirty-five (35) feet from any road right-of-way centerline, or five (5) feet from the right-of-way line, whichever is greater. This setback may be greater under specific zoning siting requirements.
 - (b) Firebreak Setback New or replacement dwellings on lots, parcels or tracts abutting the "Forest" zone shall establish and maintain a firebreak, for a distance of at least 30 feet in all directions. Vegetation within this firebreak may include mowed grasses, low

shrubs (less than ground floor window height), and trees that are spaced with more than 15 feet between the crowns and pruned to remove dead and low (less than 8 feet from the ground) branches. Accumulated needles, limbs and other dead vegetation should be removed from beneath trees.

(8) OUTDOOR STORAGE IN RESIDENTIAL ZONES (a) Boats and trailers, travel trailers, pick-up campers or coaches, motorized dwellings, and similar recreation equipment may be stored on a lot but not used as an accessory use; (b) Automotive vehicles or trailers of any kind or type without current license plates, where required, and which are not in mechanical working order, shall not be parked or stored on any residentially zoned property other than in completely enclosed buildings; (c) One operating truck may be stored on the lot of a truck driver provided it is accessory to the main use of the property. Additional trucks shall not be allowed.

FINDING: The application had a driveway and parking form included. This shall be signed off by the Road Access Manager prior to receiving a Zoning Compliance Letter. There is no riparian area that requires setbacks. The applicant shall comply with the outdoor storage in residential zones. The proposal meets the applicable requires with conditions of approval.

• SECTION 4.3.230 ADDITIONAL SITING STANDARDS

This section has specific siting standards and criteria set by the zoning district for USES, activities and development: ***

- (3) Controlled Development (CD) The following siting standards apply to all USES, activities and development within the CD zoning district.
 - (a) Minimum Lot size:
 - (1) The following Controlled Development-5 minimum lot sizes shall apply:
 - 1. Sites having both public water and public sewer cannot be less than 5,000 square feet.
 - 2. Sites not having both public water and public sewer cannot be less than one (1) acre.
 - 3. Dwelling unit density shall not exceed one (1) unit per minimum lot size, except each additional attached dwelling unit requires 1200 additional square feet above the minimum lot size.
 - (2) The following Controlled Development-10 minimum lot sizes shall apply:
 - 1. Site not having both public water and public sewer cannot be less than one (1) acre.
 - 2. Sites having both public water and public sewer cannot be less than 10,000 square feet.
 - 3. Dwelling unit density shall not exceed one (1) unit per minimum lot size, except each additional attached dwelling unit requires 1200 additional square feet above the minimum lot size. (OR-00-05-014PL)
 - (b) Density or Size limits -
 - (1) Dwelling density shall be no more than one dwelling per lawfully created parcel unless otherwise provided for by this ordinance.
 - (2) If lawfully created parcels are less than one acre in size and not served by a public sewer then Department of Environmental Quality, State Building Codes and Oregon Department of Water Resources should be consulted by the developer prior to seeking a land use authorization to construct a dwelling as there may be development limitations.
 - (c) Setbacks:
 - (1) Front Setback: 20 feet.

- (2) Side and Rear Set-Back: The side and rear setback shall be a minimum of 5 feet unless the side or rear yard is adjacent to a street or road (corner lot) the minimum setback shall be 15 feet from that street or road.
- (3) Setback exception Front yard setback requirements of this Ordinance shall not apply in any residential district where the average depth of existing front yards on developed lots within the same zoning district block, but no further than 250 feet from the exterior side lot lines of the lot and fronting on the same side of the street as such lot, is less than the minimum required front yard building setback. In such cases the front yard setback requirement on any such lot shall not be less than the average existing front yard building setback.
- (d) Building Height Maximum Building height is 35 feet. However, spires, towers, domes, steeples, flag poles, antennae, chimneys, solar collectors, smokestacks, ventilators or other similar objects may be erected above the prescribed height limitations, provided no usable floor.

FINDING: There is only one Single Family Dwelling proposed. No new lot creation is proposed. The applicant's plot indicated a 15-foot setback from the southern property line (Venus Drive). The plot plan also indicated they intend to use Venus Drive for their driveway access. Based on the definitions for lot, parcel, or tract front lot line; the parcel is facing Vesta Lane, and thus, this will make the southern property line the front property line. As a condition of approval, the applicants will be required to submit a new plot plan indicating the correct front setback distance from the front property line. The building height is not indicated but shall not exceed the 35 feet requirement. The new plot plan shall meet the submittal requirements indicated in the application packet for staff to ensure that all setbacks will be complied with. Therefore, this has been addressed.

• SECTION 4.11.125 SPECIAL DEVELOPMENT CONSIDERATIONS:

The considerations are map overlays that show areas of concern such as hazards or protected sites. Each development consideration may further restrict a use. Development considerations play a very important role in determining where development should be allowed in the Balance of County zoning. The adopted plan maps and overlay maps have to be examined in order to determine how the inventory applies to the specific site.

O 4.11.128 HISTORICAL, CULTURAL AND ARCHAEOLOGICAL RESOURCES, NATURAL AREAS AND WILDERNESS (BALANCE OF COUNTY POLICY 5.7)

The Historical/Archeological maps have inventoried the following:

- Historical;
- Area of Archaeological Concern;
- Botanical; and
- Geological Resources.

Purpose Statement:

Coos County shall manage its historical, cultural and archaeological areas, sites, structures and objects so as to preserve their original resource value. This strategy recognizes that preservation of significant historical, cultural and archaeological resources is necessary to sustain the County's cultural heritage.

- b. Areas of Archaeological Concern: Coos County shall continue to refrain from wide-spread dissemination of site-specific inventory information concerning identified archaeological sites. Rather, Coos County shall manage development in these areas so as to preserve their value as archaeological resources.
 - i. This strategy shall be implemented by requiring development proposals to be accompanied by documentation that the proposed project would not adversely impact the historical and archaeological values of the project's site. "Sufficient documentation" shall be a letter from a qualified archaeologist/historian and/or a duly authorized representative of a local Indian tribe(s).
 - ii. Properties which have been determined to have an "archaeological site" location must comply with the following steps prior to issuance of a "Zoning Compliance Letter" for building and/or septic permits.
 - 1) The County Planning Department shall make initial contact with the Tribe(s) for determination of an archaeological site(s). The following information shall be provided by the property owner/agent:
 - a) Plot plan showing exact location of excavation, clearing, and development, and where the access to the property is located;
 - b) Township, range, section and tax lot(s) numbers; and
 - c) Specific directions to the property.
 - 2) The Planning Department will forward the above information including a request for response to the appropriate tribe(s).
 - 3) The Tribe(s) will review the proposal and respond in writing within 30 days to the Planning Department with a copy to the property owner/agent.
 - 4) It is the responsibility of the property owner/agent to contact the Planning Department in order to proceed in obtaining a "Zoning Compliance Letter" (ZCL) or to obtain further instruction on other issues pertaining to their request.
 - iii. In cases where adverse impacts have been identified, then development shall only proceed if appropriate measures are taken to preserve the archaeological value of the site. "Appropriate measures" are deemed to be those which do not compromise the integrity of remains, such as:
 - 1) Paving over the sites;
 - 2) Incorporating cluster-type housing design to avoid the sensitive areas; or
 - 3) Contracting with a qualified archaeologist to remove and re-inter the cultural remains or burial(s) at the developer's expense. If an archaeological site is encountered in the process of development, which previously had been unknown to exist, then, these three appropriate measures shall still apply. Land development activities found to violate the intent of this strategy shall be subject to penalties prescribed by ORS 97.745 (Source: Coos Bay Plan).
 - iv. This strategy is based on the recognition that preservation of such archaeologically sensitive areas is not only a community's social responsibility but is also a legal responsibility pursuant to Goal #5 and ORS 97.745. It also recognizes that historical and archaeological sites are non-renewable, cultural resources (Source: Coos Bay Plan).

Finding: This property required comments from the local Tribes prior to the release of this decision. The Coquille Indian Tribe requested that the landowner and/or contractor contact their office at (541) 808-5554 (Kassandra Rippee, Archaeologist/THPO) to schedule a Cultural Resource Monitor to be on site during all ground-disturbing activities. Please schedule the monitor a minimum of 72-hours in advance of anticipated project start time. Therefore, this criterion has been addressed.

• BEACH AND DUNES AREAS WITH LIMITED DEVELOPMENT SUITABILITY CRITERIA

4.11.129 Beaches and Dunes (Policy 5.10)

The Beaches and Dunes map has inventoried the following:

- Beaches and Dunes
 - Suitable for most uses; few or no constraints (Does not require a review)
 - o Limited Suitability; special measures required for most development
 - o Not Suitable for Residential, commercial or Industrial Structures

Purpose Statement:

Coos County shall base policy decisions for dunes on the boundaries for these areas as identified on the plan map titled "Development Potential within Ocean Shorelands and Dunes" and the boundaries delineates the following specific areas "Suitable", "Limited Suitability" and "Not Suitable" areas of development potential.

a. Limited Suitability: "Beach and Dune Areas with Limited Development Suitability" includes all dune forms except older stabilized dunes, active foredunes, conditionally stable foredunes that are subject to ocean undercutting or wave overtopping, and interdune areas (deflation plains) subject to ocean flooding.

The measures prescribed in this policy are specifically required by Statewide Planning Goal #18 for the above-referenced dune forms; and that this strategy recognizes that designated mitigation sites must be protected from other uses.

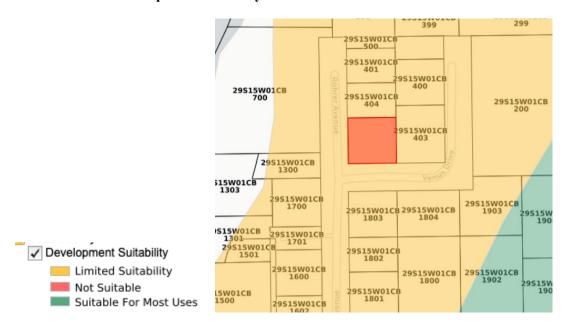
Implementation shall occur through an Administrative Conditional Use process, which shall include submission of a site investigation report that addresses this subsection, by a qualified registered and licensed geologist or engineer.

- i. Coos County shall permit development within areas designated as "Beach and Dune Areas with Limited Development Suitability" only upon the establishment of findings that consider at least:
 - a) The type of use proposed and the adverse effects it might have on the site and adjacent areas;
 - b) The need for temporary and permanent stabilization programs and the planned maintenance of new and existing vegetation;
 - c) The need for methods for protecting the surrounding area from any adverse effects of the development; and
 - *d)* Hazards to life, public and private property, and the natural environment which may be caused by the proposed use.
- ii. Further, Coos County shall cooperate with affected local, state and federal agencies to protect the groundwater from drawdown, which would lead to loss of stabilizing vegetation, loss of water quality, or intrusion of saltwater into water supplies. Coos

County shall cooperate with state and federal agencies in regulating the following actions in the beach and dune areas with limited development potential:

- a) Destruction of desirable vegetation (including inadvertent destruction by moisture loss or root damage);
- *b) The exposure of stable and conditionally stable areas to erosion;*
- c) Construction of shore structures which modify current air wave patterns leading to beach erosion; and
- *d)* Any other development actions with potential adverse impacts.

Finding: The applicant submitted a Geological Site Evaluation Report for the proposed dwelling as it is located within the limited development suitability for Beaches & Dunes.



The Geotechnical Site Evaluation Report was performed by Cascadia Geoservices and is written and stamped by Eric Oberbeck, Certified Engineering Geologist #1332. The engineering geologist acknowledged the applicant's proposal is to construct a new single-family dwelling and the geological report is based on this proposed use. According to the geological report, a preliminary site visit by Cascadia Geoservices was conducted on July 9, 2020. A second site visit was conducted on September 15, 2020 which hand-augered borings were logged and sampled.

The geologic report noted that the surface is "the site is part of an elevated coastal marine terrace located within the Coast Range Physiographic Region of southern Oregon and is within an older, stabilized back dune area".

The dune formation is classified as a <u>DUNES</u>, <u>YOUNGER STABILIZED</u>: A wind stable dune with <u>weakly developed soils and vegetation</u>. This type of dune formation is classified as a limited suitability for development since it does not fit the definition of 'beaches and dunes area unsuitable for development' per Coos County Comprehensive Plan 5.10.3.iv.a.



The geological report including the results of soil testing and the recommendations for site preparation and grading, structural fill placement and compaction, cut and fill slopes, site drainage and erosion control, trenching and piping, and recommendation for the construction of building foundations. As a condition of approval, the applicants/landowners will be required to follow all design and site development recommendations prescribed by this report. These requirements will be made a condition of approval.

Based on the applicant's proposal, the engineering geologist noted that "based on our site observations, the subject property and surrounding area appeared stable at the time of our site visit. The vegetated sand dune to the east appears to be stable and as such will not impact the site". Therefore, (a)(i)(a) criteria has been addressed.

The engineering geologist also stated in their report that "it is our opinion that there is no need for temporary or permanent stabilization programs and/or maintenance of new and existing vegetation. Therefore, (a)(i)(b) criteria has been addressed.

The geologic report stated that "we see no hazards to life, public and private property, or to the natural environment by the proposed development". Therefore, (a)(i)(c) criteria has been addressed.

The engineering geologist stated that "we see no hazards to life, public and private property, or to the natural environment by the proposed development". Therefore, (a)(i)(d) criteria has been addressed.

The geologic report noted ", it is our professional opinion that the proposed development will not cause excessive destruction of desirable vegetation (including inadvertent destruction by moisture loss or root damage), cause exposure of stable and conditionally stable areas to erosion or modify current air wave patterns leading to beach erosion". Therefore, (a)(ii)(a) criterion has been addressed. In order to meet the criteria for (a)(ii)(b,c), a condition of approval will be place on the subject property that all domestic and irrigation shall come from an offsite public water source. This condition will help prevent water drawn down which will negatively affect native vegetation and may cause saltwater intrusion into the water table.

The geologic report also stated, "the proposed development will not have an adverse impact on either the site or adjacent areas". Therefore, (a)(ii)(d) criterion has been addressed.

• 4.11.130 NON-ESTUARINE SHORELAND BOUNDARY (BALANCE OF COUNTY POLICY 5.10)

The Coastal Shoreland Boundary map has inventoried the following:

- Coastal Shoreland Boundary
- Beach Erosion
- Coastal Recreation Areas
- Area of Water-Dependent Uses
- Riparian Vegetation
- Fore Dunes
- Head of Tide
- Steep Bluffs over 50% Slope
- Significant wetland wildlife habitats
- Wetlands under agricultural use
- Areas of Exceptional Aesthetic or Scenic Quality and Coastal Headlands
- Headland Erosion

Purpose Statement:

Protection of major marshes (wetlands), habitats, headlands, aesthetics, historical and archaeological sites: Coos County shall provide special protection to major marshes, significant wildlife habitat, coastal headlands, exceptional aesthetic resources, and historic and archaeological sites located within the Coastal Shorelands Boundary of the ocean, coastal lakes and minor estuaries. This strategy shall be implemented through plan designations and ordinance measures that limit uses in these special areas to those uses that are consistent with protection of natural values, such as propagation and selective harvesting of forest products, grazing, harvesting wild crops, and low intensity water-dependent recreation. This strategy recognizes that special protective consideration must be given to key resources in coastal shorelands over and above the protection afforded such resources elsewhere in this plan.

- i. Uses allowed within the Coastal Shoreland Boundary: This strategy recognizes: (1) that Coos County's rural shorelands are a valuable resource and accordingly merit special consideration; and (2) that Statewide Planning Goal #17 places strict limitations on land divisions within coastal shorelands.***
 - f) single family residences on existing lots, parcels, or units of land when compatible with the objectives and implementation standards of the Coastal Shorelands goal, and as otherwise permitted by the underlying zone; or

FINDING: The applicant is proposing a single-family dwelling within the CD-10 zone on an existing lot. The subject property has multiple other overlay zones, including the Coastal Shoreland Boundary. Additional findings for compatibly of the proposed dwelling and Coastal Shoreland Boundary are below.

- ii. A site plan and design review is only necessary when required in Coos County Comprehensive Plan Volume I Part 3 § 3.5: Structures associated with the above uses, with the exception of farm and forest uses, shall only be permitted after an Administrative Conditional Use Review or higher review addressing the criteria and requirements of this subsection below and upon a finding that such uses do not otherwise conflict with the Special Development Considerations and Overlay Zones found in this Ordinance.
- *a)* Site Review and Approval Criteria.

Construction, site development and landscaping shall be carried out in substantial accord with the plans, drawings, sketches and other documents as approved.

Nothing in this subsection shall be construed to prevent ordinary repair, maintenance and replacement of any part of the building or landscaping which does not involve a substantial change from the purpose and objectives of this section. Proposed "substantial changes" shall be submitted to the Planning Director for approval.

All variances from the site development criteria which are deemed necessary by the applicant shall be requested pursuant to ARTICLE 5.3.

These standards are intended to provide a frame of reference for the applicant to the development of a site and building plans as well as a method of review. These standards shall not be regarded as inflexible requirements, nor do they advocate any particular architectural style, for they are intended to encourage creativity, invention and innovation. The following standards shall be utilized in reviewing the plans, drawings, sketches and other documents required under for this review:

- 1. Landscaping
 - a. The landscape shall be such to minimize soil erosion and lessen the visual impact;

FINDING: The applicant's geologic report stated that the "there is no need for temporary or permanent stabilization programs and/or maintenance of new and existing vegetation". Staff finds that the Ceritified Engineering Geologist has found that any proposed landscaping minimizes soil erosion, based on their professional opinion. Therefore, this criterion has been met.

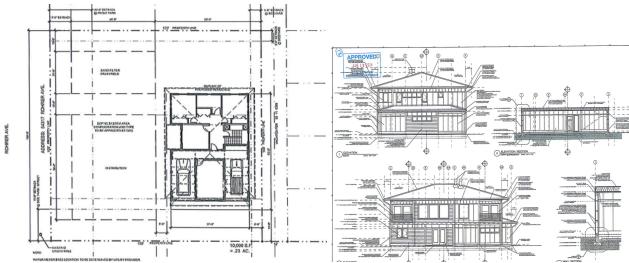
b. Any grade changes shall be in keeping with the general appearance of neighboring developed areas.

FINDING: The subject property is located in Sunset City. Sunset City is a pre-ordinance platted subdivision within the City of Bandon Urban Growth Boundary. The geologic report states that there "no plans for excavations over 4 feet deep on the site".

- 2. Structures
 - a. Proposed structures shall be related harmoniously to the terrain and to existing buildings in the vicinity that have a visual relationship to the proposed buildings;

FINDING: The subject property is located in Sunset City. Sunset City is a pre-ordinance platted subdivision within the City of Bandon Urban Growth Boundary. This area has been historically serviced with City of Bandon water and onsite septic treatment systems. This area is zoned Controlled Development-10. Sunset City consists of a mixture of single-family primary dwellings, single family secondary dwellings or investment properties, short-term vacation rentals, and undeveloped lots. While commercial use is plausible in CD-10, there historically has not been much interest in developing commercial uses in this area. The City of Bandon lies directly north of Sunset City, while Devils Kitchen State Park is located south of the subdivision. To the east of the subdivision is lightly developed Rural Residential-5 properties. The Pacific Ocean and State beaches are located to the west of Sunset City. There is a public beach access point, on Mars Lane, located southwest of the subject property.

