Tillamook County

DEPARTMENT OF COMMUNITY DEVELOPMENT BUILDING, PLANNING & ON-SITE SANITATION SECTIONS



1510 - B Third Street Tillamook, Oregon 97141 www.tillamookcounty.gov 503-842-3408

Land of Cheese, Trees and Ocean Breeze

RESOURCE ZONE EXCEPTION #851-24-000168-PLNG

NOTICE TO MORTGAGEE, LIENHOLDER, VENDOR OR SELLER: ORS 215 REQUIRES THAT IF YOU RECEIVE THIS NOTICE, IT MUST BE PROMPTLY FORWARDED TO THE PURCHASER

July 17, 2024

Dear Property Owner:

This is to confirm that the Tillamook County Department of Community Development **APPROVED WITH CONDITIONS** the above-cited Resource Zone Exception Request on July 17, 2024.

A copy of the application, along with a map of the request area and the applicable criteria for review are available for inspection on the Tillamook County Department of Community Development website: https://www.tillamookcounty.gov/commdev/landuseapps and is also available for inspection at the Department of Community Development office located at 1510-B Third Street, Tillamook, Oregon 97141.

Appeal of this decision. This decision may be appealed to the Tillamook County Planning Commission, who will hold a public hearing. Forms and fees must be filed in the office of this Department in accordance with Article 10 of the TCLUO before **4:00 PM** on July 29, 2024. Unless appealed, the Effective Date of Decision shall be July 29, 2024.

Request:

An exception request to reduce the required 100-foot resource zone setback from the Forest (F) zone boundary by 45-feet to establish a 55-foot setback from the northerly (side) property line to allow for the construction of a residential structure (single-family dwelling).

Location:

The subject property is located southeast of the Unincorporated Community of Netarts, is zoned Rural Residential 2-Acre (RR-2) and is designated as Tax Lot 500 in Section 5DD of Township 2 South, Range 10 West of the Willamette Meridian, Tillamook County, Oregon.

Zone:

Rural Residential 2-Acre (RR-2) Zone

Applicant:

AR Northwest LLC, 385 Hodgdon Rd, Tillamook, OR 97141

Property Owner:

James & Heidi Van Orman, 496 Fairway Ct., Seaside, OR 97138

CONDITIONS OF APPROVAL:

Failure to comply with the Conditions of Approval and ordinance provisions could result in nullification of this approval.

- 1. The applicant/property owner shall obtain all Federal, State, and Local permits, as applicable.
- 2. The applicant/property owner shall obtain an approved Consolidated Building/Zoning Permit from the Tillamook County Department of Community Development for construction of the dwelling.
- 3. Residential structures shall maintain the approved resource zone setback of 55-feet setback from the northerly (side) property line.
- 4. The applicant/property owner shall submit a site plan, depicting all required yard setbacks and the reduced resource zone setback at the time of Consolidated Building/Zoning Permit application submittal confirming all residential improvements adhere to setback requirements.
- 5. The site plan shall also include the vegetation plantings along the northerly property boundary to serve as a buffer between residential and resources uses.
- 6. Development shall otherwise comply with the applicable standards and requirements of TCLUO Section 3.010: Rural Residential 2-Acre (RR-2) Zone.
- 7. The applicant/property owner shall comply with TCLUO Section 4.130: Development Requirements for Geologic Hazard Areas. A Geologic Hazard Assessment Report is required if average existing slopes are equal to or greater than 29 percent within area to be developed.
- 8. In accepting this approval, the property owner understands intensive farm or forest practices may be conducted upon adjacent or nearby land zoned for farm or forest use. The property owner hereby acknowledges that practices may involve but are not limited to the application of herbicides or fertilizers (including aerial spraying), road construction, changes in view, noise, dust, odor, traffic, and other impacts related to a farm zone. The property owner acknowledges the residential use of this property may be impacted by such activities and is accepting of that fact. In the event of conflict, the property owner understands preference will be given to farm and forest practices.

A covenant to the deed shall be required, informing that intensive farm or forest practices may be conducted upon adjacent or nearby land zoned for farm or forest use and limiting pursuance of a claim for relief or cause of action of alleging injury from farming or forest practices. A copy of the recorded covenant included as 'Exhibit D' shall be provided at the time of applying for Consolidated Zoning/Building Permit.

9. This approval expires if a Building Permit is not applied for within two (2) years of issuance of this approval.

Sincerely,

Tillamook County Department of Community Development

Allison Chase, Land Use Planner

Sarah Absher, CFM, Director
Enc.: Vicinity & Assessor/Zoning Map

Tillamook County

DEPARTMENT OF COMMUNITY DEVELOPMENT

BUILDING, PLANNING & ON-SITE SANITATION SECTIONS





Land of Cheese, Trees and Ocean Breeze

Resource Zone Exception #851-24-000168-PLNG: AR Northwest, LLC/ Van Orman Administrative Decision & Staff Report

Decision: Approved with Conditions

Decision Date: July 17, 2024

Report Prepared By: Allison Chase, Land Use Planner

I. GENERAL INFORMATION:

Request: An exception request to reduce the required 100-foot resource zone setback from the

Forest (F) zone boundary by 45-feet to establish a 55-foot setback from the northerly (side) property line to allow for the construction of a residential structure (single-

family dwelling) (Exhibit B).

Location: The subject property is located southeast of the Unincorporated Community of Netarts,

is zoned Rural Residential 2-Acre (RR-2) and is designated as Tax Lot 500 in Section 5DD of Township 2 South, Range 10 West of the Willamette Meridian, Tillamook

County, Oregon (Exhibit A).