The subject property is a corner lot at the corner of Venus Drive and Rohrer Road. There are undeveloped properties towards the south of subject property. West of the subject property are developed properties with newer single-family dwellings with beach-frontage.



Staff finds that proposed development will be occupy the usual amount of lot coverage as the existing residential properties.

b. The achievement of such relationship may include the enclosure of space in conjunction with other existing buildings or other proposed buildings and the creation of focal points with respect to avenues of approach, terrain features or other buildings.

FINDING: There are no existing buildings on the subject property. The applicant's proposal is for a new two-story home with enclosed garage. Considering the shape and smaller portion of the subject property where development could be place, the need for onsite septic installation, the distance between the drain field locations, and the substantially developed single family residential development on adjoining neighboring properties. Therefore, Staff determines there is no reasonable need for enclosure of any space in conjunction with existing or proposed buildings.

3. Drives, Parking and Circulation

With respect to vehicular and pedestrian circulation, including walkways, interior drives and parking, special attention shall be given to the location and number of access points, general interior circulation, separation of pedestrian and vehicular traffic, and arrangement of parking areas that are safe and convenient and must comply with the standards found in Chapter VII. The Roadmaster is responsible for determining compliance with this subsection.

FINDING: The access driveway is a from the existing Venus Drive. The developable portion of the subject property is limited to a specific access point given the need for placing the septic drain field on the northern portion of the subject property. The applicant will need to submit a signed off from the County Roadmaster prior to requesting a Zoning Compliance Letter. The County Road Department will verify this criterion is sufficient during this process.

4. Surface Water Drainage

Special attention shall be given to proper site surface drainage so that removal of surface waters will not adversely affect neighboring properties, the public storm drainage system, or create environmental problems.

FINDING: First, Staff has access to Coos County Public Works records and is unaware of any public storm drainage systems within the Sunset City subdivision. The geologic report stated there is no plans for excavation and grade changes over 4 feet. Staff finds that there is no evidence presented that this

proposal would result in a negative effect. The only portion of the application that mentions drainage is in the geologic report. The geologic report did note that "it is our opinion that there is no need for temporary or permanent stabilization programs and/or maintenance of new and existing vegetation". Therefore, Staff finds that the criteria for surface water drainage has been met.

- 5. Utility Service
 - a. Whenever feasible, electric, telephone and other utility lines shall be underground;
 - b. Any utility installations remaining above ground shall be located so as to have an harmonious relation to neighboring properties and the site;
 - c. The proposed method of sanitary sewage disposal from all buildings shall be indicated.

FINDING: The applicant did not indicate they plan on installing underground power. However, the City of Bandon supplies electric services to Sunset City through underground power lines. Therefore, Staff concludes it is reasonable to conclude the power lines will be underground. The applicant did not indicate if any telephone line services will be installed at this time. Telephone service in this area is also thru underground service lines. The applicant does not appear to be requesting utility development to be place above ground. Staff also notes that any future substantial installations of utility improvements will trigger additional reviews of proposed said developments, being that the property is in the Beaches and Dunes overlay zone. The applicant is proposing to install an onsite septic treatment system. Therefore, Staff finds the applicant has addressed all applicable criteria.

- *b) Application Submittal and Review Procedure.*
 - 1. Submission of Documents A prospective applicant for a building or other permit who is subject to site design review shall submit the following to the County Planning Director:
 - a. A site plan, drawn to scale, shows the proposed layout of all structures and other improvements;
 - b. A landscape plan, drawn to scale, showing the location of existing trees proposed to be retained on the site, the location and design of landscaped areas, the varieties and sizes of trees and plant materials to be planted on the site, other pertinent landscape features, and irrigation systems required to maintain trees and plant materials;
 - c. Architectural drawings or sketches, drawn to scale, including floor plans, in sufficient detail to permit computation of yard requirements and showing all elevations of the proposed structures and other improvements as they will appear on completion of construction;
 - d. Specifications as to type, color and texture of exterior surfaces of proposed structures including reflective surfaces of solar collectors;
 - e. An application request which shall include:
 - 1) Name and address of applicant;
 - 2) Statement of applicant's legal interest in the property (owner, contract purchaser, lessee, renter, etc.) and a description of that interest, and in case the applicant is not the owner, verification of the owner's consent;
 - *Address and legal description of the property;*
 - *4) Statement explaining the intended request;*
 - *The required fee; and*
 - 6) Any other materials or information as may be deemed necessary to assist in evaluation of the request. The request will be made prior to deeming the application complete. However, if this review is before the hearings body they may request for additional information to ensure compliance.

FINDING: Staff found that during completeness review process that all applicable documents were submitted prior to this review. Therefore, these criteria have been addressed.

2. Threshold Standard. The Planning Director has the discretion to waive part or all of the site plan requirements if, in the Director's judgment, the proposed development is "de minimis" in extent to the existing development.

FINDING: The Planning Director has waived the requirements for a full landscaping and architectural plans. Therefore, this criteria is not appliable.

• 4.11.132 Natural Hazards (Balance of County Policy 5.11)

Coos County has inventoried the following hazards:

- Flood Hazard
 - o Riverine flooding
 - Coastal flooding
- *Landslides and Earthquakes*
 - Landslide Susceptibility
 - Liquefaction potential
- Tsunamis
- Erosion
 - o Riverine streambank erosion
 - Coastal
 - Shoreline and headlands
 - Wind
- Wildfire

Purpose Statements:

Coos County shall regulate development in known areas potentially subject to natural disasters and hazards, so as to minimize possible risks to life and property. Coos County considers natural disasters and hazards to include river and coastal flooding, landslides, liquefaction potential due to earthquakes, fault lines, tsunamis, river bank erosion, coastal erosion along shorelines and headlands, coastal erosion due to wind, and wildfires, including those areas affected by gorse.

This strategy shall be implemented by enacting special protective measures through zoning and other implementing devices, designed to minimize risks to life and property associated with new development and substantial improvements. The determination of whether a property is located in one of the above referenced potentially hazardous areas shall be made by the reviewing body (Planning Director, Planning Commission, Board of Commissioners, or any designee based upon adopted inventory mapping). A specific site may not include the characteristics for which it is mapped. In these circumstances staff shall apply § 4.11.132.ii.2m.

c. Tsunamis: Coos County shall promote increased resilience to a potentially catastrophic Cascadia Subduction Zone (CSZ) tsunami through the establishment of a Tsunami Hazard Overlay Zone (THO) in the Balance of County Zoning. See Sections 4.11.260-4.11.270 for the requirements of this overlay zone.

• TSUNAMI HAZARD OVERLAY ZONE:

4.11.260 Tsunami Hazard Overlay Zone (Background)

The Tsunami Hazard Overlay zone is designed to serve as the principal implementation mechanism for land use measures addressing tsunami risk. As the name indicates, it is designed to be applied in the form of an overlay zone, i.e. in combination with underlying base zones. The boundaries of the overlay

would correspond to the area of the jurisdiction subject to inundation from a local source tsunami indicated in § 4.11.265 below.

Oregon Statewide Planning Goal 7 envisions a process whereby new hazard inventory information generated by federal and state agencies is first reviewed by the Department of Land Conservation and Development (DLCD). DLCD then notifies the County of the new information, and the County has three years to respond to the information by evaluating the risk, obtaining citizen input, and adopting or amending implementation measures to address the risk. The County has not received notice from DLCD but has taken the proactive role in working with DLCD to address tsunami hazards.

This section of the ordinance places restrictions and limitations on certain categories of uses. These limitations apply primarily to uses which present a high potential for life safety risk, or to uses which provide an essential function during and after a disaster event. ORS 455, which is implemented through the state building code, currently prohibits certain facilities and structures in the tsunami inundation zone as defined by the Oregon Department of Geology and Mineral Industries as indicated in Section 4.11.245 below. The overlay incorporates the requirements that can be limited through the land use program. Nothing in this ordinance is meant to conflict with the State Building Code but will focus on integration of development and improvement of evacuation infrastructure into the land use and development review process.

Coos County does not house the building codes program and; therefore, Coos County lacks certain enforcement authority over the Oregon Structural Specialty Code as explained in OAR 632-005-0070 exemption responsibility. This section of the ordinance is not meant to obstruct the authority of the structural code.

These provisions establish requirements to incorporate appropriate evacuation measures and improvements in most new development, consistent with the Coos County Tsunami Evacuation Facility Improvement Plan. Coos County Planning has worked with Coos County Emergency Management in planning for emergency preparedness and developing hazard mitigation plans.

The maps that will be used to implement this section of the Coos County Zoning and Land Development ordinance are the 2012 <u>Tsunami Inundation Maps</u> produced by Oregon Department of Geology and Mineral Industries. The maps will be printed and filed as part of the Coos County Comprehensive Plan.

The series of maps consists of a Small (S), Medium (M), Large (L), Extra Large (XL) and Extra-Extra Large (XXL), with the XXL indicating the worst case scenario. When a size is identified in the section it includes all smaller sizes. For an example if a facility is regulated in an L tsunami inundation event then it includes all M and S tsunami inundation mapped areas.

4.11.265 Tsunami Hazard Overlay (THO) Zone (Definitions)

Definitions applicable to the tsunami hazard overlay zone.

As used in tsunami hazard overly zone Section 4.11.270:

- 1. "Essential Facilities" means:
 - a. Hospitals and other medical facilities having surgery and emergency treatment areas;
 - b. Fire and police stations;
 - c. Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures;
 - d. Emergency vehicle shelters and garages;

- e. Structures and equipment in emergency preparedness centers;
- f. Standby power generating equipment for essential facilities; and
- g. Structures and equipment in emergency preparedness centers.
- 2. "Hazardous facility" means structures housing, supporting or containing sufficient quantities of toxic or explosive substances to be of danger to the safety of the public if released.
- *3.* "Special occupancy structures" means:
 - a. Covered structures whose primary occupancy is public assembly with a capacity greater than 300 persons;
 - b. Buildings with a capacity of greater than 250 individuals for every public, private or parochial school through secondary level or child care centers;
 - c. Buildings for colleges or adult education schools with a capacity of greater than 500 persons;
 - d. Medical facilities with 50 or more resident, incapacitated persons not included subsection (a);
 - e. Jails and detention facilities; and
 - f. All structures and occupancies with a capacity of greater than 5,000 persons. See ORS 455.466
- 4. "Substantial improvement" means any repair, reconstruction, or improvement of a structure which exceeds 50 percent of the real market value of the structure.
- 5. "Tsunami vertical evacuation structure" means a building or constructed earthen mound that is accessible to evacuees, has sufficient height to place evacuees above the level of tsunami inundation, and is designed and constructed with the strength and resiliency needed to withstand the effects of tsunami waves.
- 6. "Tsunami Inundation Maps (TIMs)" means the map, or maps in the DOGAMI Tsunami Inundation Map (TIM) Series, published by the Oregon Department of Geology and Mineral Industries, which cover(s) the area within Coos County.

4.11.270 Tsunami Hazard Overlay Zone (Purpose, Applicability and Uses)

1. Purpose

The purpose of the Tsunami Hazard Overlay Zone is to increase the resilience of the community to a local source (Cascadia Subduction Zone) tsunami by establishing standards, requirements, incentives, and other measures to be applied in the review and authorization of land use and development activities in are as subject to tsunami hazards. The standards established by this section are intended to limit, direct and encourage the development of land uses within are as subject to tsunami hazards in a manner that will:

- a. Reduce loss of life;
- b. Reduce damage to private and public property;
- c. Reduce social, emotional, and economic disruptions; and
- d. Increase the ability of the community to respond and recover.

Significant public and private investment has been made in development in areas which are now known to be subject to tsunami hazards. It is not the intent or purpose of this section to require the relocation of or otherwise regulate existing development within the Tsunami Hazard Overlay Zone. However, it is the intent of this section to control, direct and encourage new development and redevelopment such that, overtime, the community's exposure to tsunamis will be reduced.

2. Applicability of Tsunami Hazard Overlay Zone

The Tsunami Hazard Overlay is applicable to all Balance of County Zoning Districts and any zoning districts located within the Coos Bay Estuary and Coquille Estuary Management Plans when the Estuary Policies directly reference this section. Areas of inundation depicted on the Tsunami Inundation Map(s) (TIM) published by the Oregon Department of Geology and Mineral Industries (DOGAMI) are subject to the requirements of this section as follows:

- a. Except as provided in subsection (b), all lands identified as subject to inundation from the XXL magnitude local source tsunami event as set forth on the applicable Tsunami Inundation Map(s) (TIM) published by the Oregon Department of Geology and Mineral Industries (DOGAMI) are subject to the requirements of this section.
- b. Lands within the area subject to inundation from the XXL magnitude local source tsunami event as set forth on the applicable Tsunami Inundation Map(s) (TIM) published by the Oregon Department of Geology and Mineral Industries (DOGAMI) that have a grade elevation, established by fill or other means, higher than the projected elevation of the XXL magnitude local source tsunami event are exempt from the requirements of this section. Grade elevations shall be established by an elevation survey performed by a Professional Land Surveyor licensed in Oregon.

3. Uses

In the Tsunami Hazards Overlay Zone, except for the prohibited uses set forth in subsection 4 all uses permitted pursuant to the provisions of the underlying zone map may be permitted, subject to the additional requirements and limitations of this section. The Tsunami Hazard Overlay Zone does not establish any new or additional review processes. Application of the standards and requirements of the Tsunami Hazard Overlay Zone is accomplished through the applicable review processes of the underlying zone.

4. Prohibited Uses

Unless authorized in accordance with subsection 6, the following uses are prohibited in the specified portions of the Tsunami Hazard Overlay Zone:

- a. In areas identified as subject to inundation from the L magnitude local source tsunami events set forth on the TIM, the following uses are prohibited:
 - i. Hospitals and other medical facilities having surgery and emergency treatments area as;
 - ii. Fire and police stations;
 - iii. Hospital and other medical facilities having surgery and emergency treatment areas;
 - iv. Structures and equipment in government communication centers and other facilities required for emergency response;
 - v. Building with a capacity greater than 250 individuals for every public, private or parochial school through secondary level or childcare centers;
 - vi. Buildings for colleges or adult education schools with a capacity of greater than 500 persons; and
 - vii. Jails and detention facilities
- b. In areas identified as subject to inundation from the M magnitude local source tsunami event as set forth on the Tsunami Inundation Map (TIM), the following uses are prohibited:
 - i. Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures;
 - ii. Emergency vehicle shelters and garages;
 - iii. Structures and equipment in emergency preparedness centers;
 - iv. Standby power generating equipment for essential facilities;

- v. Covered structures whose primary occupancy is public assembly with a capacity of greater than 300 persons;
- vi. Medical facilities with 50 or more resident, in capacitated patients;
- vii. Manufactured home parks, of a density exceeding 10 units per acre; and viii. Hotels or motels with more than 50 units.
- c. Notwithstanding the provisions of Article 5.6 of the Coos County Zoning and Land Development Ordinance, the requirements of this subsection shall not have the effect of rendering any lawfully established use or structure nonconforming. The Tsunami Hazard Overlay is, in general, not intended to apply to or regulate existing uses or development.

5. Use Exceptions

A use listed in subsection (4) of this section may be permitted upon authorization of a Use Exception in accordance with the following requirements:

- a. Public schools may be permitted upon findings that there is a need for the school to be within the boundaries of a school district and fulfilling that need cannot otherwise be accomplished.
- b. Fire or police stations may be permitted upon findings that there is a need for a strategic location.
- c. Other uses prohibited by subsection (4) of this section may be permitted upon the following findings:
 - i. There are no reasonable, lower-risk alternative sites available for the proposed use;
 - ii. Adequate evacuation measures will be provided such that life safety risk to building occupants is minimized;
 - iii. The buildings will be designed and constructed in accordance with the Oregon Structural Specialty Code to minimize the risk of structural failure during the design earthquake and tsunami event: and
 - iv. Developers of new essential facilities, hazardous facilities and major structures, and special occupancy structures that are located in an identified tsunami inundation zone, as described in subsection ORS 455.446. The provision of ORS 455.446 does not apply to water-dependent and water-related facilities, including but not limited to docks, wharves, piers and marinas. Decisions made under ORS 455.446 are not land use decisions.

Applications, reviews, decisions and appeals for Use Exceptions authorized by this subsection with the exclusion of subsections iii and iv shall be in accordance with the requirements for an administrative conditional use procedure as set forth in Article 5.2 – Conditional Uses.

- 6. Evacuation Route Improvement Requirements. Except single family dwellings on existing lots and parcels, all new development, substantial improvements and land divisions in the Tsunami Hazard Overlay Zone shall incorporate evacuation measures and improvements, including necessary vegetation management, which are consistent with and conform to the adopted Tsunami Evacuation Facilities Improvement Plan. Such measures may include:
 - a. On-site improvements:
 - i. Improvements necessary to ensure adequate pedestrian access from the development site to evacuation routes designated in the Tsunami Evacuation Facilities Improvement Plan in all weather and lighting conditions.
 - ii. Frontage improvements to designate evacuation routes that are located on or contiguous to the proposed development site, where such improvements are identified in the Tsunami Evacuation Facilities Improvement Plan. Such improvements shall be proportional to the evacuation needs created by the proposed development.
 - iii. Where identified in the Tsunami Evacuation Facilities Improvement Plan as the

- only practicable means of evacuation, tsunami evacuation structure(s) of sufficient capacity to accommodate the evacuation needs of the proposed development.
- b. Off-site improvements: Improvements to portions of designated evacuation routes that are needed to serve, but are not contiguous to, the proposed development site, where such improvements are identified in the Tsunami Evacuation Facilities Improvement Plan. Such improvements shall be proportional to the evacuation needs created by the proposed development.
- c. Evacuation route signage consistent with the standards set forth in the Tsunami Evacuation Facilities Improvement Plan. Such signage shall be adequate to provide necessary evacuation information consistent with the proposed use of the site.
- d. Evacuation route improvements and measures required by this subsection may include the following:
 - i. Improved streets and/or all-weather surface paths of sufficient width and grade to ensure pedestrian access to designated evacuation routes in all lighting conditions;
 - ii. Improved streets and paths shall provide and maintain horizontal clearances sufficient to prevent the obstruction of such paths from downed trees and structure failures likely to occur during a Cascadia earthquake; and
 - iii. Such other improvements and measures identified in the Tsunami Evacuation Facilities Improvement Plan. See Volume I, Part 2 Section 3.9. 400 of the Coos County Comprehensive Plan

7. Tsunami Evacuation Structures

- a. All tsunami evacuation structures shall be of sufficient height to place evacuees above the level of inundation for the XXL local source tsunami event.
- b. Tsunami evacuation structures are not subject to the building height limitations of this chapter.

8. Flexible Development Option

- a. The purpose of the Flexible Development Option is to provide incentives for, and to encourage and promote, site planning and development within the Tsunami Hazard Overlay Zone that results in lower risk exposure to tsunami hazard than would otherwise be achieved through the conventional application of the requirements of this chapter. The Flexible Development Option is intended to:
 - i. Allow for and encourage development designs that incorporate enhanced evacuation measures, appropriate building siting and design, and other features that reduce the risks to life and property from tsunami hazard; and
 - ii. Permit greater flexibility in the siting of buildings and other physical improvements and in the creation of new lots and parcels in order to allow the full realization of permitted development while reducing risks to life and property from tsunami hazard.
- b. The Flexible Development Option may be applied to the development of any lot, parcel, or tract of land that is wholly or partially within the Tsunami Hazard Overlay Zone.
- c. The Flexible Development Option may include any uses permitted outright or conditionally in any zone, except for those uses prohibited pursuant to subsection 5 of this section
- d. Overall residential density shall be as set forth in the underlying zone or zones. Density shall be computed based on total gross land area of the subject property, excluding street right-of-way.
- e. Yards, setbacks, lot area, lot width and depth, lot coverage, building height and similar

- dimensional requirements may be reduced, adjusted or otherwise modified as necessary to achieve the design objectives of the development and fulfill the purposes of this section.
- f. Applications, review, decisions, and appeals for the Flexible Development Option shall be in accordance with the requirements for an administrative conditional use procedure as set forth in Article 5 of the Coos County Zoning and Land Development Ordinance.
- g. Approval of an application for a Flexible Development Option shall be based on findings that the following criteria are satisfied:
 - i. The applicable requirements of sub-paragraphs (b) and (d) of this subsection are met: and
 - ii. The development will provide tsunami hazard mitigation and/or other risk reduction measures at a level greater than would otherwise be provided under conventional land development procedures. Such measures may include, but are not limited to:
 - 1. Providing evacuation measures, improvements, evacuation way finding techniques and signage;
 - 2. Providing tsunami evacuation structure(s) which are accessible and provide capacity for evacuees from off-site;
 - 3. Incorporating building designs or techniques which exceed minimum structural specialty code requirements in a manner that increases the capacity of structures to withstand the forces of a local source tsunami; and
 - 4. Concentrating or clustering development in lower risk portions or areas of the subject property, and limiting or avoiding development in higher risk areas.

Finding: The proposal is for constructing a new residential dwelling. This use is not regulated as an essential facilities, hazardous facility, special occupancy structures, substantial improvement, or tsunami vertical evacuation structure. Therefore, the above criteria are not applicable to this request for land use approval.

- **f. Wildfires:** Coos County shall promote protection of property from risks associated with wildfires. New development or substantial improvements shall, at a minimum, meet the following standards, on parcels designated or partially designated as "High" or "Moderate" risk on the Oregon Department of Forestry 2013 Fire Threat Index Map for Coos County or as designated as at-risk of fire hazard on the 2015 Coos County Comprehensive Plan Natural Hazards Map:
- 1. The dwelling shall be located within a fire protection district or shall be provided with residential fire protection by contract. If the dwelling is not within a fire protection district, the applicant shall provide evidence that the applicant has asked to be included within the nearest such district or is provided fire protection by contract.
- 2. When it is determined that these standards are impractical the Planning Director may authorize alternative forms of fire protection that shall comply with the following:
 - a. The means selected may include a fire sprinkling system, onsite equipment and water storage or other methods that are reasonable, given the site conditions, as established by credible documentation approved in writing by the Director;
 - b. If a water supply is required for fire protection, it shall be a swimming pool, pond, lake, or similar body of water that at all times contains at least 4,000 gallons per dwelling or a stream that has a continuous year-round flow of at least one cubic foot per second per dwelling:
 - c. The applicant shall provide verification from the Water Resources Department that any permits or registrations required for water diversion or storage have been obtained or that permits, or registrations are not required for the use; and

d. Road access shall be provided to within 15 feet of the water's edge for firefighting pumping units. The road access shall accommodate the turnaround of firefighting equipment during fire season. Permanent signs shall be posted along the access route to indicate the location of the emergency water source.

3. Fire Siting Standards for New Dwellings:

- a. The property owner shall provide and maintain a water supply of at least 500 gallons with an operating water pressure of at least 50 PSI and sufficient ¾ inch garden hose to reach the perimeter of the primary fuel-free building setback.
- b. If another water supply (such as a swimming pool, pond, stream, or lake) is nearby, available, and suitable for fire protection, then road access to within 15 feet of the water's edge shall be provided for pumping units. The road access shall accommodate the turnaround of firefighting equipment during the fire season. Permanent signs shall be posted along the access route to indicate the location of the emergency water source.

4. Firebreak:

- a. A firebreak shall be established and maintained around all structures, including decks, on land owned or controlled by the applicant for a distance of at least 30 feet in all directions.
- b. This firebreak will be a primary safety zone around all structures. Vegetation within this primary safety zone may include mowed grasses, low shrubs (less than ground floor window height), and trees that are spaced with more than 15 feet between the crowns and pruned to remove dead and low (less than 8 feet from the ground) branches. Accumulated needles, limbs and other dead vegetation should be removed from beneath trees.
- c. Sufficient garden hose to reach the perimeter of the primary safety zone shall be available at all times.
- d. The owners of the dwelling shall maintain a primary fuel-free break area surrounding all structures and clear and maintain a secondary fuel-free break on land surrounding all structures that is owned or controlled by the owner in accordance with the provisions in "Recommended Fire Siting Standards for Dwellings and Structures and Fire Safety Design Standards for Roads" dated March 1, 1991, and published by Oregon Department of Forestry and shall demonstrate compliance with Table 1.

Table 1 – Minimum Primary Safety Zone

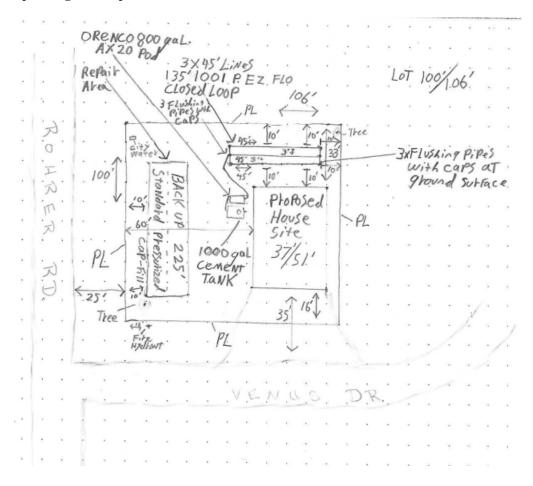
Slope	Feet of Primary Safety	Feet of Additional
	Zone	Primary Safety Zone
		Down Slope
0%	30	0
10%	30	50
20%	30	75
25%	30	100
40%	30	150

- e. All new and replacement structures shall use non-combustible or fire resistant roofing materials, as may be approved by the certified official responsible for the building permit.
- f. If a water supply exceeding 4,000 gallons is suitable and available (within 100 feet of

the driveway or road) for fire suppression, then road access and turning space shall be provided for fire protection pumping units to the source during fire season. This includes water supplies such as a swimming pool, tank or natural water supply (e.g. pond).

- g. The structure shall not be sited on a slope of greater than 40 percent.
- h. If the structure has a chimney or chimneys, each chimney shall have a spark arrester.
- i. Except for private roads and bridges accessing only commercial forest uses, public roads, bridges, private roads, and driveways shall be constructed so as to provide adequate access for firefighting equipment. Confirmation shall be provided from the Coos County Road Department or local fire protection district that these standards have been met.
- 5. Wildfires inside urban growth boundaries. Certain areas inside urban growth boundaries may present special risks and may be made subject to additional or different standards and requirements jointly adopted by a city and the county in the form of code requirements, master plans, annexation plans, or other means.

Finding: The proposed dwelling will be located within the Bandon Rural Fire Protection district. The subject property is completely within the City of Bandon Urban Growth Boundary. Under the agreement between the City of Bandon and Coos County; as a condition of approval, the subject property will be required to meet the fire siting standards identified in section 4.11.132.f.4. Based on the submitted plot plan, the applicant appears to be developing most of the subject property with the residence, parking, and septic drain fields.



The Planning Director also finds that for rule 3 and 5; that the 500 gallon tank requirement may be supplemented by utilized the existing water main and hydrants in the Sunset City subdivision. Other than Subsection 4.f & i; all requirements of subsection 4 will be conditions of approval. Therefore, these criterions have been addressed.

• FLOATING ZONE: AIRPORT SURFACES

Bandon, Lakeside and Powers Airports

O SECTION 4.11.300 PURPOSE:

The purpose of the Airport Surface Floating zone is to protect public health, safety and welfare. It is recognized that obstructions to aviation have potential for endangering the lives and property of users of selected airports, and property of occupancy of land in the airport's vicinity. An obstruction may affect future instrument approach minimums and obstructions may reduce the area available for the landing, take-off and maneuvering of aircraft, thus tending to destroy or impair the utility of the airport and the public investment therein.

O SECTION 4.11.305 DESIGNATION OF AIRPORT SURFACES:

Those lands lying beneath the approach surfaces, transition surfaces, horizontal surfaces and conical surfaces as they apply to the "Bandon, Lakeside and Powers Airports Approach and Clear Zone Inventory Map" shall be subject to the requirements of this floating zone. Southwest Regional Airport Surfaces (AKA North Bend Municipal Airport) regulations can be found in Sections 4.11.400 through 4.11.460.

O SECTION 4.11.310 AIRPORT SUB-ZONES:

Sub-zones are hereby established and defined as follows:

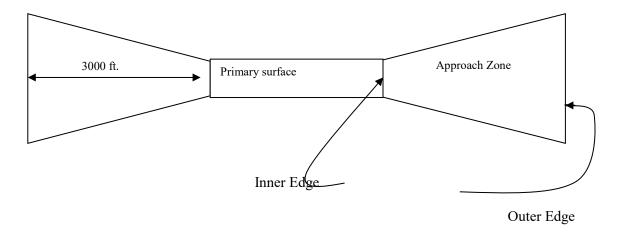
1. Approach zone—The inner edge of the approach zone coincides with the primary surface of the runway:

Bandon = 500 ft. wide Lakeside = 50 ft. wide Powers = 100 ft. wide

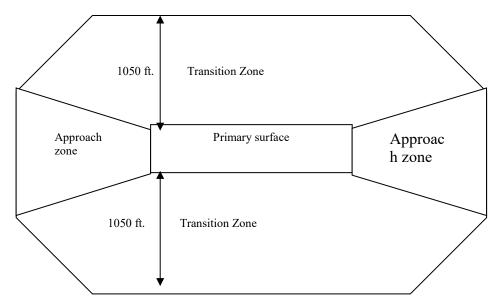
The approach zone expands outward uniformly to a width of:

Bandon = 1400 ft. wide Lakeside = 900 ft. wide Powers = 900 ft. wide

At a horizontal distance of 3000 feet for all airports from the primary surface. Its centerline is the continuation of the runway centerline.



1. Transition Zone – The inner edge of the transition zone coincides with the outer edges of the primary surface and approach zone. The outer edge of the transition zone parallels the primary surface and is 1050 feet wide tapering to the end of the approach zone.



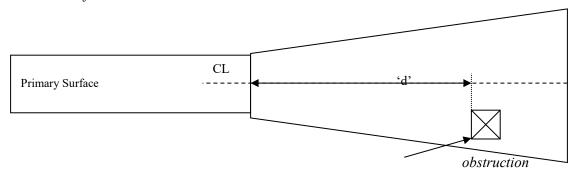
- 3. Horizontal Conical Zone The horizontal conical zone is established by swinging arcs of 9,000 feet radii from the center of each end of the primary surface of each runway and connecting the adjacent arcs by drawing lines tangent to those arcs. The horizontal conical zone does not include the approach and transitional zones.
- *4. Primary Surface Zone The primary surface zone overlays the runway surface:*

Bandon =	500 ft. wide
Lakeside =	50 ft. wide
Powers =	100 ft. wide

SECTION 4.11.315 AIRPORT SURFACES HEIGHT LIMITATIONS:

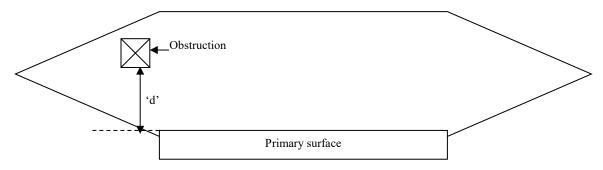
Notwithstanding other provisions of this Ordinance, no structure shall be created or altered to a height in excess of the applicable height limits herein established. Such applicable height limitations are hereby established:

1. Approach zone – The maximum height allowed shall be 5% of the distance from the primary surface as measured along the centerline to a point, perpendicular to the obstruction, and shall not exceed 35 ft.



'd' = distance from primary surfaces allowable height = $(0.05) \times ('d')$. and not to exceed 35 ft.

2. Transition Zone – The maximum height allowed shall be 14% of the distance as measured perpendicular to the outer edge of the primary surface (or an extension of the outer edge) but shall not exceed 35 feet.



'd' = distance from the primary surface outer edge allowable height = $(0.14) \times ('d')$ and not to exceed 35 feet.

- 3. Horizontal Conical Zone Maximum allowable height = 35 feet.
- 4. Primary Surface Maximum allowable building height = 0 (zero) feet for structures or other improvements. Siting of structures or improvements other than navigational aides permitted by State Aeronautics is prohibited.

O SECTION 4.11.320 PERMITTED USES:

Except as restricted by Section 4.11.330, in a District in which the /AS zone is combined, those uses permitted by the underlying district are permitted outright in the /AS FLOATING ZONE.

O SECTION 4.11.325 CONDITIONAL USES:

Except as restricted by Section 4.11.330, in a District with which the /AS is combined, those uses subject to the provisions of ARTICLE 5.2 (Conditional Uses) may be permitted in the /AS FLOATING ZONE.

O SECTION 4.11.330 USE RESTRICTIONS:

Notwithstanding any other provision of this Ordinance, no use may be made of land or water within any zone established by this Ordinance in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft, make it difficult for pilots to distinguish between airport light and other, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport, create bird strike hazards, or otherwise in any way endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport.

• SECTION 4.11.335 CLARIFICATION OF GRANDFATHER USES AND RIGHTS:

1. In addition to Article 3.4, the regulations prescribed by this zone shall not be construed to require the removal, lowering, or other change or alteration of any structure not conforming to the regulations as of the effective date of this Ordinance, or otherwise interfere with the continuance of the Grandfathered Use. Nothing contained herein shall require any change in the construction, alteration, or intended use of any structure, the construction or alteration of which was begun prior to the effective date of this Ordinance, and is diligently prosecuted.

However, no permit shall be granted that would allow the establishment or creation of an obstruction or permit a Grandfathered Use or structure to become a greater hazard to air navigation than it was on the effective date of this Ordinance or any amendments thereto or than it is when the application for a permit is made.

2. <u>Marking and Lighting</u> – Notwithstanding the preceding provision of this Section, the owner of any existing Grandfathered structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by the Airport Owner to indicate to the operators of aircraft in the vicinity of the airport the presence of such airport obstruction. Such markers and lights shall be installed, operated, and maintained at the expense of the Airport Owner.

O SECTION 4.11.340 VARIANCES:

Variances may be granted where consistent with the procedural and substantive requirements of Article 5.3.

• SECTION 4.11.345 CONFORMANCE REQUIREMENT:

All structures and uses within the Airport Operations District shall conform to the requirements of Federal Aviation Agency Regulation FAR-77 or its successor, and to other Federal and State laws as supplemented by Coos County Ordinances regulating structure height, steam or dust, and other hazards to flight, air navigation or public health, safety and welfare.

Finding: 4.11.315.3 requires all structures be limited to a height restriction of 35 feet. The property is already subject to the 35 feet height limitation in the Controlled Development-10 zoning district. The applicant did not request a variance to the height limitation for this proposal. Therefore, these criteria have been addressed.

IV. DECISION

In conclusion Staff finds that the applicant has address most of the relevant criteria and the ones that have not been address or cannot be completed until after the approval is obtained have been made conditions of approval. Therefore, the proposed dwelling in Beaches & Dunes and Coastal Shorelands Boundary meets the requirements of the Coos County Zoning and Land Development Ordinance, with conditions listed in Exhibit "A" of this report.

V. NOTICE REQUIREMENTS:

A notice of decision will be provided to property owners within 100 feet of the subject properties and the following agencies, special districts, or parties: Bandon Rural Fire Protection District

A Notice of Decision and Staff Report will be provided to the following: Applicants/Owners, Department of Land Conservation and Development, Coos County Assessor's Office and the Planning Commission and Board of Commissioners.

Adjacent property owners will receive a Notice of Decision and maps, but all other attachments can be found by contacting the Planning Department or visiting the website. If not found on the website the public may contact the department to view the official record.



Coos County Land Use Permit Application

SUBMIT TO COOS COUNTY PLANNING DEPT. AT 60 E. SECOND STREET OR MAIL TO: COOS COUNTY PLANNING 250 N. BAXTER, COQUILLE OR 97423. EMAIL PHONE: 541-396-7770

FILE NUMBER: 4 CU-21-053 Date Received: 8

This application shall be filled out electronically. If you need assistance please contact staff.

If the fee is not included the application will not be processed. (If payment is received on line a file number is required prior to submittal)

		I	AND INFO)RM	ATION		Towns The Mark Decision
A. Land	Owner(s)	Brad & Laura Sc	humacher				
Mailing addr		ocet Ave Bandon					
Phone: 971 2	35-2324		En	nail:	brschu@	frontie	er.com
Township: 29S	Range: 15W	Section:	¼ Section: C	1/16 B	Section:	Tax 402	lots:
Select	Select	Select	Select	Sele	ct		
Tax Account Tax Account	Number(s): Number(s)	R2895202	z	one:	Select Zo		ontrolled Development (CD)
B. Applic	cant(s) Same	as above					
			_				
Mailing addre	ess:						
Phone:							
	tant or Ager						
Mailing Addre	ess						
Phone #: _					Email:		
	e matronocer materiale as	Type of	Application	Requ	ested		
Text Amer Map - Rez		Administrative Hearings Body Variance - V	e Conditional U y Conditional U	Jse Re Jse Re	view - ACU view - HBC	Tu 📙	Land Division - P, SUB or PUD Family/Medical Hardship Dwelling Home Occupation/Cottage Industry
		Special	Districts and	l Serv	rices		
Water Service School Distr	33.55	Water			ge Dispos District: ^B		rpe: On-Site Septic RFPD
supplemental	application	ment application of please contact state at land use atto	ff. Staff is r	ot ab	le to prov	ssistar ide le	nce with the application or gal advice. If you need help
Any property	information	may be obtained	from a tax s	tatem	ent or can	be fo	ound on the County Assessor's
		links: Map Inforr					

Coos County Land Use Application - Page 1

D. ATTACHED WRITTEN STATEMENT. With all land use applications, the "burden of proof" is on the applicant. It is important that you provide information that clearly describes the nature of the request and indicates how the proposal complies with all of the applicable criteria within the Coos County Zoning and Land Development Ordinance (CCZLDO). You must address each of the Ordinance criteria on a point-by-point basis in order for this application to be deemed complete. A planner will explain which sections of the Ordinance pertain to your specific request. The information described below is required at the time you submit your application. The processing of your application does not begin until the application is determined to be complete. An incomplete application will postpone the decision, or may result in denial of the request. Please mark the items below to ensure your submittal is complete.

Application Charle List: Places males off 11

rip	pheation Check List. Flease make off all steps as you complete them.
I.	A written statement of intent, attached to this application, with necessary supporting
	evidence which fully and factually describes the following:
	1. A complete explanation of how the request complies with the applicable provision
	and criteria in the Zoning Ordinance. A planner will explain which sections of the
	Ordinance pertain to your specific request. You must address each of the Ordinance
	criteria on a point-by-point basis in order for this application to be deemed complete.
	2. A description of the property in question, including, but not limited to the following
	size, vegetation, crops grown, access, existing buildings, topography, etc.
	3. A complete description of the request, including any new structures proposed.
	4. If applicable, documentation from sewer and water district showing availability for
	connection.
II.	A plot plan (map) of the property. Please indicate the following on your plot plan:
	1. Location of all existing and proposed buildings and structures
	2. Existing County Road, public right-of-way or other means of legal access
	3. Location of any existing septic systems and designated repair areas
	4. Limits of 100-year floodplain elevation (if applicable)
	5. Vegetation on the property
	6. Location of any outstanding physical features
	7. /Location and description (paved, gravel, etc.) of vehicular access to the dwelling
	7. Location and description (paved, gravel, etc.) of vehicular access to the dwelling location
III.	
	A copy of the current deed, including the legal description, of the subject property. Copies may be obtained at the Coos County Clerk's Office.
	copies may be obtained at the coos country Clerk's Office.