Zone: Rural Residential 2-Acre (RR-2) Zone

Applicant: AR Northwest LLC, 385 Hodgdon Rd, Tillamook, OR 97141

Property Owner: James & Heidi Van Orman, 496 Fairway Ct., Seaside, OR 97138

Description of Site and Vicinity: Assessor records indicate the subject property encompasses approximately 3.02-acres, topography is steep in most areas with the exception of a previously graded gravel driveway and dirt paths that have been cut into the Northeastern portions of the property (Exhibit A). The property is trending downward to the West and Southwest at the rear and side property lines, is vegetated with grasses and trees, and currently vacant. There is a drainage channel that borders the Southerly property line. The subject property is accessed via Old Netarts Road, a County road (Exhibit A).

The area is a pocket of RR-2 zoned properties which are primarily located between Old Netarts Road and Netarts Bay Road also a County road, improved with single-family dwellings and their accessory structures, or vacant. Remaining properties in the vicinity are zoned Rural Residential 2-Acre (RR-2), Netarts

Residential Manufactured Dwelling Zone (NT-RMD) and Forest (F) and appear to be in residential and forest use.

The property is within an area of geologic hazard, with areas of deep and shallow landslide susceptibility (Exhibit A). FEMA Flood Insurance Rate Map #41057C0570F dated September 28, 2018, confirms the subject property is not located in an area of the Special Flood Hazard Area (SFHA) (Exhibit A).

Applicant is proposing to reduce the 100-foot setback from the Forest (F) zone boundary by 45-feet to establish a 55-foot setback from the northerly (side) property line to allow for the siting of a residence (Exhibit B).

II. APPLICABLE ORDINANCE AND COMPREHENSIVE PLAN PROVISIONS:

The desired use is governed through the following sections of the Tillamook County Land Use Ordinance (TCLUO). The suitability of the proposed use, in light of these criteria, is discussed in Section III of this report:

- A. TCLUO Section 3.010: Rural Residential 2-Acre (RR-2) Zone
- B. TCLUO Section 4.130: Development Requirements for Geologic Hazard Areas

III. ANALYSIS:

Notice of the request was mailed to property owners within 250 feet of the subject property and other agencies on May 16, 2024. Notice was provided to the Department of State Lands (DSL) Comments were received from Department of State Lands (DSL) (Exhibit C).

DSL states if any land disturbing activities are proposed in the low areas west of the hillslope that the engineer assumes construction is on, or is near any of the mapped streams then a wetland review of the site by a consultant is recommended.

A. Section 3.010: Rural Residential 2-Acre (RR-2) Zone

Section 3.010(4) Standards: Land divisions and development in the RR-2 and RR-10 zone shall conform to the following standards, unless more restrictive supplemental regulations apply:

...(k) No residential structure shall be located within 100 feet of an F-1, F, or SFW-20 zone boundary, unless it can be demonstrated that natural or man-made features will act as an equally effective barrier to conflicts between resource and residential used; or that a residential structure could not otherwise be placed on the property without requiring a variance to the 100 foot requirement. In either case, all yard requirements in this zone shall still apply.

Findings: The applicant is requesting to reduce the required 100-foot resource zone setback from the Forest (F) zone boundary by 45-feet to establish a 55-foot setback from the northerly property line for the construction of a single-family dwelling (Exhibit B). The northerly property boundary abuts the Forest (F) zone, and the 100-foot setback fully extends into the subject property (Exhibit A).

The property contains steep slopes along its West and Southwest boundaries, and a drainage channel along the Southerly property boundary (Exhibit B). A topographic map dated October 4, 2022 is included in the September 5, 2023 engineering plan of the Geologic Hazard Report prepared by Jason R. Morgan, P.E. of Morgan Civil Engineering (Exhibit B). Mr. Morgan identifies slopes between 30-50% throughout the property with the exception of the location proposed for development. Due to the steep topography of the property, the Geologic Hazard Report comprised of an Engineering Geologic Reconnaissance and Geologic Hazard Report dated June 30, 2023 prepared by R. Warren Krager, R.G., C.E.G together with

the Engineering Portion of Geologic Hazard Report dated September 5, 2023 prepared by Jason R. Morgan, P.E. of Morgan Civil Engineering only considers development of a dwelling in the northeastern portion of the subject property where development minimizes disturbance in steeply sloped areas (Exhibit B).

The property currently maintains natural features such as grasses and trees (Exhibits A & B). The applicant states they will also plant trees along the northerly property boundary to enhance the forested buffer to act as a natural barrier between the proposed dwelling and forest land (Exhibit B).

There is a driveway constructed along the northerly boundary of the property (Exhibit B). The driveway is approximately 20 feet wide between the property and the forest zone. The driveway serves as a fuel break and additional man-made barrier to limit conflicts between residential and resource use.

Based upon the findings outlined above, staff finds natural and man-made features can act as an equally effective barrier between the resource and residential uses. Staff finds the applicant can be required as a Condition of Approval to demonstrate at time of the Consolidated Building/Zoning Permit Submittal to show the vegetation plantings as stated in (Exhibit B).

B. TCLUO Section 4.130: Development Requirements for Geologic Hazard Areas

TCLUO Section 4.130(2)(b) identifies the area maintaining shallow landslide susceptibility as identified in DOGAMI Open File Report O-20-13. (Exhibit A)

Staff finds a Geologic Hazard Report prepared in conformance with the standards of TCLUO 4.130 shall be submitted to this Department for review and approval if average existing slopes are equal to or greater than 29 percent in areas proposed for development. Staff find that a Condition of Approval can be made to ensure compliance with this standard prior to development of the property.

IV. DECISION: APPROVED WITH CONDITIONS

Staff concludes that the applicant has satisfied the review criteria and can meet all applicable ordinance requirements at the time of application. Therefore, Staff approves this request for an exception to the Forest (F) zone setback subject to the Conditions of Approval in Section V of this report. This approval does not address any additional development of the subject property.

By accepting this approval the applicant and property owner agrees to indemnify, defend, save and hold harmless Tillamook County, and its officers, agents, and employees from any claim, suit, action or activity undertaken under this approval, including construction under a Building Permit approved subject to this approval. The applicant /property owner shall obtain all of the necessary local, state, and federal permits and comply with all applicable regulations for the proposed construction.