I certify that this application and its related documents are accurate to the best of my knowledge. I am aware that there is an appeal period following the date of the Planning Director's decision on this land use action. I understand that the signature on this application authorizes representatives of the Coos County Planning Department to enter upon the subject property to gather information pertinent to this request. If the application is signed by an agent, the owner's written authorization must be attached.

If this application is refereed directly to a hearings officer or hearings body I understand that I am obligated to pay the additional fees incurred as part of the conditions of approval. I understand that I/we are not acting on the county's behalf and any fee that is a result of complying with any conditions of approval is the applicants/property owner responsibility. I understand that conditions of approval are required to be complied with at all time and an violation of such conditions may result in a revocation of this permit. Signatures required below for application processing.

Paure Schumacher 10/1/2021

Coos County Land Use Application - Page 2

DR-21-116

ACCESS INFORMATION

The Coos County Road Department will be reviewing your proposal for safe access, driveway, road, and parking standards. There is a fee for this service. If you have questions about these services please contact the Road Department at 541-396-7660.

Property Address: 54317 Rohrer Rd

Type of Access: Public Road Name of Access: Venus

Is this property in the Urban Growth Boundary? Yes
Is a new road created as part of this request? No

Required parking spaces are based on the use of the property. If this is for a residential use two spaces are required. Any other use will require a separate parking plan submitted that is required to have the following items:

- Current utilities and proposed utilities;
- Roadmaster may require drawings and specs from the Oregon Standards Specification Manual (OSSC) (current edition).
- The location and design of bicycle and pedestrian facilities shall be indicated on the site plan if this is a parking plan;
- Location of existing and proposed access point(s) on both sides of the road where applicable;
- Pedestrian access and circulation will be required if applicable. Internal pedestrian circulation shall be provided in new commercial, office, and multi-family residential developments through buildings, construction of walkways, landscaping, accessways, or similar techniques;
- All plans (industrial and commercial) shall clearly show how the internal pedestrian and bicycle facilities of the site connect with external existing or planned facilities or systems;
- Distances to neighboring constructed access points, median openings (where applicable), traffic signals (where applicable), intersections, and other transportation features on both sides of the property;
- Number and direction of lanes to be constructed on the road plus striping plans;
- All planned transportation features (such as sidewalks, bikeways, auxiliary lanes, signals, etc.);
- · Parking and internal circulation plans including walkways and bikeways, in UGB's and UUC's.

Additional requirements that may apply depending on size of proposed development.

- a. Traffic Study completed by a registered traffic engineer.
- b. Access Analysis completed by a registered traffic engineer
- c. Sight Distance Certification from a registered traffic engineer.

Regulations regarding roads, driveways, access and parking standards can be found in Coos County Zoning and Land Development Ordinance (CCZLDO) Article 7.

By signing the application I am authorizing Coos County Roadmaster or designee to enter the property to determine compliance with Access, Parking, driveway and Road Standards. Inspections should be made by calling the Road Department at 541-396-7660

Roadmaster or designee:	Coos County Road De	partment Use On	aly	
Driveway Parking File Number: DR-21-	Access Bonded	Date:	Receipt #	

	AD-21 000
ADDRESS APPLICATION INFORMATION	N FILE NUMBER: AD-
ADDRESS OF DRIVEWAY #1 CLOSEST TO YOUR NEW DRIVEWAY: 57340 Venus Drive	
DISTANCE FROM DRIVEWAY #1 TO YOUR NEW DRIVEWAY: 300	Neighbor's Driveway #1
Is this driveway on the same side of the road as your Driveway: Select	Distance #1
ADDRESS OF DRIVEWAY #2 CLOSEST TO YOUR NEW DRIVEWAY: NA	Your New Driveway
DISTANCE FROM DRIVEWAY #2 TO YOUR NEW DRIVEWAY:	Neighbors
Is this driveway on the same side of the road as your Driveway: Select	Driveway #2 ∫
The distance information is important from your new drivewayou (doesn't matter which side of the road) and what the address information is important to include in the formula used to calc	esses are to those two driveways. This
Staff from the County Road Department will place the stake at placed, it must not be moved. If your stake is removed or dark	nd once the driveway stake has been maged you may purchase replacements.
Additional Notes or directions:	
☐ This application is not required.	

Coos County Land Use Application - Page 4

SANITATION INFORMATION	SA	NIT	TIC	ON	IN	FOR	AMS	TION
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If this is a request for a recreational, commercial, industrial, vacation rental, manufactured home park, mass or small gathering Coos Health and Wellness, Environmental Health Staff will be reviewing the proposal to ensure the use meets environmental health standards for sanitation and water requirements to serve the facility. If the proposal indicates that you are using a community water system a review may be required. A fee is charged for this service and shall be submitted with the application \$83.00. If you have questions about regulations regarding environmental health services please call 541-266-6720. This form is required to be signed off for any type of subdivision, recreational, commercial, industrial, vacation rental, manufactured home park, mass or small gathering.

Barrier	5.					
Water	Service Type: Shared/Community Sytem	Sewage Disposal Type: On-site septic				
	check if this request is for industrial, commercial owing questions:	, recreational or home base business use and complete				
•	How many employees/vendors/patrons, total, w	vill be on site?				
۰	Will food be offered as part of the an on-site but	siness?				
•	*****					
•	What will be the hours of operation of the busin	ness?				
Please o	check if the request is for a land division.					
Coos C	County Environmental Health Use Only:					
Staff R	eviewing Application:					
Staff Si	ignature:					
☐ This	application is found to be in compliance and will re-	quire no additional inspections				
	application is found to be in compliance but will rec	State of the state				
This	application will require inspection prior to determin	ing initial compliance. The applicant shall contact				
Coos He	ealth and Wellness, Environmental Heath Division to	make an appointment.				
Additio	nal Comments:					

Coos County Land Use Application - Page 5

Brad & Laura Schumacher 623 Avocet Ave Bandon OR 97411

Coos County Planning Dept. 250 N. Baxter Coquille OR 97423

Aug 17, 2021

Please find attached the following: Compliance determination form; Conditions of Approval City of Bandon; Geotechnical Site Assessment Report and a check for the necessary fees. Please note that our home address on most of the documentation listed as Clackamas will change to the Bandon address effective September 1st.

Also of note is the site address listed on all the documents is 54317 Rohrer Ave. This is the address the city Bandon had and all other documentation was used in the past for this lot. Evidently, this is not the address that is presently in your records. To simplify matters I would ask if possible this become the official address. This would eliminate the need for the city documents and title being changed to reflect the new address. I realize that we will access the lot from the side street of Venus, but do no believe that is an issue as many properties are accessed from different streets than their addresses. It is basically a small square corner lot with the fire hydrant on the southwest corner making house visible and easily accessible from either street for emergency personnel.

Thank you for your consideration in this mater. If you need any additional documentation please let me know..

We are looking forward to hearing from you soon.

Yours sincerely,

Brad Schumacher



PROPERTY OWNER:

Schumacher, Brad 11550 SE Highland Loop, Clackamas, OR 97015

REPRESENTATIVE: Schumacher, Brad 11550 SE Highland Loop, Clackamas, OR 97015 971-235-2324

PROJECT: New Single-Family Dwelling

CONDITIONS OF APPROVAL

PLANNING ACTION NUMBER: 21-083

THE PROPERTY OWNER AND/OR
THE REPRESENTATIVE IS
RESPONSIBLE FOR ENSURING
THAT ALL REQUIRED
INSPECTIONS ARE REQUESTED,
COMPLETED, AND APPROVED

Approval is subject, but not limited to, the following conditions and attachments:

GENERAL

- 1. Approval of the plan is based on information submitted by the applicant. No other approvals are expressed or implied. Any changes to the approved plan shall be submitted, in writing, and approved by the Planning Department prior to implementation. *If changes are made to any plans or documents used to make a decision, those changes must be clearly denoted with written documentation describing the need for the change. No change is considered approved unless written confirmation from the City approving the proposed change is received by the applicant or the property owner.
- 2. All state, federal, City, and County permits associated with this approval shall be obtained by the applicant prior to construction.
 It is the property owner/applicant's responsibility to determine if additional permits from other agencies will be required. If additional permits are required, it is the responsibility of the property owner/applicant to obtain those permits.
- 3. As-built plans shall be submitted to the City of Bandon upon completion of construction showing all components of the project and utility connections as built.

Electric:

- 1) 3" conduit is required for all buildings over 2000 square feet or for 400 amp service of any size.
- 2) The meter shall be installed at curbside on a post, or on the structure, facing the vehicular access and no more than 5 feet down the side of the structure nearest

21-083 54317 Rohrer Rd [1]

the vehicular access.

- 3) The electric meter shall be stainless steel and shall not be enclosed.
- 4) Electric meter must be accessible at all times, without locked doors, gates, enclosures, boxes or covers which deny access, including the keeping of animals in such a manner that access is denied or hazardous.

Public Works:

 Repair costs of any damage to City property, or right-of-way, as a result of use during construction shall be the responsibility of the property owner and/or applicant.

WITH DEVELOPMENT OF THE SITE:

Any changes to the approved plan shall be submitted and approved by the Planning
Department as an Amendment to the approved plan.
 *If changes are made to any plans or documents used to make a decision, those changes must
be clearly denoted with written documentation describing the need for the change. No change is
considered approved unless written confirmation from the City approving the proposed change
is received by the applicant or the property owner.

2. Any changes to the approved preparation, construction or final stages of the approved plan shall be submitted, in writing, and approved by the Planning Department prior to implementation.

*If changes are made to any plans or documents used to make a decision, those changes must be clearly denoted with written documentation describing the need for the change. No change is considered approved unless written confirmation from the City approving the proposed change is received by the applicant or the property owner.

PRIOR TO CERTIFICATE OF OCCUPANCY

- 1. Certificate of Occupancy for new construction or change of use must be issued by the City of Bandon prior to occupancy of the structure.
- 2. Certificate of Occupancy shall not be issued until conformance of all conditions of approval have been verified.
- Certificate of Occupancy will not be issued until repairs, as required by the City, to the City infrastructure or right-of-way is completed and acceptable by the Public Works Department.
- 4. Certificate of Occupancy will not be issued until all meter placements have been approved, in writing, by a representative of the Electric Department.

OTHER:

 All utilities are considered temporary until a Certificate of Occupancy has been obtained through the City.

*Temporary services may be discontinued after a six-month period, unless special conditions warrant. It is the applicant's responsibility to submit, in writing, request for extension of temporary services.

- 2. Applicant must adhere to all conditions and requirements set out by the Coquille Indian Tribe, State Historic Preservation Office (SHPO) or both if required.
- 3. Property owner(s) shall sign and record with the Coos County Clerk the City of Bandon Service and Annexation Agreement Waiver of Remonstrance, on forms furnished by the City of Bandon. All costs associated with such agreement are the responsibility of the property owner.

This Zoning Compliance expires one (1) year from the date of signature.

Failure of the "as-built" project to fully comply with the approved submitted plans, as determined by an on-site inspection by the City Code Enforcement Officer or other City designee, may result in citation under the Bandon Municipal Code (BMC), Section 17.04.040, and any other applicable BMC that may apply. No further approvals may be issued until the City has determined the final design plans and specifications comply with the submitted construction plans for which this Zoning Compliance has been granted.

These approval conditions must accompany any further approval requests to other agencies or governing bodies.

Signature of Approval:	Dana Nichols	8/10/2021
oignature of Approva.	Dana Nichols, Planning Manager	Date

Planning File Check List

ZONING COMPLIANCE NO.: 21-083

ADDRESS:

54317 Rohrer Road

ADMINISTRATION/PLANNING

21-083	Application	8/10/2021	Planning Dept Signature of Approval		
7/21/2021	Request for Comments	8/10/2021	Conditions of Approval		
		8/10/2021	Location & Inspection Card Created		
	Notified Tribe	7/15/2021	Tribe Comment		
	New Address Notification Given				
	FINA	NCE			
8/11/2021 - check sent	SDC Amount \$3,080 (storm drainage)21-083	Pd. In 1996	SDC Paid in Full Rec # (for stm drn)		
	SDC Lien Card Created		OR P. A. Signed (check for recording rec'd)		
	SDC Deferral Agreement Signed Utility Deferred (circle utility) Water Sewer Street				
	SDC Lien Card given to Finance Dept.				
7/29/2021	OUTSIDE: Anti-Remonstrance				
	PUBLIC	WORKS			
	#1 Lot Drainage	1	#4 Sewer Lateral Inspection		
	#2 Culvert Inspection		#5 Sewer Clean Out Inspection		
	#3 Water Shut Off Control Valve @ Meter		#6 Driveway Inspection		
	CODE ENFO	DRCEMENT			
	Inspection # 1		Inspection # 3		
-70	Inspection # 2		Final Inspection Checklist		
	ADMINISTRA	TION - FINAL			
	Certificate of Occupancy or Letter of Compliance sent		File sent to Planning for Filing		

CONTRACTOR:

Schumacher, Brad

PHONE:

971-235-2324

EMAIL:

brschu@frontier.com

CITY OF BANDON ZONING COMPLIANCE JOB LOCATION & INSPECTION CARD

21-083
ZONING COMPLIANCE NUMBER

8/10/2021 DATE OF APPROVAL

54317 Rohrer Road JOB ADDRESS

Inspection # 1: Compliance with approved site plan - Inspection required prior to

pouring foundation footings.
Inspection # 2: Compliance with approved floor plans and elevation drawings - Inspection required after roof trusses are placed, before any cover is added.
Inspection # 3: Compliance with approved plans for drainage, utility service, off-street parking, any required street improvements, authorized land use and other City codes Inspection required upon completion of structure and related site work, prior to

It is the responsibility of the owner/contractor to post this card in a conspicuous location at the job site. Card shall remain posted until a final inspection by the City of Bandon.

be allowed until a final inspection has been approved.

occupancy. All utilities are considered temporary, and no permanent services will



Planning Permit Application

CITY OF BANDON PLANNING P.O. BOX 67 5S5 HWY 101 BANDON, OR 97411 P:(541) 347-2437 F:(541)347-1415

		ALAST MANAGEMENT AND	Permit Number: 21-073	
APPLICATION TYPE (select all that apply)				
□ Annexation*	□ Land Use Review*		□ Subdivision*	
☐ Certificate of Appropriateness (CoA)*	□ Partition*		□ Vacation*	
☐ Comprehensive Plan or Zone Amendment*	D Plan Review (PR)		□ Variance*	
□ Conditional Use Permit (CUP)*	Planned Unit Development	nent (PUD)*	E Zoning Compliance (ZC) for W	
□ Floodplain Development*	☐ Property Line Adjustme	ent (PLA)*	□ Other*	
* Pre-application required		Total Fees: \$	750	
I. PROJECT LOCATION				
Street Address: 54317 Rohrer RD Bandon,				
Map Number / Tax Lot(s): 29S 15W 01BC	CB / 12=15	Zone: CD-10	Floodplain: □Yes ■No	
II. APPLICANT'S INFORMATION (applicant is t	the primary party respon	sible for developm	nent)	
Applicant's Name: Brad Schumac		Phone: 971 235-23		
Brad Schumac	her	E-Mail: brschu@fre		
		L-Ivian. Discha@in	onder.com	
Applicant's Mailing Address: 11550 SE Hi	ghland Loop Clacks	amas, OR 970	015	
III. PROPERTY OWNER'S INFORMATION				
Property Owner's Name: Above		Phone:		
Above		E-mail:		
Mailing Address:				
IV. OTHER INFORMATION (APPLICANT'S REP.	SURVEYOR, ENGINEER,	ARCHITECT, LAND	SCAPE ARCHITECT, ETC)	
	ame: Jay L. Mills			
Email: jaymills.architect@gmail.com		Phone: 541 54	40-1728	
Total Control of the	ame: Eric Oberbeck			
Email: info@cascadiageoservices.com		Phone: 541 33	2-0433	
	ame: Walter White			
Email: wwhite@shn-engr.com	and the state of t	Phone: 541 2	66-9890	
V. PROJECT DESCRIPTION				
Use: ■Residential □Commercial	Other			
*Please attach a short narrative that describe	es your proposed project	and indicates the	e proposed use.	
Two story single family residence. Whe	en completed it will be	come our prim	ary residence.	
		•	•	
			1	
VI. SITE PLAN: Please see our "How to Create	a Cita Dian" and samela	ita nian da	• 6	
how to create your site plan. Plans must be d	rawn to scale and may be	submitted electr	onically; printed copies must be	

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submitted on 11x17, ledger size paper (larger or smaller paper sizes will not be accepted).

VII. PROPERTY	OWNER	SIGNATURE/	AUTHORIZATION
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- I have read the application and the attached documentation and I understand that my application may be delayed or deemed incomplete
 if I have provided insufficient information and documentation to allow for approval.
- I certify that the information provided in this application, including all submittals and attachments, is true and correct to the best of my knowledge.
- I understand and agree that all required inspections will be requested 2 business days in advance, and it is the applicant's responsibility to
 ensure required inspections have been requested, completed, and approved.
- I authorize the City of Bandon or its acting agent, to enter onto the subject property, as described in section "I. Project location".
- I authorize the following party(s) to act as applicant in regard to the attached application for the subject property described above.

X Applicant's Signature: Brad X	Date: 6/30/2021			
Property owner's signature required if applicant is not the property owner				
X Property Owner's Signature:	Date:			

Development Disclosure

The City of Bandon is obligated to report all ground disturbances within the City of Bandon to the Coquille Indian Tribe. Property owners and applicants must adhere to all conditions and requirements set out by the Coquille Indian Tribe, State Historic Preservation Office (SHPO) or both if required. Please be aware that state statutes and federal law govern how archaeological sites are to be managed. ORS 97.745 prohibits the willful removal, mutilation, defacing, injury, or destruction of any cairn, burial, human remains, funerary objects, or objects of cultural patrimony of a Native Indian. ORS 358.920 prohibits excavation, injury, destruction, or alteration of an archaeological site or object, or removal of an archaeological object from public or private lands.

It is the property owner and applicant's responsibility to determine if additional permits from other agencies will be required, including but not limited to: Oregon State Building Codes, Oregon State Department of Environmental Quality, FEMA, Oregon State Fish and Wildlife and U.S. Fish and Wildlife. If additional permits are required, it is the responsibility of the property owner/applicant to obtain such permits and comply with their conditions of approval.

It is the property owner/applicant's responsibility to provide the City of Bandon <u>all necessary legal documentation</u> related to the property, including but not limited to: proof of ownership, receipts, deed restrictions, vacation records, easement records, etc.