Appeal of this decision. This decision may be appealed to the Tillamook County Planning Commission, who will hold a public hearing. In such cases, forms and fees must be filed in the office of this Department before 4:00 PM on July 29, 2024.

V. CONDITIONS OF APPROVAL:

Failure to comply with the Conditions of Approval and ordinance provisions could result in nullification of this approval.

- 1. The applicant/property owner shall obtain all Federal, State, and Local permits, as applicable.
- 2. The applicant/property owner shall obtain an approved Consolidated Building/Zoning Permit from the Tillamook County Department of Community Development for construction of the dwelling.
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A covenant to the deed shall be required, informing that intensive farm or forest practices may be conducted upon adjacent or nearby land zoned for farm or forest use and limiting pursuance of a claim for relief or cause of action of alleging injury from farming or forest practices. A copy of the recorded covenant included as 'Exhibit D' shall be provided at the time of applying for Consolidated Zoning/Building Permit.

9. This approval expires if a Building Permit is not applied for within two (2) years of issuance of this approval.

VI. <u>EXHIBITS</u>

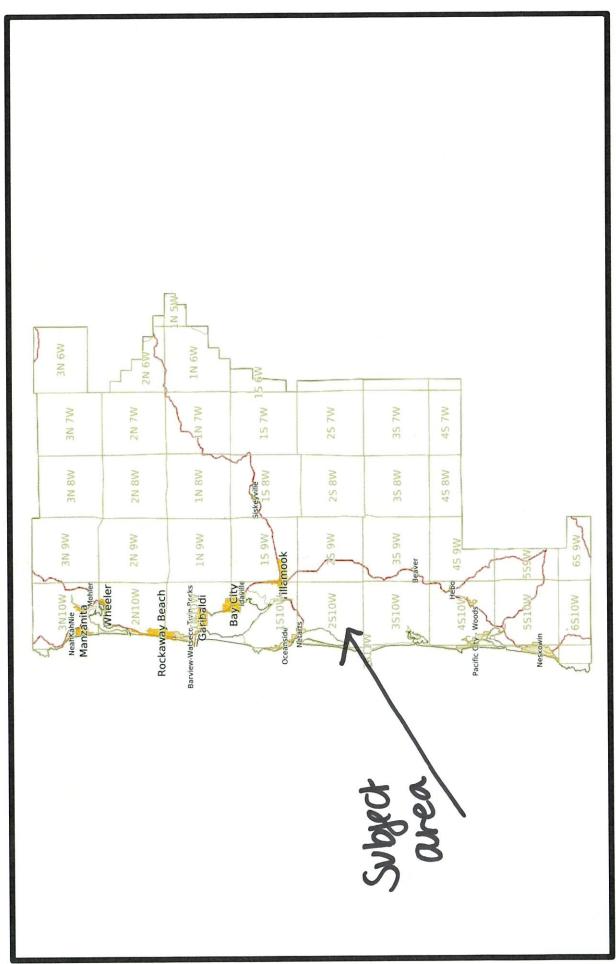
All Exhibits referenced herein are, by this reference, made a part hereof:

- A. Maps
- B. Applicant's submittal
- C. Public Comments
- D. Required Restrictive Covenant: Farm Forest Practices

EXHIBIT A

Vicinity Map

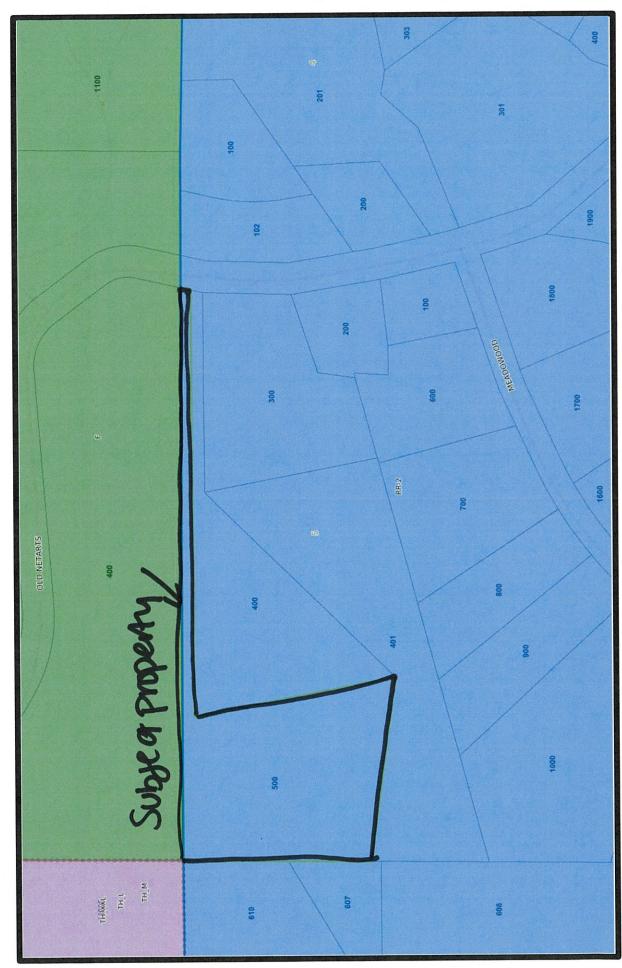




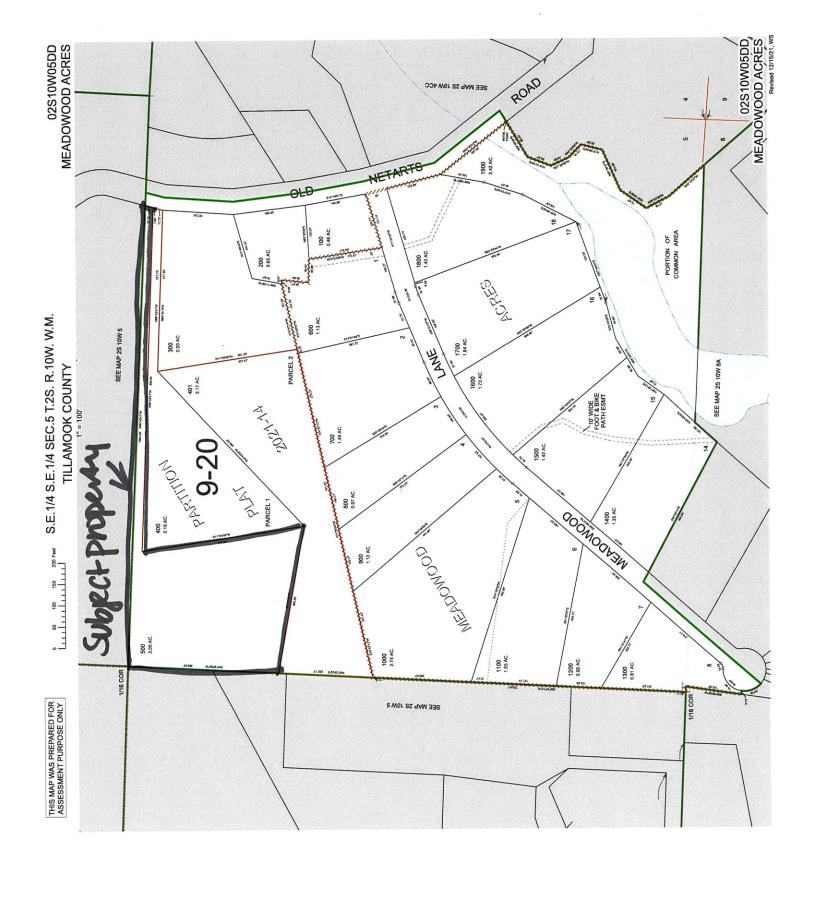
Generated with the GeoMOOSE Printing Utilities

Zoning Map





Generated with the GeoMOOSE Printing Utilities



National Flood Hazard Layer FIRMette



OTHER AREAS OF FLOOD HAZARD OTHER AREAS 123°55'37"W 45°25'14"N AREA OF MINIMAL FLOOD HAZARD HIELAMOOK COUNTRY Feet eff. 9/28/2018 41057C0570F T02S R10W S08 T02S R10W S05 Zone AE (EL 13.5 Feet) 200 EL 15.8 Fee

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

With BFE or Depth Zone AE, AO, AH, VE, AR Without Base Flood Elevation (BFE) Regulatory Floodway HAZARD AREAS SPECIAL FLOOD

0.2% Annual Chance Flood Hazard, Areas of 1.% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X Future Conditions 1% Annual

Area with Flood Risk due to Levee Zone D Area with Reduced Flood Risk due to Chance Flood Hazard Zone Levee. See Notes. Zone X

NO SCREEN Area of Minimal Flood Hazard Zone X

Effective LOMRs

- - - Channel, Culvert, or Storm Sewer GENERAL

Area of Undetermined Flood Hazard Zone D

STRUCTURES | 111111 Levee, Dike, or Floodwall

Cross Sections with 1% Annual Chance 17.5 Water Surface Elevation

Base Flood Elevation Line (BFE) Coastal Transect um 513 mm

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Hydrographic Feature Profile Baseline