I acknowledge, understand, and agree, that all relevant documentation will be provided Bandon, and that all required permits and consent will be obtained prior to the start of call conditions of approval adhered to.	
X Minh Leek	6/30/2021
Property Owner's Signature (Property owner's signature required if applicant is not the property owner)	Date
X	
Applicant's Signature	Date
Staff's Signature of Intake:	6-30-21
Staff's Signature of Completeness: Date:	7.29.21
Staff's Signature of Approval: Date:_	8.10.21
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UD 08/27/18

Submittal Requirements:

- 1. Completed Pre-Application with summary notes from the Planning Department (if applicable)
- 2. Complete Planning Permit application (including fees and applicable property records)
- Signed Development Disclosure
- 4. Completed Submittal Requirement sheet

- E Setbacks on all sides of the property (must be marked from the closest structure to the property line)
- E Property line must be clearly marked on all sides if property corners cannot be determined a survey will be required.
- E Location of all buildings and proposed building or addition
- E Location of all mechanical equipment and proposed equipment (HVAC, propane tanks and enclosures these cannot be located in the setback area)
- Fences, patios, sidewalks, (if being built along with the construction of a building)
- Decks, steps, porches (these cannot be located in the setback)
- All off-street parking
- E Location of the front entrance and all exterior doorways
- Location & material of the driveway
- Direction of roof drainage
- Drywell, if required (must be engineered)
- E Location of electric meter base (on the front or no farther than 5 feet down the side)
- Proposed water and sewer line locations
- 🗷 Water shut off valve must be located beside the water meter box; 6" sewer clean out must be at the property line
- Square footage of the lot, structures including garage (1st & 2nd floors noted separately), and percentage of impermeable surface. (Impermeable surfaces must be shown on the site plan)

Design Feature Requirements (Please check your selections)

Homes in the R-1 and R-2 zones require a minimum of 6 (at least 3 on the face of the home) Homes in the CD zones require a minimum of 8 (at least 4 on the face of the home)

- Roof pitch at or greater than 3/12
- Covered porch (minimum of 25 square feet)
- ☐ Tile or Architectural grade shingles (not composition shingle)
- E Off set of the building face or roof (at least one foot, minimum of 2 feet in cd-1 & cd-2 zones)
- Eaves with a minimum projection of six (6) inches
- ☐ Horizontal lap siding, cedar shake or shingle on 100% of the exterior
- Recessed entry area (minimum depth of three feet)
- Garage (constructed with exterior finish materials matching the residence)
- Combination of cedar shake and shingle siding or lap siding with stone

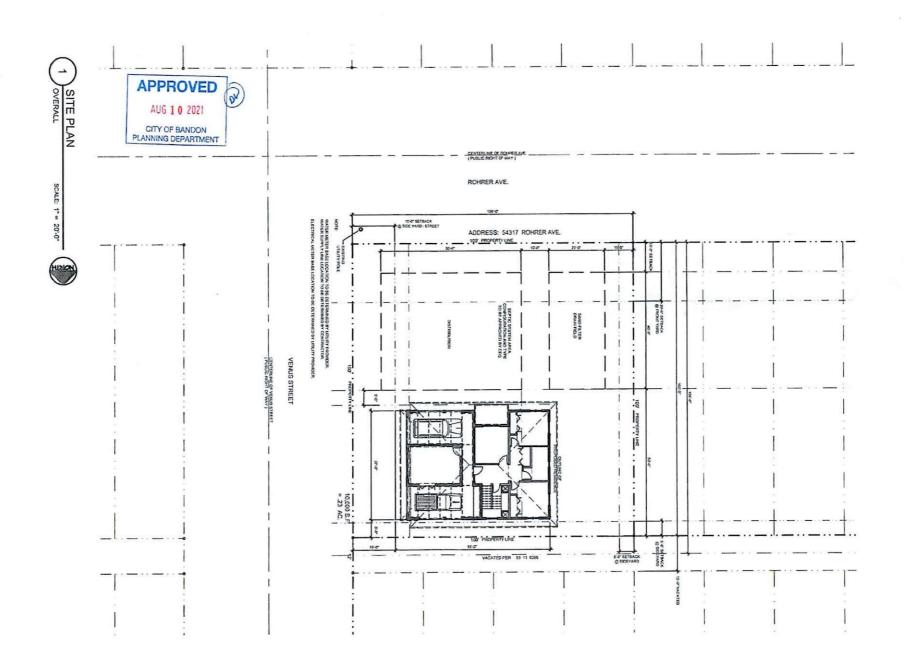
- □ Bay windows
- ☐ Cupolas
- Hip roof
- Pillars or posts
- ☐ Mullioned windows
- ☐ Window shutters☐ Clerestory windows
- □ Dormers
- ☐ Gables

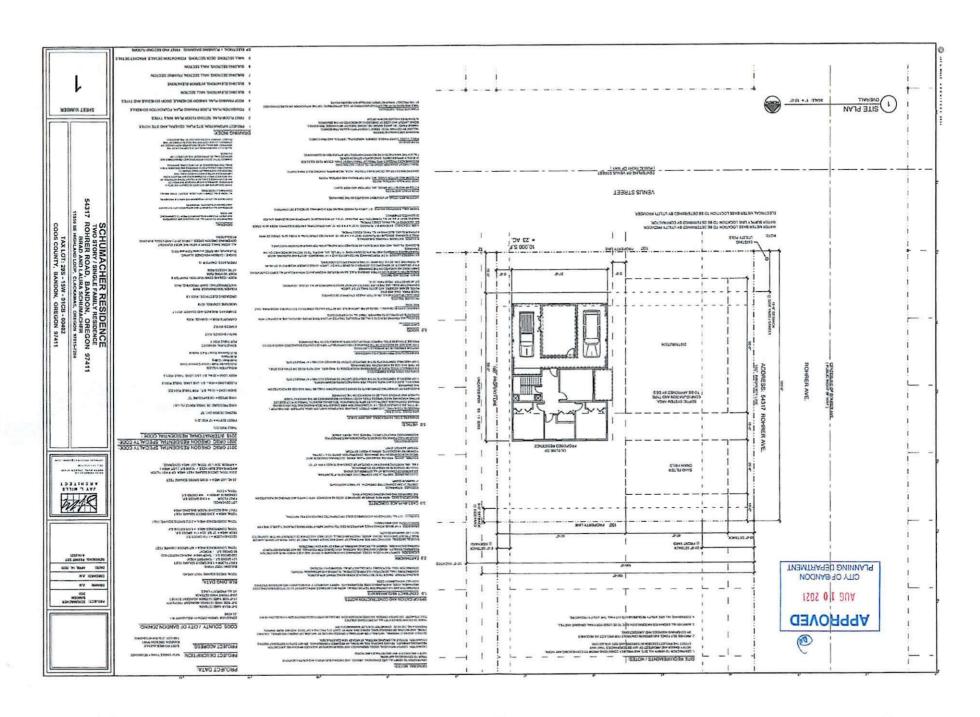
Additional Required Plans

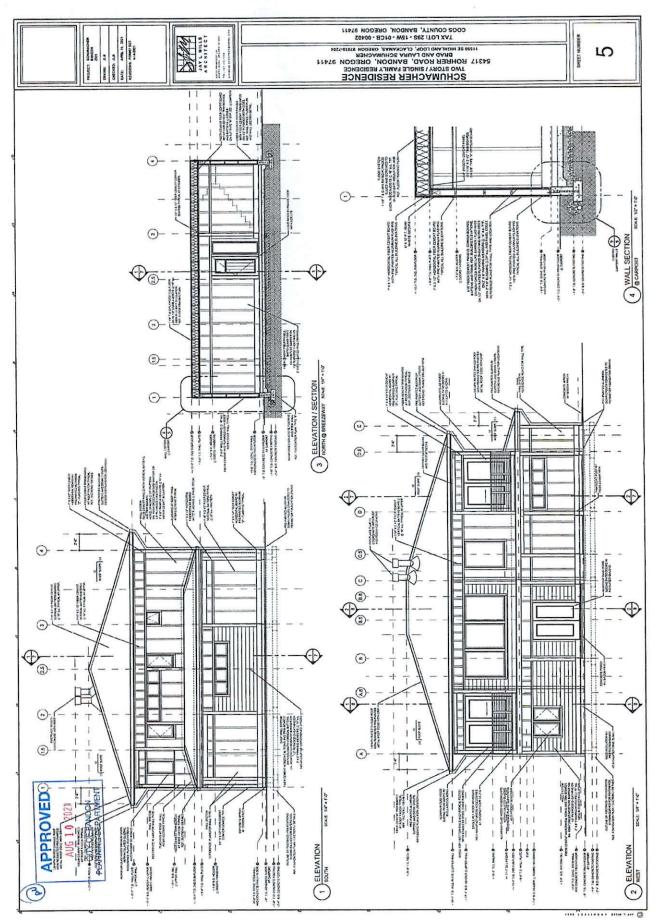
- Floor plan Including garage (before and after drawings must be included for remodel/additions)
- Elevation of all structures All sides must show direction, dimensions, height, design features and depth of eaves/gutters.
- Grade of property and/or grading plan
- Foundation plan for all construction (for a manufactured home the slab & runner system)
- E DEQ septic system permit & plan drawings (if applicable)
- Geotechnical report (if applicable)
- ☐ Drainage plan (with engineered drawings if applicable)
- Engineered foundation (if applicable)

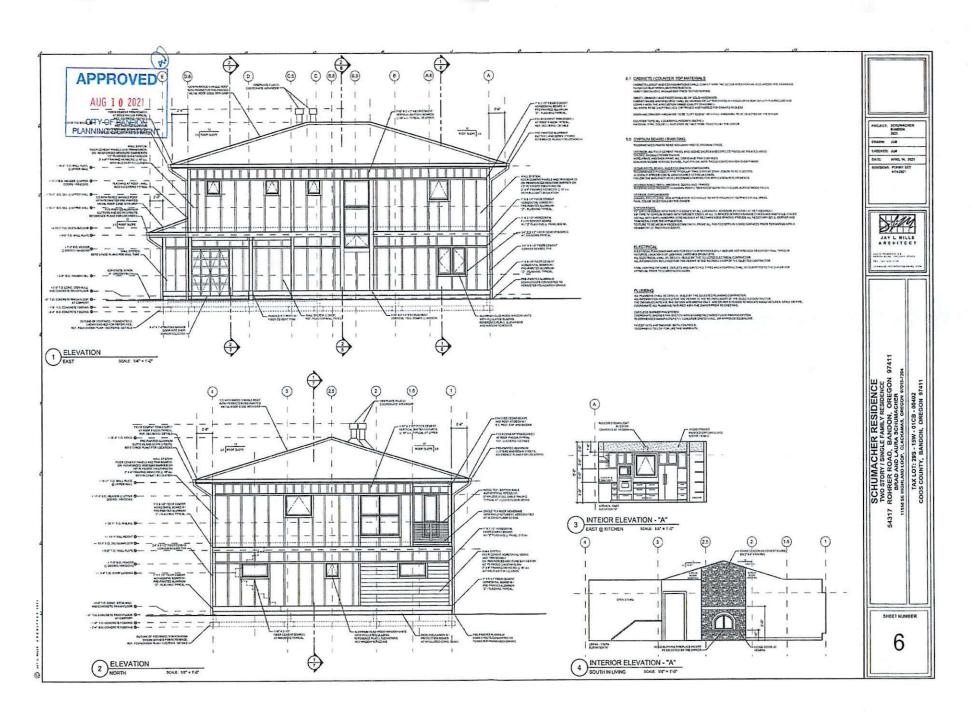
YOUR APPLICATION <u>WILL</u> BE DEEMED INCOMPLETE IF YOUR SITE PLAN FAILS TO LIST ALL REQUIRED INFORMATION, INCLUDING DESIGN FEATURE REQUIREMENTS WHICH MUST ALSO BE SHOWN IN YOUR SUBMITTED ELEVATION PLANS.

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After Recording Return To: City of Bandon, Oregon P.O. Box 67 Bandon, Oregon 97411

SERVICE AND ANNEXATION AGREEMENT WAIVER OF REMONSTRANCE

PARTIES: The City of Bandon, Oregon, hereinafter referred to as "City" and Bradley L. Schumacher and Laura E. Schumacher, hereinafter referred to as "Owner"

WHEREAS:

A. Owner is the owner of real property, (hereinafter referred to as Property) more particularly described as:

Lots 12 through 15, Inclusive, Block 3, Sunset City, Coos County, OR. Together with that portion of the vacated alley vacated by Vacation #508, recorded November 4, 1993, bearing Instrument No. 93-11-0265, which would inure thereto by reason of the vacation thereof.

Assessor's Map & Tax Lot Number: 28S-15W-25CA TL4700

B. Owner has made application to the City to receive City water service, and or City sewer service, or has otherwise elected to enter into this agreement, which makes it subject to City Ordinances and requires payment of City fees. The application was reviewed and approved by the City, subject to Owner agreeing to the terms and conditions contained herein;

NOW, THEREFORE, based on the above, the Parties agree to the following terms and conditions:

- TERM OF AGREEMENT. This agreement shall be effective from the date of execution by all
 Parties and is binding until such time as the property is annexed to the City. After annexation, all
 conditions relative to payment for water service shall remain in full force and effect except that
 payment of property taxes shall displace the separate requirement for payment of Public Safety
 Service Fees.
- SUPPLY OF CITY SERVICES. If the Property is not within the City limits, upon application for
 connection to the City's water system or sewer system, the City shall provide Owner with said
 water or sewer service and with Public Safety Services per the conditions set forthherein.
- 3. CITY CODES AND ORDINANCES. From and after the date this agreement is executed by all Parties, the Property and all structures or improvements hereafter in or thereupon shall be subject to and shall comply with all City Codes and Ordinances including but not limited to the City Building, Development, and Utility standards and procedures.
- 4. SCOPE OF AGREEMENT. This agreement covers one (1) single family residence. This agreement does not cover any subdivision or partition of the property, creation of an accessory dwelling unit or the use of the property as a vacation rental.
- 5. EXAMINATIONS AND INSPECTIONS. Owner grants City and any of its authorized representatives the right to go upon the Property at all reasonable times to make such examinations and inspections as are reasonably necessary in City's opinion to inspect connections to the City sewer, water, and storm drain facilities and determine that regulations relative to utility services are being complied with by the Owner or occupant. City shall make reasonable efforts to contact the Owner or a representative prior to entrance of any building unless such a delay would represent a threat to the public health or safety.
- 6. ANNEXATION. If the Property is not currently annexed to the City, Owner hereby requests and grants continuing, irrevocable consent to annexation of the Property to the City and acknowledges same is a continuing petition to the City for annexation.
- 7. WAIVER. Owner hereby waives all rights under ORS 222.173, which limits the duration of the annexation agreement to one year. Owner intends for this agreement to be in effect until the Property is annexed. Owner's consent and waiver are continuing and are binding on the heirs, executors, administrators, personal representatives, successors and assigns of the Owner, including but not limited to lessors, lessees, renters and any other occupants of the Property. See also Addendum "A" which is attached to and incorporated herein.
- 8. DENIAL OF ANNEXATION TERMINATION OF WATER AND SEWER SERVICE. If at any time the City is denied the ability to annex by the actions of the Owner or occupant, or the Owner or occupant fails or refuses to pay fees required under this agreement, or direct fees or charges for water or sewer service, then it is understood and agreed, the City has the right, authority, and permission to terminate the water and sewer service to the Property upon 30 days prior notice posted on the Property. The termination of water and sewer services to the Property shall not affect

Standard UGB Agreement Form 1 - Service and Annexation Agreement

Page 1 of 2

the other provisions of this agreement (including continual consent to annexation), which shall remain in full force and effect, and shall not affect the City's right to collect delinquent fees and charges.

- 9. WAIVER OF REMONSTRANCE AGAINST LOCAL IMPROVEMENT DISTRICT(S) The Owner(s) agree to waive their right to participate in a remonstrance the formation of a future local improvement district (LID) for public improvements in their local area. This agreement is specifically not a waiver of Owner's rights to participate at the annexation hearing or any other hearings. Owners' right to participate by testifying either orally or in writing are specifically not waived by this agreement. The parties understand and agree that the effect of this agreement is that any objections by Owner(s) will not be counted as a remonstrance for the purpose of determining the number or percentage of property owners objecting to an annexation or formation of a LID.
- 10. PUBLIC IMPROVEMENTS. This agreement, in referring to "public improvements", is meant to include, but not be limited to, streets, curbs and gutters, drainage and storm drains, water, sewer, and other utilities, sidewalks and improvements to each of the listed items.
- 11. BINDING AFFECT OF AGREEMENT. This agreement is binding upon the heirs, executors, administrators, personal representatives, successors and assigns of Owner, including but not limited to lessors, lessees, renters and any other occupants of the Property. If there is more than one owner, each owner is jointly and severally bound hereby. Owner shall assist City in the enforcement of any and all of the conditions of this agreement upon persons bound hereby. Owner agrees to provide renters, lessees, and other long term occupants of the Property with a copy of this agreement to ensure said occupants have a full understanding of the termination of water, sewer, and public safety services noted in Section 12 upon failure to pay (whether by Owner or occupant) as required by this agreement. Failure to notify does not affect the City's rights to terminate service.
- ENFORCEABILITY. If any of the provisions contained in this agreement are held unconstitutional or unenforceable, the enforceability of the remaining provisions shall not be impaired.

impaired.	only of the remaining provisions shall not be
IN WITNESS WHEREOF, the Parties hereto, on the dat duly authorized agents and affirm the responsibilities and	tes indicated, set their hands by and through their covenants contained herein.
OWNER (S): Bradley J. Schumacher	Laura E. Schumacher
STATE OF OREGON)	Laura E. Schumacher
County of MULTINAH) ss.	
This Service and Annexation Agreement was signed before 2021 by Bradley L. Schum acknowledged as their Voluntary Act and Deed.	re me on theday of nacher and Laura E. Schumacher was
IN WITNESS WHEREOF, I set my hand and seal hereto	on this same date.
Notary Public	
My Commission Expires:	CHRISTOPHER GEORGE BROWN NOTARY PUBLIC - OREGON COMMISSION NO. 1004878 MY COMMISSION POTOBER 15, 2024
United Deny Bon	
CITY OF BANDON by Dana Nichols, Planning Manage	г
40MD	ate 8-10-21
Attest: Denise Russell, City Recorder	
Derise Lussell 1	Date 8-10-21
\sim	

Standard UGB Agreement Form 1 - Service and Annexation Agreement

ADDENDUM "A" * WAIVER OF ANNEXATION LIMITATION * RE: SERVICE AND ANNEXATION AGREEMENT

The below listed person(s) or corporation(s) owns Property which is the subject of a Service and Annexation Agreement, which agreement contains a consent and request for annexation. Owner hereby waives ORS 222.173 which limits the duration of the annexation agreement to one year. The intent of this waiver is that the agreement to annex is to be in effect until the Property is officially annexed. Owner's consent and waiver are continuing and are binding on the heirs, executors, administrators, personal representatives, successors and assigns of the Owner, including but not limited to lessors, lessees, renters and any other occupants of the Property. Owner understands the City generally desires to annex property within one year of signing an annexation agreement, but also understands annexation may be delayed based on applicable elections and upon determinations that the annexation should be delayed. Owner does not object to any such delay.

WE THE UNDERSIGNED have read and agree to the terms contained in this Waiver.