OTHER FEATURES

Digital Data Available

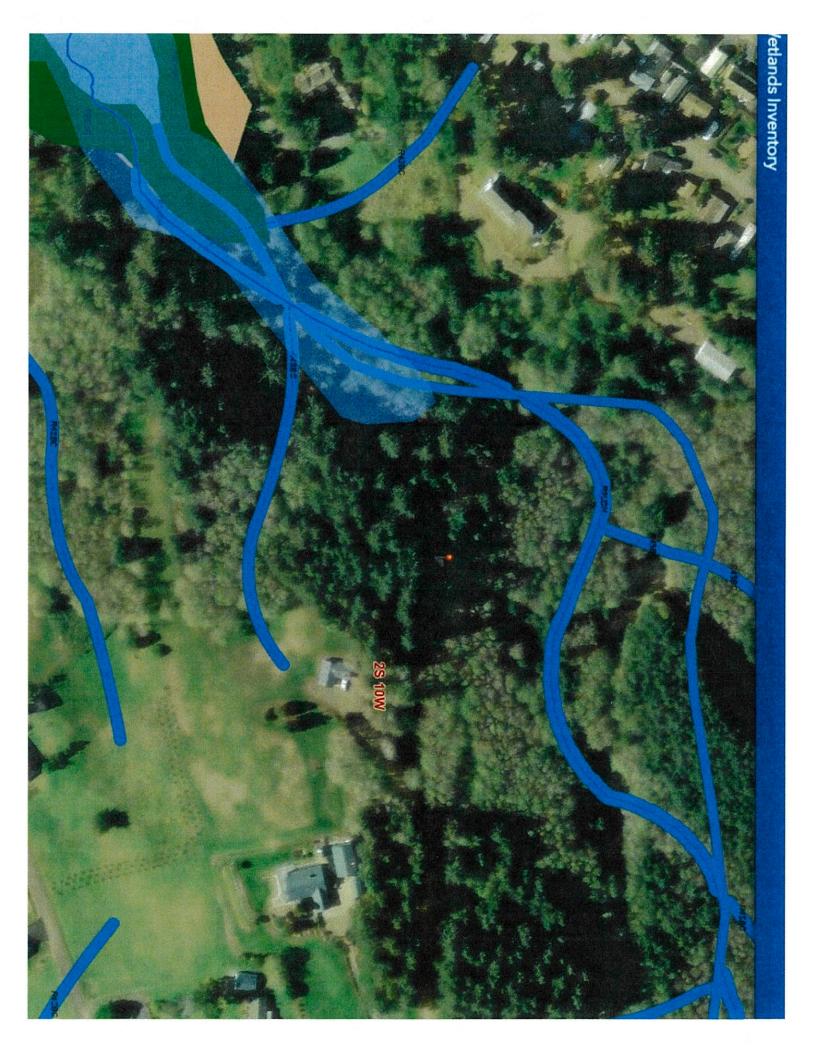
No Digital Data Available Unmapped

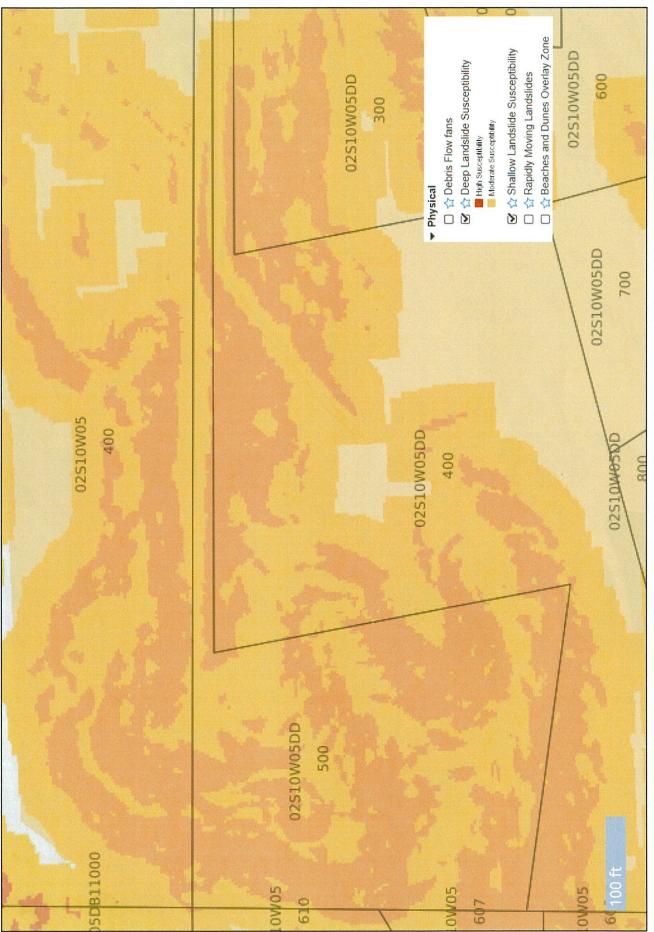
MAP PANELS

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap

authoritative NFHL web services provided by FEMA. This map reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or The flood hazard information is derived directly from the was exported on 5/10/2024 at 7:23 PM and does not become superseded by new data over time. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, FIRM panel number, and FIRM effective date. Map images for legend, scale bar, map creation date, community identifiers, unmapped and unmodernized areas cannot be used for regulatory purposes.





DISCIAINET: The spatial information hosted at this website was derived from a variety of sources. Care was taken in the creation of these themes, but they are provided "as is". The state of Oregon, or any of the data providers cannot accept any receiptable to inclinate the authoritable to properly boundaries, the precise shape or contour of the earth or the precise iscange any of these products. However, notification of any errors would be appredated. The data are clearly not intended to indicate the authoritable to precise shape or contour of the earth or the precise iscange any of these products. However, notification of any errors would be appredated. The data are clearly not intended to indicate the authoritable toperry boundaries, the precise shape or contour of the earth or the precise iscange any of these products. However, notification of any errors would be appredated.

Tillamook County 2023 Real Property Assessment Report

Account 372117

Map

2S1005DD00500

0920 - 372117

Tax Status

Assessable

Account Status Subtype

Active **NORMAL**

Legal Descr

Code - Tax ID

See Record

Mailing

VAN ORMAN, JAMES WELBURN & HEIDI COLLEEN

Deed Reference # 2022-6935

496 FAIRWAY CT SEASIDE OR 97138

Sales Date/Price

11-18-2022 / \$210,000

Property Class

400

MA

80

SA NH **Appraiser**

ELIZABETH LOFTIS

RMV Class

400

AC 842

Site Situs Address

City

			Value Summary			
Code Ar	'ea	RMV	MAV	AV	RMV Exception	CPR %
0920	Land	176,970	·	Land	0	
	Impr	0		Impr	0	
Code	Area Total	176,970	72,500	72,500	0	
G	rand Total	176,970	72,500	72,500	0	

				Land Breakdown			
Code Area	ID#	Plan RFPD Ex Zone	Value Source	Trend %	Size	Land Class	Trended RMV
	10 m			70	SIZE	Lallu Class	Treffded RMV
0920	0	RR-2	Market	112	3.00 AC		176,970
				Code Area Total	3.00 AC		176,970

				Improvement Breakdown			
Code		Year	Stat	Trend			
Агеа	ID#	Built	Class Description	% Т	Total Sqft	Ex% MS Acct	Trended RMV

Exemptions / Spec	ial Assessments / Notations		
Code Area 0920			
Fire Patrol	Amount	Acres	Year
 FIRE PATROL NORTHWEST 	18.75	3.00	2023
Fire Patrol	Amount	Acres	Year
■ FIRE PATROL SURCHARGE	0.00		2023

Comments

2/25/11 Moved to 542 neighborhood, zoned RR-2, EJ. 3/17/14 Land re-appraisal, tabled land. EJ.