OWNER (S): Bradley L. Schumacher (PRINT NAME)	Ruly S. Schumener
Laura E. Schumacher (PRINT NAME)	Oquru E. Schumalnus (SIGNATURE)
STATE OF CREGON) County of multipown) ss. This Addendum "A" was signed before me on the	day of July
2021 by Bradley L. Schumacher and Laura E. Schumacher and Deed.)
IN WITNESS WHEREOF, I set my hand and seal hereto o	n this same date.
Notary Public	
Mittakn Dery Bru-	OFFICIAL SEAL CHRISTOPHER GEORGE BROWN NOTARY PUBLIC - OREGON COMMISSION NO. 1004878
My Commission Expires:	MY COMMISSION EXPIRES OCTOBER 15, 2024

WAIVER ACKNOWLEDGED AND ACCEPTED ON BEHALF OF THE CITY OF BANDON

BY: Dana Nichols, Planning Manager



COQUILLE INDIAN TRIBE

3050 Tremont Ave. North Bend, OR 97459 Telephone: (541) 756-0904 ~ Fax: (541) 756-0847 www.coquilletribe.org

July 15, 2021

City of Bandon Planning Department P.O. Box 67 Bandon, Oregon 97411

Re: 21-083

Project location: 54317 Rohrer Rd, Bandon, OR 97411

Thank you for the opportunity to comment on the proposal to construct a new single-family dwelling at the above referenced location. Our records show known cultural resources within extreme proximity to the project area.

Due to the proximity to known cultural resources, we request that the landowner and/or contractor contact our office at (541) 808-5554 (Kassandra Rippee, Archaeologist/THPO) to schedule a Cultural Resource Monitor to be on site during all ground-disturbing activities. Please schedule the monitor a minimum of 72-hours in advance of anticipated project start time.

Please be aware that state statutes and federal law governs how archaeological sites are to be managed. 43 CFR 10 applies on tribal and federal lands, federal projects, federal agencies, as well as to federal actions and federally funded (directly or indirectly) projects. ORS 97.745 prohibits the willful removal, mutilation, defacing, injury, or destruction of any cairn, burial, human remains, funerary objects, or objects of cultural patrimony of a Native Indian. ORS 358.920 prohibits excavation, injury, destruction, or alteration of an archaeological site or object, or removal of an archaeological object from public or *private lands*. If archaeological materials are discovered, uncovered, or disturbed on the property, we will discuss the appropriate actions with all necessary parties.

Thank you again and feel free to contact me if you have any questions.

Masi (thank you),

Todd Martin

Tribal Historic Preservation Specialist

CRT21274

EXHIBIT "D"



APPLICATION & COMMENTS F BANDON

P.O. BOX 67
BANDON, OREGON 97411
Public Service...We Take It Seriously

December 10,2020

Brad and Laura Schumacher 54317 Rohrer Ave Bandon, OR 97411

RE: Request for Water Service Outside Bandon City Limits for Coos County
Map Number 29.15.ICB Tax Lot 402 12-15, as shown on the attached.

Mr. and Mrs. Schumacher:

The City of Bandon is not obligated to provide city services outside of city limits, including the restoration of discontinued services or service to new or additional uses, and currently has a moratorium in place for new water connections out of town.

However, because you paid systems development charges before the moratorium and because a main line exists adjacent to the above-described property, one single residential water service will be made available to serve the existing parcel. This letter does not cover any future subdivision of the property, service to another property or service to any commercial use including but not limited to a vocational rental.

Service would be subject to all city policies and requirements in effect at the time of connection.

Before the property can be approved for actual connection to city water, the following will need to be completed:

- City zoning compliance review, including payment of cityfees.
- Service agreement including: consent to annexation waiver of remonstrance grant of easement
- Connections fees paid. (amounts depend on city zoning compliance review)

Connection fees will be determined upon completion of a zoning compliance review.

EXHIBIT "D"



P.O. BOX 67 BANDON, OREGON 97411 Public Service...We Take It Seriously

Let me know if you have any questions.

Respectfully,

Dan Chandler

City Manager/Director of Utilities

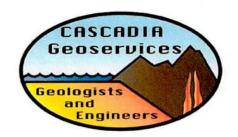
City of Bandon

DC:jh

Cascadia Geoservices, Inc.

190 6th Street PO Box 1026 Port Orford, Oregon 97465 D. 541-332-0433 C. 541-655-0021

Email: info@cascadiageoservices.com www: CascadiaGeoservices.com





Geotechnical Site Assessment Report

Rohrer Road Bandon, Oregon 97411 29\$15W01CB, Tax Lot 402

Prepared for:

Mr. Bradley Schumacher
11550 SE Highland Loop
Clackamas, Oregon 97015-7204
Sent via email: brschu@frontier.com

November 2, 2020 CGS Project No. 20073

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INTRODUCTION

Cascadia Geoservices, Inc. (CGS) is pleased to submit this Geotechnical Site Assessment Report for a portion of your Coos County, Oregon property (subject property or site) located on Rohrer Road in Bandon, Oregon (see Figure 1, Location Map). We understand that you are proposing to develop the site with a new residential structure. The site is within Coos County's Beach and Dune Area (Municipal Code Policy 5.10) which is discussed in this report under **Geologic Hazards**. This report summarizes our project understanding, site investigation, and subsurface explorations and provides conclusions and recommendations.

PROJECT UNDERSTANDING

Our understanding is based on email and telephone correspondence with you beginning on July 9, 2020. Our understanding is further based on a preliminary site visit on July 9, 2020, and on a second site visit on September 15, 2020, at which time a geologic reconnaissance of the site was conducted, and hand-augered borings were logged and sampled.

We understand that you are in the process of developing the site with a residential structure and are asking CGS to provide you with a site evaluation to determine the geologic suitability of the subject property to site a single-family residence. The site is approximately 0.24 acres and is currently undeveloped. And we understand that you have no plans for excavations over 4 feet deep on the site, such as for a basement. As of the date of this proposal, no site plan or architectural drawings have been provided to CGS.

SURFACE DESCRIPTION

The site is part of an elevated coastal marine terrace located within the Coast Range Physiographic Region of southern Oregon and is within an older, stabilized back dune area. The subject property is in a residential neighborhood and is part of the Sunset City Subdivision. The site is bordered to the west by Rohrer Road, to the south by Venus Drive, to the north by a developed residential lot, and to the east by undeveloped and vegetated sand dunes. At the nearest western point, the site is over 300 feet from an actively eroding sea cliff known locally as the Bandon Bluff. The site is not impacted by coastal erosion.

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The site is generally level to gently sloping to the northwest and is approximately 58 feet above mean sea level (AMSL). The site is predominantly covered in grass and has shore pines within the western portion.

Based on a review of historic aerial photographs which date back to May 1994, there have been no significant changes to the site.

Based on work done by others, ^{1,2} native soils at the site consist of sandy loam (8E—Bullards sandy loam, 30 to 50 percent slopes). Underlying these are surficial sediments of Quaternary Marine Terrace deposits (QMTD) which consist of semi-consolidated sand, silt, clay, and gravel. Under the marine terrace deposits are bedrock of the Upper Cretaceous to Jurassic meta-volcanic and meta-sedimentary rocks of the Mélange of Sixes River (MSR). Bedrock is exposed in the sea cliff west of the site but is not exposed in outcrop on the level building site or in our hand-augered borings. This assemblage of soils and rocks has been elevated during coastal uplift associated with the Cascadia Subduction Zone.

Based on our site observations, the subject property and surrounding area appeared stable at the time of our site visit. The vegetated sand dune to the east appears to be stable and as such will not impact the site.

SUBSURFACE EXPLORATIONS

In order to analyze the soils at the site, CGS excavated three hand-augered borings during our October 14, 2020 site visit. The borings were logged by an Oregon certified engineering geologist from our Port Orford, Oregon office. The borings were excavated to observe subsurface conditions across the site and to collect soil samples for later analysis. The locations of the borings are shown on Figure 2, Site Map. The borings were excavated to a depth of 5.0 feet below ground surface (bgs).

Our analysis of the subsurface conditions on the site is based on the soils encountered in our borings and is summarized as follows:

Topsoil: Encountered from 0.0 to 1.0-foot bgs in all three hand-augered borings. Consists of very-loose-to-loose, dark-brown, organic, silty fine sand: dry. We

¹ United States Department of Agriculture (USDA). Natural Resource Conservation Service Web Soil Survey, retrieved from https://websoilsurvey.sc.egov.usda.gov/

² Thomas J. Wiley, et al. (2014). Geologic map of the southern Oregon coast between Port Orford and Bandon, Curry, and Coos Counties, Oregon. Oregon Department of Geology and Mineral Industries (DOGAMI) Open-File Report O-14-0.

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interpret this to be topsoil (Bullards sandy loam). The thickness of the topsoil deepens towards the west.

Sands: Encountered from 1.0 foot to the depths of our borings at 5.0 feet bgs. Consists of loose (becoming medium-stiff from 3.0 to 4.0 feet bgs), dark-brown, silty fine sand. These soils were observed to be moderately cemented and dry. We infer that these are part of the surficial deposits which form the Quaternary Marine Terrace deposits.

A dynamic cone penetrometer (DCP)³ was used by CGS to test the relative consistency of the surficial soils in the borings. In general, the dark-brown silty fine sand encountered at 1.0-foot bgs was determined to be loose with a penetration rate (PR) of from 4 to 5. At from 3.0 to 4.0 feet bgs, these sands were determined to be medium-dense.

LABORATORY ANALYSIS

Selected samples collected from the borings were packaged in moisture-tight bags and transported to our laboratory in Coos Bay where they were classified in general accordance with the Unified Soil Classification System, Visual-Manual Procedure. In addition, water content (ASTM D698) and percent fines (-#200) (ASTM D1140) were determined for select samples. The results are summarized below in Table 1. The Lab Analysis Reports for the samples are provided at the end of this report as Attachment 2.

Table 1: Laboratory Analysis

Sample Number	Boring	Depth Feet (bgs)	Soil Description	Moisture Content %	Percent Fines (-#200)	USCS4
SS-1	HA-1	1.0	Fine Sand	2.2	0.4	SP
SS-2	HA-2	2.0	Fine Sand	3.0	1.0	SP
SS-3	НА-3	2.0	Fine Sand	1.6	1.2	SP

Our lab analysis indicates that the sands are well drained and poorly graded.

³ The dynamic cone penetrometer (DCP) test uses a 15 lb. steel mass falling 20 inches to strike an anvil to penetrate a 1.5-inch-diameter 45° (vertex angle) cone that has been seated in the bottom of a hand-augered hole. The penetrometer is used to determine a penetration resistance relationship with the standard penetration resistance of virgin soils. The penetration rate (PR) is the average number of blows needed to advance the cone a distance of 1 inch.

⁴ Unified Soil Classification System

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GROUNDWATER

Groundwater was not encountered in our borings. The soil samples collected in the borings were observed to be dry. Based on a review of well logs in the area, the primary groundwater aquifer is believed to be less than 50 feet bgs and to occur at the contact of QMTD and underlying bedrock.

We anticipate that groundwater levels will rise during periods of heavy rainfall. We also anticipate that surficial soils on the site may become saturated during winter months. We note that hydric plants and soils south of the building site indicate a seasonal shallow groundwater elevation. We also anticipate that limited perched groundwater may be present at or near the contact of the underlying surficial deposits.

GEOLOGIC HAZARDS

The subject property is located in an area that is highly influenced by regional seismicity due to the proximity to the Cascadia Subduction Zone (CSZ). Recent studies⁵ indicate that the southern CSZ has generated maximum credible earthquakes with a moment magnitude (Mm) of 8.7 or greater every 200 to 300 years. Time-dependent probabilities currently range up to 18 percent in 50 years for a southern segment rupture.

Seismic Design Criteria

Our seismic design parameters are based on Site Class D. The subject property is located in an area that is highly influenced by regional seismicity due to the proximity to the Cascadia Subduction Zone. Seismic design criteria, in accordance with the ASCE 7-10 (IBC-12), are summarized in Table 2 below.

Table 2: 2012/2015 International Building Code Recommended Seismic Provisions

Seismic Design Parameters	Short Period	1 Second	
Maximum Credible Earthquake Spectral Acceleration	S _s = 2.023 g	S ₁ = .969 g	
Site Class	D = Stiff Soil		
Site Coefficient	F _a = 1.2	F _v = null	
Adjusted Spectral Acceleration	S _{MS} = 2.428 g	S _{M1} = null g	

⁵ Goldfinger, C., et al. (2012). Turbidite Event History—Methods and Implications for Holocene Paleoseismicity of the Cascadia Subduction Zone, U.S. Geological Survey (USGS), Professional Paper: 1661-F.

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Design Spectral Response Acceleration Parameters	$S_{DS} = 1.619 g$	S _{D1} = null g
Peak Ground Acceleration ⁶	PGA = 1.009 g	

Liquefaction

Liquefaction potential was assessed based on the information obtained from our borings and using the parameters suggested in Youd & Andrus, et al., 2001.⁷ According to our seismic analysis, the site will experience a peak ground acceleration (PGA) during a design seismic event of 1.009 g. Further, groundwater appears to be less than 50.0 feet bgs. Based on the depth of groundwater and the hardness of the granular soils becoming medium-dense at from 3.0 to 4.0 .0 feet bgs, it is our opinion that the liquefaction potential for the site is low to moderate.

Tsunamis

Based on recent mapping and modeling done by the state of Oregon,⁸ the site is within the Tsunami Inundation Zone. Based on this modeling, the subject property and surrounding area will be inundated by a near-source tsunami wave generated by a CSZ moment magnitude (Mm) earthquake of 9.1 or greater. Because of this, we strongly recommend that you check with Coos County and with the state of Oregon's Department of Geology and Mineral Industries (DOGAMI) Tsunami Resource Center for current information regarding tsunami preparedness and emergency procedures.

Beach and Dune Hazard

Based on a review of the Coos County Map Atlas, ⁹ Tax Lot 402 has not been classified in accordance with Goal 18 Inventory. Dune classification in accordance with the USDA is "Younger, Stabilized Dunes." This agrees with our site evaluation. Coos County has inventoried the site and surrounding area as having "limited suitability." We note that the site is within the Sunset City Subdivision and is zoned Controlled Development and that adjoining parcels to the north and west have been developed with residential structures.

⁶ Mapped MCE Geometric Mean (MCE_s) Peak Ground Acceleration as provided by 2015 NEHRP.

⁷ Youd, T. L., Andrus, I. M., et al., 2001. Resistance of Soils: Summary Report from the 1996 NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils. ASCE, Journal of Geotechnical and Geoenvironmental Engineering, v. 127, No. 10, pp. 817-33.

⁸ Local Source (Cascadia Subduction Zone) Tsunami Inundation Map, Bandon, Oregon, 2012. State of Oregon Department of Geology and Mineral Industries.

⁹ Viewed online at https://www.coastalatlas.net

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Based on our site evaluation and on our experience working on the Bandon Bluff region, the proposed structure will not have an adverse impact on either the site or adjacent areas. Further, it is our opinion that there is no need for temporary or permanent stabilization programs and/or maintenance of new and existing vegetation. Further, we see no hazards to life, public and private property, or to the natural environment by the proposed development. Finally, it is our professional opinion that the proposed development will not cause destruction of desirable vegetation (including inadvertent destruction by moisture loss or root damage), cause exposure of stable and conditionally stable areas to erosion, or modify current air wave patterns leading to beach erosion.

DISCUSSION AND RECOMMENDATIONS

Feasibility

Based on our surface and subsurface assessment and our knowledge of the area, it is our opinion that the site is suitable for the proposed new residential structure which can be supported on conventional spread footings, provided that the site is prepared in accordance with our recommendations.

It is further our opinion that the sands encountered at 12 inches bgs are a suitable soil medium on which to site the structure. We recommend that the building pad and 5 feet around the building pad be excavated to a depth of 1.0 feet bgs and that all visible organics, including roots, be removed. We further recommend that the base of the excavated pad be wetted and rolled with a smooth-drum roller to an unyielding state. A member of our staff should confirm suitable bearing conditions and evaluate all footing subgrades. Observations should also confirm that loose or soft materials, organics, unsuitable fill, and old topsoil zones were removed. Localized deepening of footing excavations may be required to penetrate any deleterious materials.

Footings bearing on the sand subgrade should be sized for an allowable bearing capacity of 1,500 pounds per square foot (psf). This is a net bearing pressure. The weight of the footings and overlying backfill can be disregarded in calculating footing sizes.

Based on CGS's estimates, total post-construction settlement is estimated to be less than one (1) inch, with post-construction differential settlement of less than 0.5 inch over a 50-foot span.

EXHIBIT "D" Geotechnical Site Assessment Report APPLICATION & COMMENTS

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For footings in contact with native soils, use a coefficient of friction equal to 0.5 when calculating resistance to sliding. The footings should be founded below an imaginary line projecting at a 1 horizontal to 1 vertical (1H:1V) slope from the base of any adjacent, parallel utility trenches.

Upon completion of this, the site should be graded to provide for positive drainage away from the structure.

If construction occurs during wet weather, we recommend that a thin layer of compacted crushed rock be placed over the footing subgrades to help protect them from disturbance due to foot traffic.

The site should be prepared in accordance with **Appendix 1: General Construction**Considerations.

CONSTRUCTION OBSERVATIONS

Satisfactory pavement and earthwork performance depends on the quality of construction. Sufficient monitoring of the contractor's activities is a key part of determining that the work is completed in accordance with the construction drawings and specifications. We recommend that a representative from CGS be retained to observe general excavation, stripping, fill placement, footing subgrades, and subgrades and base rock for floor slabs and pavements.

Subsurface conditions observed during construction should be compared with those encountered during the subsurface explorations. Recognition of changed conditions requires experience; therefore, qualified personnel should visit the site with sufficient frequency to detect whether subsurface conditions change significantly from those anticipated.

LIMITATIONS

Cascadia Geoservices, Inc.'s (CGS) professional services will be performed, findings obtained, and recommendations prepared in accordance with generally accepted principles and practices for geologists and geotechnical engineers. No other warranty, express or implied, is made. The Customer acknowledges and agrees that:

- CGS is not responsible for the conclusions, opinions, or recommendations made by others based upon our findings.
- 2. This report has been prepared for the exclusive use of the addressee, and their agents, and is intended for their use only. It is not to be

EXHIBIT "D" Geotechnical Site Assessment Report APPLICATION & COMMENTS

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- photographed, photocopied, or similarly reproduced, in total or in part, without the expressed written consent of the Customer and Cascadia Geoservices, Inc.
- 3. The opinions, comments, and conclusions presented in this report are based upon information derived from our literature review, historical topographic map and aerial photograph review, and on our site observations. The scope of our services is intended to evaluate soil and groundwater (ground) conditions within the primary influence or influencing the proposed development area. Our services do not include an evaluation of potential ground conditions beyond the depth of our explorations or agreed-upon scope of our work. Conditions between or beyond our site observations may vary from those encountered.
- 4. Recommendations provided herein are based in part upon project information provided to CGS. If the project information is incorrect or if additional information becomes available, the correct or additional information should be immediately conveyed to CGS for review.
- 5. The scope of services for this subsurface exploration and report did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous substances in the soil, surface water, or groundwater at this site.
- 6. If there is a substantial lapse of 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, this report should be reviewed to determine the applicability of the conclusions and recommendations. Land use, site conditions (both on and off site), or other factors may change over time and could materially affect our findings. Therefore, this report should not be relied upon after two years from its issue, or in the event that the site conditions change.
- 7. The work performed by the Consultant is not warrantied or guaranteed.
- 8. There is an assumed risk when building on marginal ground, sites subject to flooding, or adjacent to bluffs, sea cliffs, or on steep ground.
- The Consultant's work will be performed to the standards of the engineering and geology professions and will be supervised by licensed

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> professionals. Attempts at improving marginal ground, sites subject to flooding, or adjacent to bluffs, sea cliffs, or on steep ground supporting the Customer's property may, through acts of God or otherwise, be temporary and that marginal ground, sites subject to flooding, or adjacent to bluffs, sea cliffs, or on steep ground may continue to degrade over time. The Customer hereby waives any claim that it may have against CGS for any claim, whether based on personal injury, property damage, economic loss, or otherwise, for any work performed by CGS for the Customer relating to or arising out of attempts to stabilize the marginal ground, sites subject to flooding, or bluffs, sea cliffs, or steep ground located at the Customer's property identified hereunder. It is further understood and agreed that continual monitoring of the Customer's property may be required, and that such monitoring is done by sophisticated monitoring instruments used by CGS. It is further understood and agreed that repairs may require regular and periodic maintenance by the Customer.