5/14/2024 4:20 PM Page 1 of 1

EXHIBIT B



Land Use Application

Rev. 6/9/23

Tillamook County Department of Community Development

1510-B Third Street. Tillamook, OR 97141 | Tel: 503-842-3408 Fax: 503-842-1819 www.co.tillamook.or.us

OFFICE USE ONLY

Page 1

PLANNING APPLICATION

PLANNING APPL	ICATION	PARECEIVED
Applicant □ (Check Box if Same as Pro	marty Owner	
	:503-354-2176	MAR 2 7 2024
	:505-354-2176	BY: Chop-OFF
Address: 385 Hodgdon rd		BY: (NOP-OF
City:tillamook State:	OR Zip: 97141	- □Approved □Denied
Email: adam@arnwconstruction.com		Received by: AC
Property Owner		Receipt #: 136666
Name: James Van Orman Phone	:503-4843751	Fees: \$1305—
Address:496 fairway CT		Permit No:
City: Seaside State:	OR Zip:97138	- 851-24 - 000/00 -PLNG
Email: jvanorma@yahoo.com		L
Request: Exemption for 100 ft setback requirms info and documents.		Souse Zone
Type II	Type III	Type IV
☐ Farm/Forest Review	Detailed Hazard Report	☐ Ordinance Amendment
☐ Conditional Use Review	Conditional Use (As deemed	☐ Large-Scale Zoning Map
☐ Variance	by Director)	Amendment
☑ Exception to Resource or Riparian Setback	Ordinance Amendment	☐ Plan and/or Code Text
☐ Nonconforming Review (Major or Minor)	☐ Map Amendment	Amendment
Development Permit Review for Estuary	☐ Goal Exception	
Development	☐ Nonconforming Review (As	
☐ Non-farm dwelling in Farm Zone	deemed by Director)	
☐ Foredune Grading Permit Review	☐ Variance (As deemed by	
☐ Neskowin Coastal Hazards Area	Director)	
Location:		
Site Address:		
Map Number: 02S 101	N	5DD 500
Township Range		Section Tax Lot(s)
Clerk's Instrument #:		
Authorization		
This permit application does not assure permit a	pproval. The applicant and/or pro	perty owner shall be responsible for
obtaining any other necessary federal, state, and	d local permits. The applicant verif	ies that the information submitted is
complete, accurate, and consistent with other in	formation submitted with this app	olication.
In on offin Co-		3/26/2024
Protect Owner Signature (Required)		Date
I for form,		2/26/2029
Applicant Signature	-	Date



ADAM RUSHING

AR Northwest LLC | CCB No. 217557 503.354.2176 arnwconstruction.com adam@arnwconstruction.com

March 27, 2024

Tillamook County- Exemption to Resource

Map: 2S1005DD00500

To whom it may concern,

I am a general contractor working on behalf of James Van Orman to acquire an exemption to resource for his property, so that we may construct a new single-family dwelling. This property zoned RR-2 abuts a property to the north zoned F (2S10050000400). Due to this zone location, my client's dwelling is required to be set back 100' from the north property line. This creates many conflicts to building on this lot due to site slope, soil composition, and ravine consisting of a natural drainage way. I have included geotechnical reports, maps of national wetlands, as well as topographical maps showing these restrictions.

Due to these site features we need to build this dwelling at a setback distance of 45' from the northern property line and still adhering to all other zoning setbacks for the property. In addition to the before mentioned maps, I have included plans showing building design and a comprehensive site plan with topographic elevations as to the placement of the dwelling and other site features i.e.. Driveway, septic system, potential retaining walls.

In conclusion, we ask to obtain this exemption to resource so that the property can be improved upon and a single family dwelling constructed in a safe and efficient manner without obstructing natural drainage and habitat.

Thank you for your consideration.

Sincerely,

Adam Rushing

AR Northwest LLC



DEPARTMENT OF ENVIRONMENTAL QUALITY

November 12, 1991

HAYDEN HAUPERT 3050 WHISKEY CREEK ROAD TILLAMOOK OREGON 97141

> Re: OSS-Tillamook Co. Site Evaluation, Approved T2S, R10W, SEC 5, TL 505

Dear Mr. Haupert:

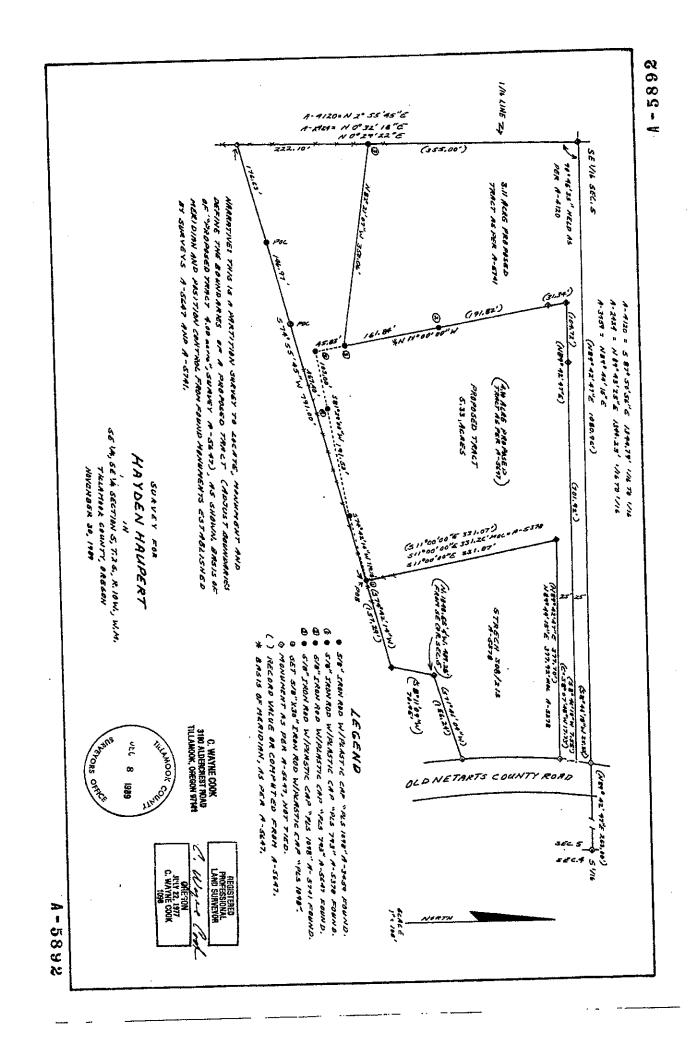
In response to your completed application of July 12, 1991 (Tillamook County Application No. 91-1110) a field inspection was made on October 1, 1991. The field inspection was made by Department of Environmental Quality staff assisting Tillamook County. Topographic and physical features of the site were checked. Soil information was collected by examining soil pit(s). The field worksheet is attached for your reference.