10. The Customer shall indemnify, defend, at the Customer's sole expense, and hold harmless CGS, affiliated companies of CGS, its partners, joint ventures, representatives, members, designees, officers, directors, shareholders, employees, agents, successors, and assigns (Indemnified Parties) from and against any and all claims for bodily injury or death, damage to property, demands, damages, and expenses (including but not limited to investigative and repair costs, attorney's fees and costs, and consultant's fees and costs) (hereinafter "Claims") which arise or are in any way connected with the work performed, materials furnished, or services provided under this Agreement by CGS or its agents.

EXHIBIT "D"

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PROFESSIONAL QUALIFICATIONS

Please see our website at www.CascadiaGeoservices.com to review our qualifications.

Sincerely,

CGS Project No. 20073

Cascadia Geoservices, Inc.



Eric Oberbeck, RG, CEG Expires June 1, 2021

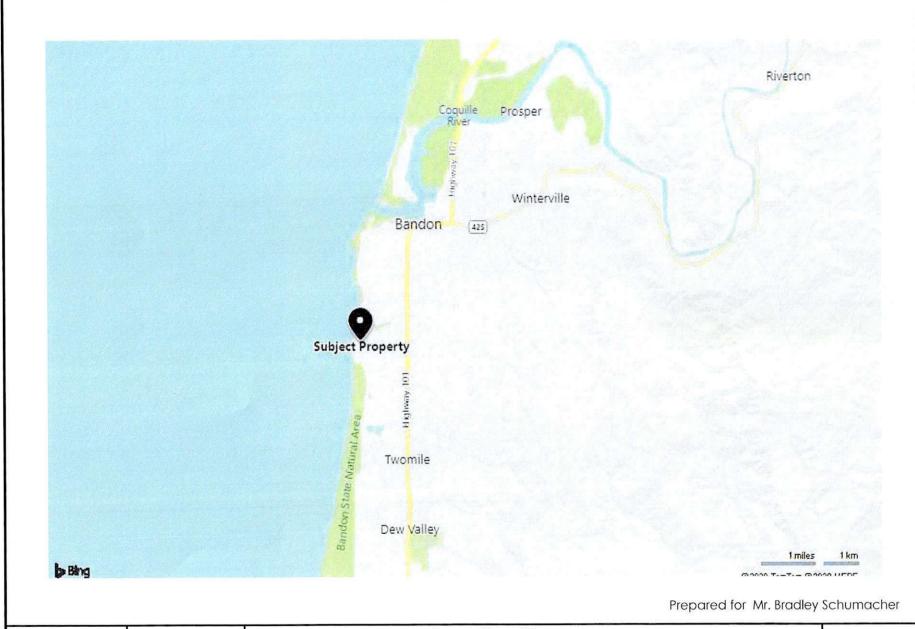
FIGURES

Figure 1, Location Map Figure 2, Site Map

ATTACHMENTS

Attachment 1 – Test Pit Logs Attachment 2 – Lab Analysis Report

APPENDIX 1: GENERAL CONSTRUCTION CONSIDERATIONS



CASCADIA Geoservices Geologists and Engineers

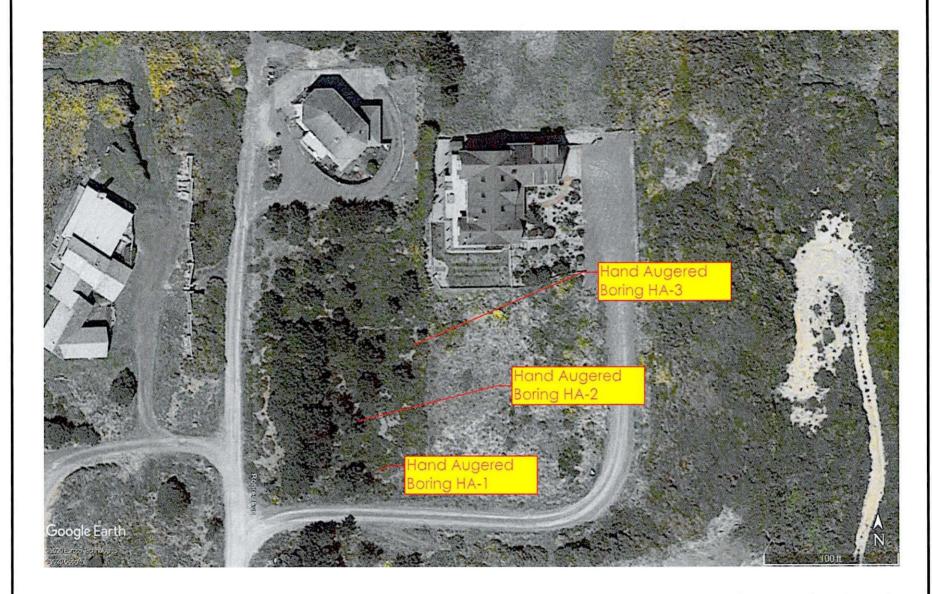
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Location Map

Rohrer Road Bandon, Oregon 97411 29S15W01CB, Tax Lot 402 Figure

ACU-21-053



Prepared for Mr. Bradley Schumacher



Project: 20073

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Site Map

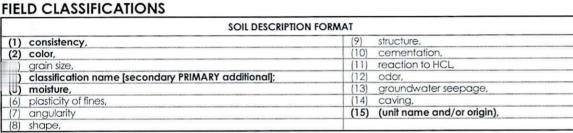
Rohrer Road Bandon, Oregon 97411 29\$15W01CB, Tax Lot 402 Figure

ACU-21-053

EXHIBIT "D"

TABLE 1

APPLICATION Attachment 1- Test Pit Logs





Note: Bolded items are the minimum required elements for a soil description.

			1. CONSI	ISTENCY - COARSE-GRAINED	
Term	SPT (140-lb. HAMMER) ¹	D & M SAMPLER (140- LB. HAMMER) ¹	DYNAMIC CONE PENETROMETER PENETRATION RATE SAMPLER (DCP) ^{4,5,6}		
Very loose	0-4	0-11	0-2	Easily penetrated when pushed by hand	
Loose	4-10	11-26	2-5	Easily penetrated several inches when pushed by hand	
Medium dense	10-30	26-74	6-31	Easily to moderately penetrated when driven by 5 lb. hammer	E778E77. (OLIO 10)
Dense	30 - 50	74-120	32 - 42	Penetrated 1-foot with difficulty when driven by 5 lb. hammer	
Very dense	>50	>120	>43	Penetrated only few inches when driven by 5 lb. hammer	

1. CONSISTENCY - FINE-GRAINED

Term	SPT (140-lb. HAMMER) ¹	D & M Sampler (140-lb. Hammer) ¹	DYNAMIC CONE PENETROMETER PENETRATION RATE SAMPLER (DCP) ^{5,6}	POCKET PEN. ²	Torvane ³	FIELD TEST
Very soft	<2	<3	<2	< 0.25	< 0.13	Easily penetrated several inches by fist
Soft	2-4	3-6	2-3	0.25 - 0.5	0.13 - 0.25	Easily penetrated several inches by thumb
Medium stiff	5-8	7-12	4-7	0.50 - 1.0	0.25 - 0.5	Can be penetrated several inches by thumb with moderate effort
Stiff	9-15	13 – 25	8 - 16	1.0 - 2.0	0.5 - 1.0	Readily indented by thumb but penetrated only with great effort
Very stiff	16-30	26 - 65	17-27	2.0 - 4.0	1.0 - 2.0	Readily indented by thumbnail
Hard	>30	>65	>28	>4.0	>2.0	Difficult to indent by thumbnail

- 1 Standard penetration resistance (SPT N-value); Dames and Moore (D & M) sampler, number of blows/ft. for last 12" and 30" drop. Unconfined
- 2 compressive strength with pocket penetrometer; in tons per square foot (tsf).
- 3 Undrained shear strength with torvane (tsf).
- 4 Up to maximum medium-size sand grains only.
 - Dynamic cone penetration resistance; number of blows/inch.
 - Reference: George F. Sowers et. al. "Dynamic Cone for Shallow In-Situ Penetration Testing of In-Situ Soils, ASTM STP 399, ASTM, pg. 29. 1966.

2. COLOR

Use common colors. For combinations use hyphens. To describe tint use modifiers: pale, light, and dark. For color variations use adjectives such as "mottled" or "streaked". Soil color charts may be required by client. **Examples:** red-brown; or orange-mottled pale green; or dark brown.

		3. GRAIN SIZE			
DESC	RIPTION	SIEVE*	OBSERVED SIZE		
bou	ılders		>12"		
cobbles		_	3'' – 12''		
- Name of the second se	coarse	3/" - 3"	¾" - 3"		
gravel	fine	#4 - 3/4"	4.75 mm (0.19") — ¾"		
	coarse	#10 - #4	2.0 – 4.75 mm		
sand	medium	#40 - #10	0.425 - 2.0 mm		
fine		#200 - #40	0.075 - 0.425 mm		
fir	nes	<#200	<0.075 mm		

4. CLASSIFICATION NAME

* Use of #200 field sieve encouraged for estimating percentage of fines.

	NAME AND MODIFIER TERMS	CONSTITUENT PERCENTAGE	CONSTITUENT TYPE	
	GRAVEL, SAND, COBBLES, BOULDERS	>50%	PRIMARY	
	sandy, gravelly, cobbley, bouldery	30 - 50%	secondary	
520	silty, clayey*	15 - 50%	secondary	
Coarse	with (gravel, sand, cobbles, boulders)	15 - 30%		
grained	with (silt, clay)*	5 - 15%	additional	
	trace (gravel, sand, cobbles, boulders)			
	trace (silt, clay)*	<5%		
	CLAY, SILT*	>50%	PRIMARY	
	silty, clayey*	30 – 50%	secondary	
C 1	sandy, gravelly	30-30/8	3000110017	
Fine	with (sand, gravel, cobbles, boulders)	15 – 30%	additional	
grained	with (silt, clay)*	13 - 30%		
	trace (sand, gravel, cobbles, boulders)	5 - 15%	adamona	
	trace (silt, clay)*	80 NRAB		
Company States	PEAT	50 - 100%	PRIMARY	
Organic	organic (soil name)	15 - 50%	secondary	
	(soil name) with some organics	5 - 15%	additional	

* For classification and naming fine-grained soil: dry strength, dilatancy, toughness, and plasticity testing are performed (see Describing Fine-Grained Soil page 2). Confirmation requires laboratory testing (Atterberg limits and hydrometer).

TABLE 1

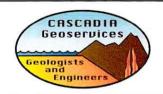
EXHIBIT "D" APPLICATION & COMMENTS

TERM dry absence of moisture, dusty, dry to touch moist contains some moisture wet visible free water, usually saturated 6. PLASTICITY OF FINES See "Describing fine-grained Soil" on Page 2. 7. ANGULARITY Orounded OSERVATION Subrangular OSERVATION Flat particles with widthy!thickness ratio >3 elongated particles with lengthywidth ratio >3 flat and elongated particles meet criteria for both flat and elongated alternating layers >1 cm thick, describe variation laminated alternating layers >1 cm thick, describe variation fisured contains shears and partings along planes of weakness blocky breaks into lumps, crumbly lensed contains pockets of different soils, describe variation comogenous same color and appearance throughout 10. CEMENTATION TERM PIELD TEST Weak breaks under light finger pressure weak breaks under light finger pressure strong will not break with finger pressure strong will not break with finger pressure 11. REACTION TO HCL TERM FIELD TEST Needs breaks under hard finger pressure strong vigorous reaction 12. ODOR Describe occurrence (i.e. from soil horizon, fissures with depths) and rate: slow (<1 gpm!): moderate (1-3 gpm!); fast (>3 gpm) 14. CAVING Describe occurrence (depths, soils) and amount with term	TERM dry absence of moisture, dusty, dry to touch moist contains some moisture wet visible free water, usually saturated 6. PLASTICITY OF FINES See "Describing fine-grained Soil" on Page 2. 7. ANGULARITY Orounded OSubangular OSUBANGULARITY 8. Shape Term OBSERVATION flat particles with widthythickness ratio > 3 elongated particles with lengthywidth ratio > 3 lat and elongated particles meet criteria for both flat and elongated 9. STRUCTURE Term OBSERVATION Stratified alternating layers > 1 cm thick, describe variation insured alternating layers > 1 cm thick, describe variation contains shears and partings along planes of weakness elicknesides partings appear glossy or striated blocky breaks into lumps, crumbly lensed contains pockets of different soils, describe variation comogenous is same color and appearance throughout 10. CEMENTATION Term FIELD Test Weak breaks under light finger pressure 11. REACTION TO HCL Term FIELD Test Needs breaks under hard finger pressure 11. REACTION TO HCL Term FIELD Test Needs breaks under hard finger pressure 11. REACTION TO HCL Term FIELD Test Needs breaks under hard finger pressure 12. ODOR Describe occurrence (i.e. from soil horizon, fissures with depths) and rate: slow (<1 gpm); moderate (1-3 gpm); fast (>3 gpm) 14. CAVING Describe occurrence (depths, soils) and amount with term Test Pits minor (<1 ft*) moderate (1-3 ft*) Severe (>3 ft*) Severe (>3 ft*)		
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1 0 10	Test Pits minor (<1 ft³) moderate (1-3 ft³) Severe (>3 ft³		
Test Fits minor (<1 ft/) minor (<1 f			
		TEST PITS	minor (>1 mg moderate (1-3 mg 3evere (23 mg
15. (UNIT NAME/ORIGIN)			

Tume of stratigraphic unit (e.g. Willamette Silt), and/or origin of deposit (Topsoil, Alluvium, Colluvium, Decomposed Basalt, Loess, Fill, etc.).

	DESC	CRIBING FINI	E-GRAINED SO	OIL					
		FIELD	TEST						
Name	PLASTICITY (A BELOW)	DRY STRENGTH (B BELOW)	DILATANCY REACTION (C BELOW)	Toughness of Thread (D below)					
SILT	non- plastic, low	none, low	rapid	low					
SILT with some clay	low	low, medium	rapid, slow	low, medium					
clayey SILT	low, medium	medium	slow	medium					
silty CLAY	medium	medium, high	slow, none	medium, high					
CLAY with some silt	high	High	none	high					
CLAY	high	very high	none	high					
organic SILT	non- plastic, low	low, medium	slow	low, medium					
organic CLAY	medium, high	medium to very high	none	medium, high					
		A. PLAS	STICITY						
TERM			OBSERVATION						
non-	12.0% AND SECTION	NOT BURGETON TO AND CONTRACTOR	d cannot be r	rolled at any water					
plastic	content.		halaa aal	and the all the second					
low	The three	ad can bare	ly be rolled a	nd the lump in the plastic limit.					
medium high	required be re-roll crumble It takes of reach the several ti	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be re-rolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit. It takes considerable time rolling and kneading to reach the plastic limit. The thread can be re-rolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than							
	the plast		JOT CHOTTIBILITY	, which and man					
	1 mo pros	B. DRY ST	RENGTH						
TERM			OBSERVATION						
none		imen crumb of handling.		der with mere					
low	Dry spec	imen crumb	oles into powo	der with some finge					
medium	Dry spec	imen break able finger	oressure.	or crumbles with					
high	Dry spec Will brea surface.	imen canno k into piece:	ot be broken s between th	with finger pressure. umb and a hard					
very high		imen canno ard surface.	ot be broken l	between thumb					
	(C. DILATANO	Y REACTION						
TERM			OBSERVATION						
none			the specime						
slow	shaking upon sq	and doesn't Jeezing.	disappear of	of specimen during r disappears slowly					
rapid	specime upon sq	n during sho ueezing.		appears quickly					
		. TOUGHNES	S OF THREAD						
TERM	0 1 "	o I have	OBSERVATION	1 4 11 11 11 · · · · · · · · · ·					
low	near the	plastic limit.	The thread of	ed to roll the thread and lump are weak					
medium	the plast stiffness.	ic limit. The	thread and lu	I the thread to near ump have medium					
high	thread to		lastic limit. Th	quired to roll the ie thread and lump					

TABLE 2 KEY TO TEST PIT AND BORING LOG SYMBOLS



SAMPLE NUMBER ACRONYMS/WATER SYMBOLS

DM - Dames & Moore Sampler

GR - Grab or Bulk Samples

OS - Osterberg (Piston) Sampler

C - Rock Core

SA - Screen Air Sampling

SW - Screen Water Sampling

SS - SPT Standard Penetration Drive Sampler (ASTM D1586)

ST - Shelby Tube Push Sampler (ASTM D1587)