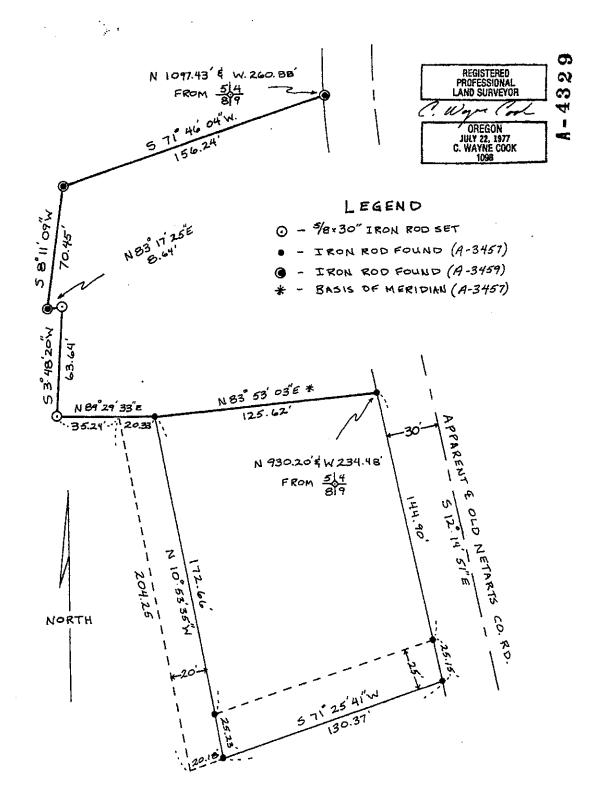
Based on the field work, the site complies with the rules of the Oregon Environmental Quality Commission. At least one specific area meets Oregon Administrative Rules Chapter 340, Division 71, governing on-site sewage disposal. The attached favorable report of evaluation for one lot shows approval of a standard or alternative sewage disposal system.

An approved report is not a permit to construct the system. However, it is a valuable document, similar to the title to an automobile. The approval runs with the land and is transferable. A permit will be issued to the owner of the land upon receipt of a complete application and fee; it will be good for one year and is renewable. Conditions on the approved site or adjacent land must not be altered in a manner that would prohibit permit issuance. For example, topsoil is removed from the approved site, neighbor drills a well too close, an improper partition,



811 SW Sixth Avenue Portland, OR 97204-1 (503) 229-5696 TDD (503) 229-6993 DEQ-1 Red





SURVEY FOR

HAYDEN HAUPERT

PORTIONS OF SEY4, SEC. 5, T.25, R. 10W., W.M.

TILLAMOOK COUNTY

OREGON

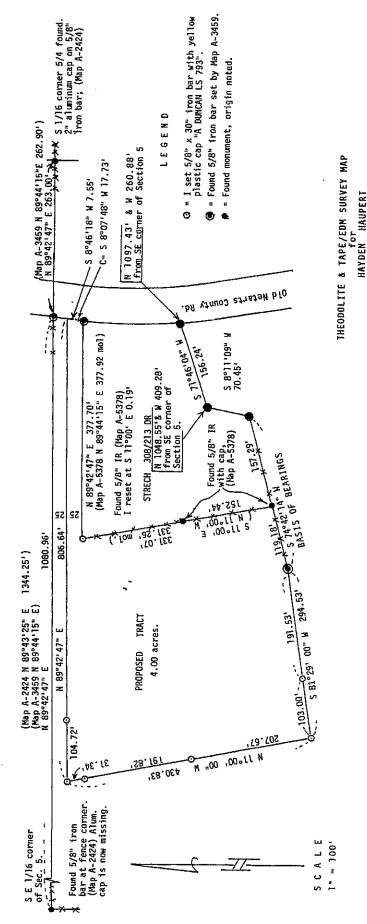
OCTOBER 1980

SCALE 1"=40"

C. WAYNE COOK
LAND SURVEYING
533 HIGHWAY 101 NORTH
TILLAMOOK, OREGON 97141
503-842-8360

DRAWN BY L. E. 10-18-CHECKED BY CUL 10-25-10

8.A.J. 5-23-78



SE⁴SE⁴ Section 5, T. 2 S., R. 10 W., N.M. Tillamook County, Gregon HAUPERT JULY 8, 1988 HAYDEN

> llon & Burean REGISTERED PROFESSIONAL LAND SURVEYOR

BASIS OF BEARINGS: The record value of S 74°42'14" W between the found monuments established by Map A.3459. The tie to the southeast corner of section 5 was not retraced, the record coordinate values being held.