Water Level
During Drilling/
Excavation

Water Level on Date Measured



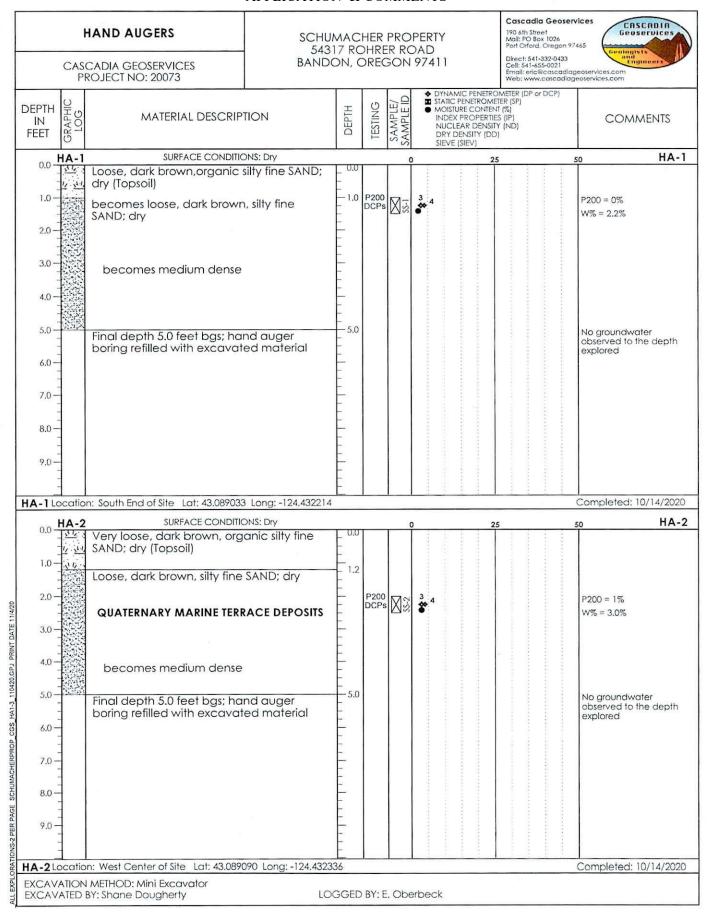
LOG GRAPHICS/INSTALLATIONS

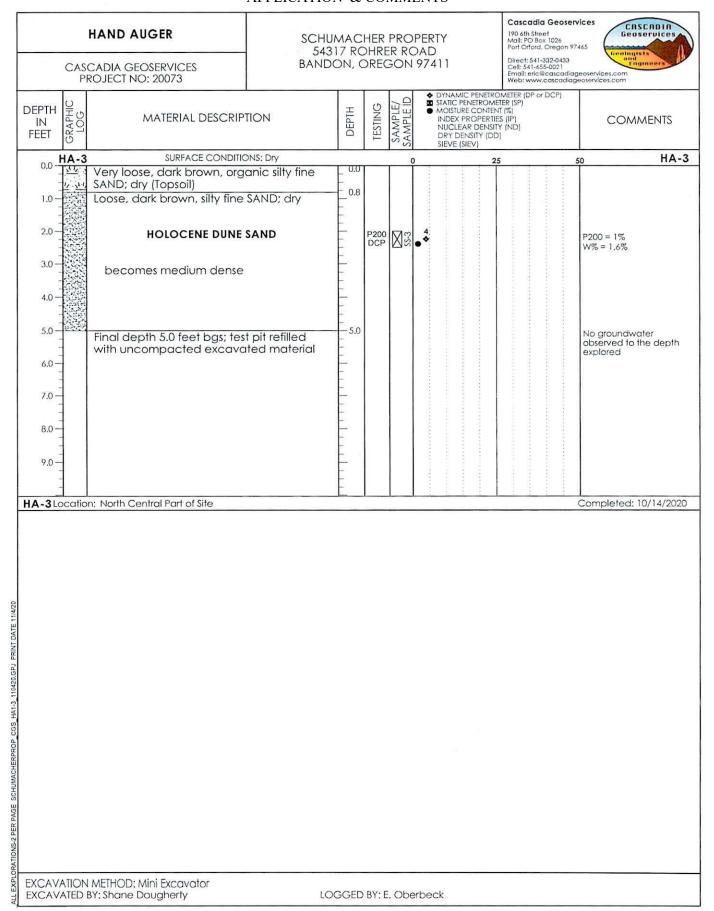
Soil and Rock Instrumentation Detail Soil and Rock Sampling Symbols ·Ground Surface Interpreted contact between soil or rock geologic units Rock Sample Drive Length Soil Recovery Length Well Cap or Rock Types Sample Well Seal Well Pipe Interpreted Soil Electronic Piezometer contact between soil -Well Screen Soil or rock Rock Core subunits Electronic Piezometer Sample Sensor Bottom of Hole

GEOTECHNICAL FIELD & LABORATORY TESTING/ACRONYM EXPLANATIONS

ATT	Atterberg Limits	ОС	Organic Content
AMSL	Above Mean Sea Level	OD	Outside Diameter
BGS	Below ground surface	P200	Percent Passing U.S. Standard No. 200 Sieve
CBR	California Bearing Ratio	PI	Plasticity Index
CON	Consolidation	PL	Plasticity Limit
DCP	Dynamic Cone Penetrometer	PP	Pocket Penetrometer
DD	Dry Density	RES	Resilient Modulus
DS	Direct Shear	SC	Sand Cone
GPS	Global Positioning System	SIEV	Sieve Gradation
HCL	Hydrochloric Acid	SP	Static Penetrometer
HYD	Hydrometer Gradation	TOR	Torvane
kPa	kiloPascal	UC	Unconfined Compressive Strength
LL	Liquid Limit	VS	Vane Shear
ENVIRON	MENTAL TESTING/ACRONYM EXPLANA	ATIONS	

ATD	At Time of Drilling	ND	Not Detected
BGS	Below ground surface	NS	No Sheen
CA	Sample Submitted for Chemical Analysis	PID	Photoionization Detector Headspace
HS	High Sheen		Analysis
MS	Moderate Sheen	PPM	Parts Per Million





Attachment 2- Lab Report

CASCADIA GEOSERVICES, INC.

Material Laboratory 1099 S 4th Street Coos Bay, Oregon 97420 P.541-294-6915



Project No.:

20073

Testing Date:

24-Oct-20

Tests Performed:

Water Content, Soil Finer Than 75µm

Standards Followed:

D2216, D1140

Performed By:

Stephan Stys

Water Content (D2216)

Sample Name	SS-1	SS-2	SS-3					
Pan Letter	G	Н	1					
M _c = Mass of Container, g	1.28	1.12	1.03					
M_{cms} = Mass of Container and Moist Specimen, g	29.87	21.51	23.33					
M_{cds} = Mass of Container and Dry Specimen, g	29.26	20.91	22.98					
M_s = Mass of Oven Dry Specimen = M_{cds} - M_c , g	27.98	19.79	21.95					
$M_w = Mass of Water = M_{cms} - M_{cds}$, g	0.61	0.60	0.35					
$W = Water Content = M_w/M_s X 100\%$	2.2%	3.0%	1.6%			1		

% Finer Than 75µm (D1140)

Sample Name	SS-1	SS-2	SS-3				
Pan Letter	G	Н	1				
M_c = Mass of Container, g	1.28	1.12	1.03				
M _{cds} = Mass of Container and Dry Specimen, g	29.26	20.91	22.98				
M_{crs} = Mass of Container and Retained Specimen, g	29.16	20.71	22.72				
M_s = Mass of Oven Dry Specimen = M_{cds} - M_c , g	27.98	19.79	21.95				
M_r = Mass of Retained Specimen = M_{crs} - M_c , g	27.88	19.59	21.69				
% Finer Than 75μm = Ms - M _w /M _s X 100%	0.4%	1.0%	1.2%				

D

1.0 APPENDIX 1: GENERAL CONSTRUCTION CONSIDERATIONS Site Preparation

Site preparation should include removal of existing structures and foundations. Underground utility lines, vaults, or tanks should be removed or grouted full if left in place. The excavations resulting from removal of footings, buried tanks, etc., should be backfilled with compacted structural fill. The base of these excavations should be excavated to firm subgrade before filling with sides sloped to allow for uniform compaction.

Materials generated during demolition of existing improvements should be transported off-site or stockpiled in areas designated by the owner. Organic and clay rich soils are typically not suitable for use as structural fill but may be used for landscaping and general backfill. Asphalt, concrete, and base rock materials may be crushed and recycled for use as general fill.

Trees and shrubs should be removed from all pavement and improvement areas. In addition, root balls should be grubbed out to the depth of the roots, which could exceed 3 feet bgs. Depending on the methods used to remove the root balls, considerable disturbance and loosening of the subgrade could occur during site grubbing. Soil disturbed during grubbing operations should be removed to expose firm undisturbed subgrade. The resulting excavations should be backfilled with structural fill.

The existing topsoil zone should be stripped and removed from all proposed building pads, pavement, and improvement areas and for a 5-foot margin around such areas. Please review **Discussion Section** of this report to ascertain the actual stripping depth. All loose fill and organics soils should be removed. Greater stripping depths may be required to remove localized zones of loose or organic soil. Greater stripping depths may be anticipated in areas with thicker vegetation and shrubs and where fill is present. The actual stripping depth should be based on field observations at the time of construction.

Stripped organic material should be transported off-site for disposal or used in landscaped areas.

Following stripping and prior to placing fill, pavement, or building improvements, the exposed subgrade should be evaluated by probing or proofrolling. The subgrade should be proofrolled with a fully loaded 10 yard or larger dump truck or similar heavy rubber-tire construction equipment to identify soft, loose, or unsuitable areas. A member of CGS's staff should observe the proofrolling. Soft or loose zones identified during testing should be compacted to an unyielding condition or excavated and replaced with structural fill, as discussed in the "Structural Fill" section of this appendix.

Wet-Weather Conditions

Trafficability on the near-surface soils may be difficult during or after extended wet periods or when surface soils become saturated. Soils that have been disturbed during site-preparation activities, or soft or loose zones identified during probing or proofrolling, should be removed and replaced with compacted structural fill.

The thickness of the granular material for access roads and building areas will depend on the amount and type of construction traffic. A 12- to 18-inch-thick mat of imported granular material is sufficient for most staging areas. The granular mat for haul roads and areas with repeated heavy construction traffic typically needs to be increased to between 18 to 24 inches. The actual thickness of haul roads and staging areas should be based on the amount and type of traffic anticipated and the type of underlying soils present. Imported granular material should be placed in one lift over the undisturbed subgrade and compacted using a smooth-drum, non-vibratory roller. Additionally, a geotextile fabric should be placed as a barrier between the subgrade and imported granular material in areas of repeated construction traffic.

2.0 MATERIALS SECTION

Structural fill should be placed over subgrade that has been prepared in conformance with the "Site Preparation" and "Wet-Weather Conditions"

sections of this report. A wide range of material may be used as structural fill; however, all material used should be free of organic matter or other unsuitable materials and should meet the specifications provided in the 2018 ODOT Oregon Standards Specifications for Construction (ODOT SS, 2018)¹ depending on the application. A brief characterization of some of the acceptable materials is provided below.

Native Soils

Native soils are suitable for use as general fill only if they meet the requirements of ODOT SS 00330.12 – Borrow Material. Laboratory testing is required to determine if the moisture content of the near-surface soils is greater than the soils' optimum moisture content required for satisfactory compaction. To adequately compact the soil, it may be necessary to moisture condition the soil to within 2 to 3 percentage points of the optimum moisture content. In most instances, moisture conditioning will be difficult due to the fine-grained nature of the soil.

Imported Granular Material

Imported granular material used during periods of wet weather or for haul roads, building pad subgrades, staging areas, etc., should be pit or quarry run rock, crushed rock, or crushed gravel and sand and should meet the specifications provided in ODOT SS 00330.12 – Borrow Material and ODOT SS 00330.13 – Selected General Backfill. In addition, the imported granular material should also be well-graded between coarse and fine material and have less than 5 percent by weight passing the U.S. Standard No. 200 Sieve.

Imported granular material should be placed in lifts with a maximum uncompacted thickness of 8 to 12 inches and compacted to not less than 95 percent of the maximum dry density, as determined by ASTM D 698. During the wet season or when wet subgrade conditions exist, the initial lift should be approximately 18 inches in uncompacted thickness and should be compacted by rolling with a smooth-drum roller without using vibratory action.

¹ View online at https://www.oregon.gov

Where imported granular material is placed over soft-soil subgrades, we recommend a geotextile be placed as a barrier between the subgrade and imported granular material. Depending on site conditions, the geotextile should meet ODOT SS 2320.10 – Geosynthetics, Acceptance, for soil separation or stabilization. The geotextile should be installed in conformance with ODOT SS 0350.40 – Geosynthetic Construction.

Trench Backfill

Trench backfill placed beneath, adjacent to, and for at least 2 feet above utility lines (i.e., the pipe zone) should consist of well-graded granular material with a maximum particle size of 1.5 inches and less than 10 percent by weight passing the U.S. Standard No. 200 Sieve and should meet the standards prescribed by ODOT SS 405.12 – Pipe Zone Bedding. The pipe zone backfill should be compacted to at least 90 percent of the maximum dry density, as determined by ASTM D 698, or as required by the pipe manufacturer or local building department.

Within roadway alignments or beneath building pads, the remainder of the trench backfill should consist of well-graded granular material with a maximum particle size of 2.5 inches, less than 10 percent by weight passing the U.S. Standard No. 200 Sieve, and should meet standards prescribed by OSSC 405.14 – Trench Backfill, Class A or B. This material should be compacted to at least 92 percent of the maximum dry density, as determined by ASTM D 698, or as required by the pipe manufacturer or local building department. The upper 2 feet of the trench backfill should be compacted to at least 95 percent of the maximum dry density, as determined by ASTM D 698.

Outside of structural improvement areas (e.g., roadway alignments or building pads), trench backfill placed above the pipe zone may consist of general fill materials that are free of organics and materials over 6 inches in diameter and meet ODOT SS 00330.12 – Borrow Material and ODOT SS 00405.14 – Trench Backfill, Class C, D, or E. This general trench backfill should be compacted to at least 90 percent of the maximum dry density, as determined by ASTM D 698, or as required by the pipe manufacturer or local building department.

Stabilization Material

Stabilization rock should consist of imported granular material that is well-graded, angular, crushed rock consisting of 4- or 6-inch-minus material with less than 2 percent passing the U.S. Standard No. 4 Sieve. The material should be free of organic matter and other deleterious material.

Retaining Wall Backfill

Backfill material placed behind retaining walls and extending a horizontal distance of 0.5H, where H is the height of the retaining wall, should consist of select granular material meeting ODOT SS 00510.12 – Granular Wall Backfill. We recommend that the select granular wall backfill be separated from general fill, native soil, and/or topsoil using a geotextile fabric which meets the requirements provided in ODOT SS 02320.10 – Geosynthetics, Acceptance. The geotextile should be installed in conformance with ODOT SS 00350.40 – Geosynthetic Construction.

The wall backfill should be compacted to a minimum of 95 percent of the maximum dry density, as determined by ASTM D 698. However, backfill located within a horizontal distance of 3 feet from the retaining walls should only be compacted to approximately 90 percent of the maximum dry density, as determined by ASTM D 698. Backfill placed within 3 feet of the wall should be compacted in lifts less than 6 inches thick using hand-operated tamping equipment (such as, a jumping jack or vibratory plate compactors). If flat work (sidewalks or pavements) will be placed atop the wall backfill, we recommend that the upper 2 feet of material be compacted to 95 percent of the maximum dry density, as determined by ASTM D 698.

Trench and Retaining Wall Drain Backfill

Backfill in a 2-foot zone against the back of retaining walls and for subsurface trench drains should consist of drain rock meeting the specifications provided in ODOT SS 00430.11 – Granular Drain Backfill Material. The drain rock should be wrapped in a geotextile fabric that meets the specifications provided in ODOT SS 02320.10 – Geosynthetics, Acceptance, for soil separation and/or stabilization.

The geotextile should be installed in conformance with ODOT SS 00350.40 – Geosynthetic Construction.

Footing Base

Imported granular material placed at the base of footings should be clean crushed rock or crushed gravel, and sand that is well-graded between coarse and fine. The granular materials should contain no deleterious materials, have a maximum particle size of 1.5 inches, and meet ODOT SS 00330.14 – Select Granular Backfill. The imported granular material should be placed on one lift and compacted to not less than 95 percent of the maximum dry density, as determined by ASTM D 698.

Floor Slab Base Aggregate

Base aggregate for floor slabs should be clean crushed rock or crushed gravel. The base aggregate should contain no deleterious materials, meet specifications provided in ODOT SS 00330.14 – Select Granular Backfill, and have less than 5 percent weight by passing the U.S. Standard No. 200 Sieve. The imported granular material should be placed in one lift and compacted to at least 95 percent of the maximum dry density, as determined by ASTM D 698.

Pavement Base Aggregate

Imported granular material used as base aggregate (base rock) along roadway alignments should be clean crushed rock or crushed gravel and sand that is fairly well-graded between coarse and fine. The base aggregate should meet the gradation defined in ODOT SS 02630.10 – Dense-Graded Aggregate 1"-0", depending upon application, with the exception that the aggregate has less than 5 percent passing a U.S. Standard No. 200 Sieve. The base aggregate should be compacted to not less than 95 percent of the maximum dry density, as determined by ASTM D 698.

3.0 PERMANENT SLOPES

SETBACK

The 2017 Oregon Residential Specialty Code, Section R. 403.1.9.1 (code) requires that buildings adjacent to descending slope surfaces be founded in firm material with an embedment and setback from the slope surface sufficient to provide vertical and lateral support for the footing without detrimental settlement. When determining setbacks, the code recommends a minimum setback of at least the smaller of H/3 and 40 feet for descending slopes and the smaller of H/2 and 15 feet from ascending slopes. For slopes steeper than 100%, the setback shall be measured from an imaginary plane 45 degrees to the horizontal projected upward from the toe of the slope. We provide our setback recommendations in our **DISCUSSION AND RECOMMENDATIONS** section of this report.

Permanent cut and fill slopes up to 15 feet high may typically be built to a gradient as steep as 2 Horiziontal:1Vertical (2H:1V) dependent upon the type of soils and or rock present. However, cut slopes over 15 feet tall should be limited to a gradient of 2.5H:1V or should be partially retained by a retaining wall. Slopes that will be maintained by mowing should not be constructed steeper than 3H:1V. Newly constructed fill slopes should be over-built by at least 12 inches and then trimmed back to the required slope to maintain a firm face.

Access roads and pavements should be setback a minimum of 5 feet from the top of cut and fill slopes. Slopes should be covered with erosion control netting and planted with appropriate vegetation to provide protection against erosion as soon as possible after grading. A mixture of perennial and annual grasses works well. Surface water runoff should be collected and directed away from slopes to prevent water from running down the face of the slope.

4.0 DRAINAGE CONSIDERATIONS

The contractor shall be made responsible for temporary drainage of surface water and groundwater, as necessary, to prevent standing water and/or erosion at the working surface. The ground surface around the structures should be sloped to create a minimum gradient of 2 percent away from the building foundations for a distance of at

least 5 feet. Surface water should be directed away from all buildings into drainage swales or into a storm drainage system. "Trapped" planting areas or ponds should not be created next to any building without providing means for drainage. The roof downspouts should discharge onto splash blocks or paving that direct water away from the building or into smooth-walled underground drain lines that carry the water to appropriate discharge locations at least 10 feet away from any buildings. If built on a sloped or cut fill building site, drainage should not be directed onto the descending slope.

Foundation Drains

CGS recommends that foundation drains be installed around the perimeter foundations of all structures including buildings and tanks. The foundation drains should be at least 12 inches below the base of the slab. The foundation drain should consist of perforated collector pipes embedded in a minimum 2-footwide zone of angular drain rock. The drain rock should meet specifications provided in the "Structural Fill" section of this report. The drain rock should be wrapped in a geotextile fabric. The collector pipes should discharge at an appropriate location away from the base of the footings. Unless measures are taken to prevent backflow into the wall's drainage system, the discharge pipe should not be tied directly into the stormwater drain system.

The contractor should refer to the following 2008 Oregon Standards Specifications for Construction (ODOT SS, 2008) sections with regard to backfill materials and geosynthetics. Local or municipal standards may also apply. The contractor should check with the jurisdictional permitting office to determine applicability of local or municipal standards.

5.0 WET-SOIL CONDITIONS

If cohesive soils are present on the site, they will be susceptible to disturbance during periods of sustained rainfall. Trafficability or grading operations within the exposed soils may be difficult during or after extended wet periods or when the moisture content of the soils is more than a few percentage points above optimum. Soils disturbed during

site-preparation activities, or soft or loose zones identified during probing, should be removed, and replaced with compacted structural fill.

6.0 EXCAVATION

Trench cuts in native materials should stand vertical to a depth of approximately 4 feet, provided no groundwater seepage is present in the trench walls. Open excavation, which may be used to excavate trenches with depths deeper than 4 feet and shallower than 8 feet, can be done with the walls of the excavation cut at a slope of 1H:1V, provided groundwater seepage is not present and with the understanding that some sloughing may occur. The trenches should be flattened to 1.5H:1V if excessive sloughing occurs or seepage is present.

Water levels may fluctuate during the wet months of the year. If shallow groundwater is observed during construction, the use of a trench shield (or other approved temporary shoring) is recommended for cuts that extend below groundwater seepage or if vertical walls are desired for cuts deeper than 4 feet. The ultimate type and design of the shoring and dewatering systems used for this project should be the responsibility of the contractor who is in the best position to choose systems that fit the plan of operation. All excavations should be made in accordance with applicable Occupational Safety and Health Administration and State regulations.