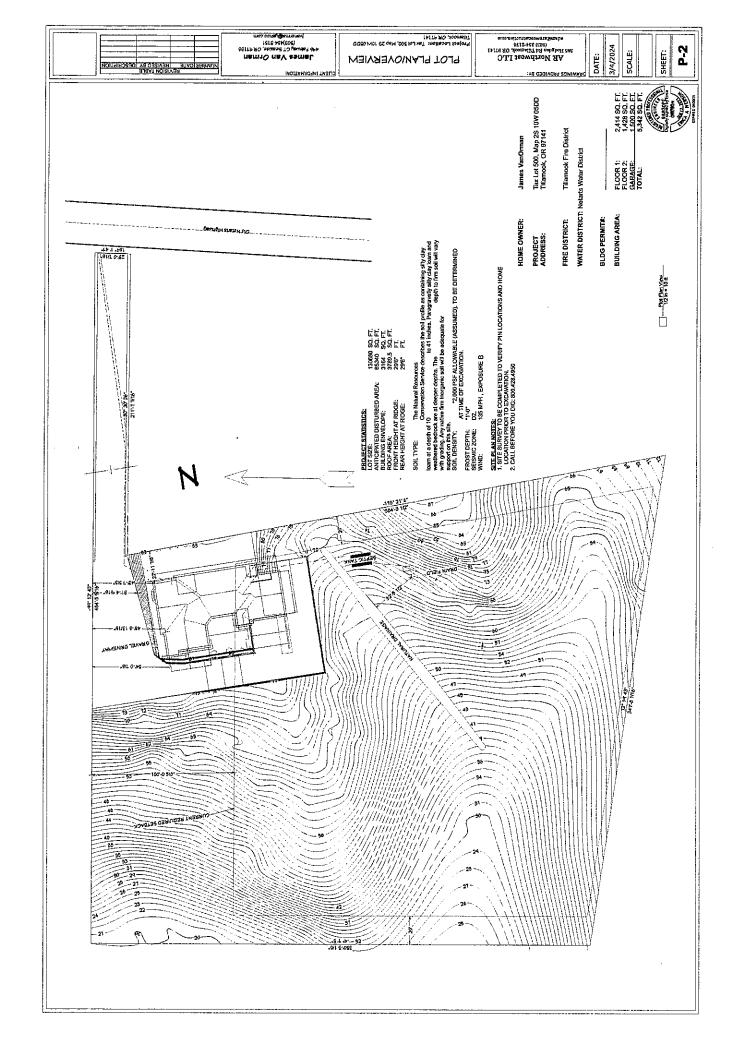
This survey was conducted as a partition survey to monument a proposed tract and to also provide a basis for description.

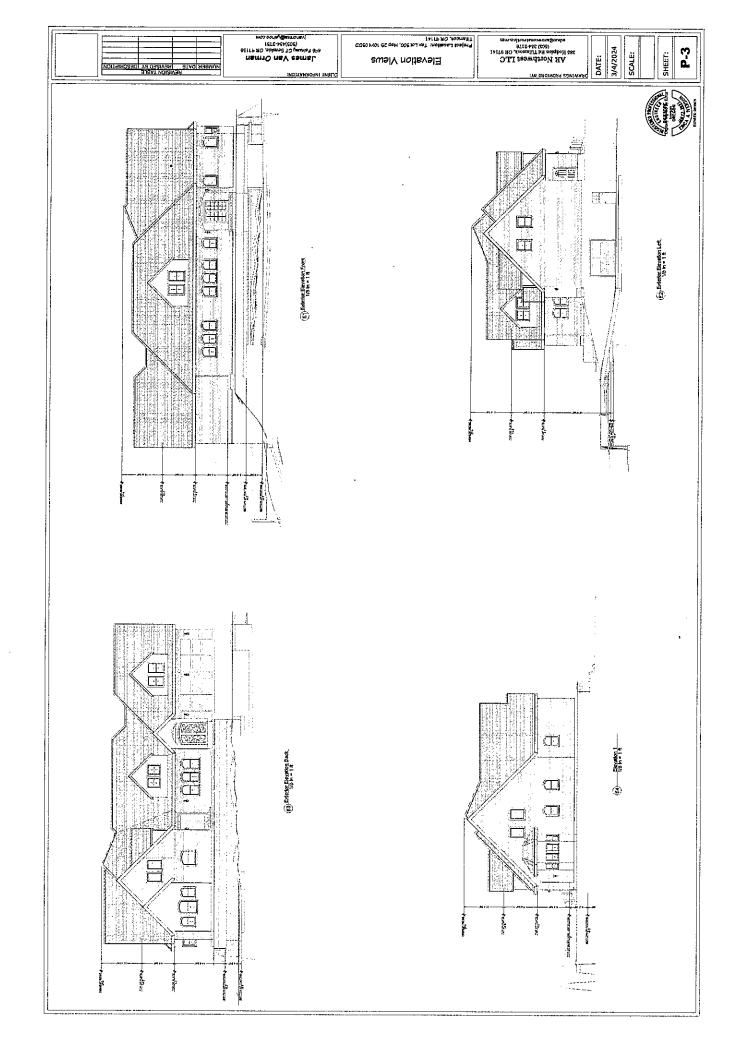
NARRATIVE

OREGON JULY 14.1897 ALLAN E. DUNCAN 7.93

Allan E, Duncan 4206 Cypress St, Tillamock, OR 97141 503-842-5478

COS YCOMAR 583 Ħ





3/4/2024 SCALE: SHEET: DATE:

P-4

585 Hodgdon Rd Tillamook, OR 97141 (503) 354-2176

AR Northwest LLC

Project Location: Tax Lot 500, Map 25 10W 05DD

ENGINEERING NOTES

CONCRETE

The floor share walls, bothing, and slabs shall develop a minimum compressive shength of 2,500 psi at 28 days
2 Apply TP4AEL, or equal foundation costing on all extensir lases of walls below grade.

Of Commonic share and evidences only.

Deficient of besides to be allocated beside not also not also also described input, whichever is greater 3. Conclinate preventions to be also also disease, mechanical ducts, peing, and electrical condultymetic to minimize in a business to a business and small permitting business between more for the relevance on all possible terming confess only.

All contings are to be contened under columns unless noted otherwise. All contings are to be contened under columns unless noted otherwise. All contings are be an entirely understanding the contened under columns unless noted otherwise. All contings are be contened under columns unless noted otherwise. All contings are because of min. undisturbed, non-organic non-organic

REMEORCRIC STEEL

1. Additional and a seek being conforming to ASTM A015, grade 60 for #4 and larges.

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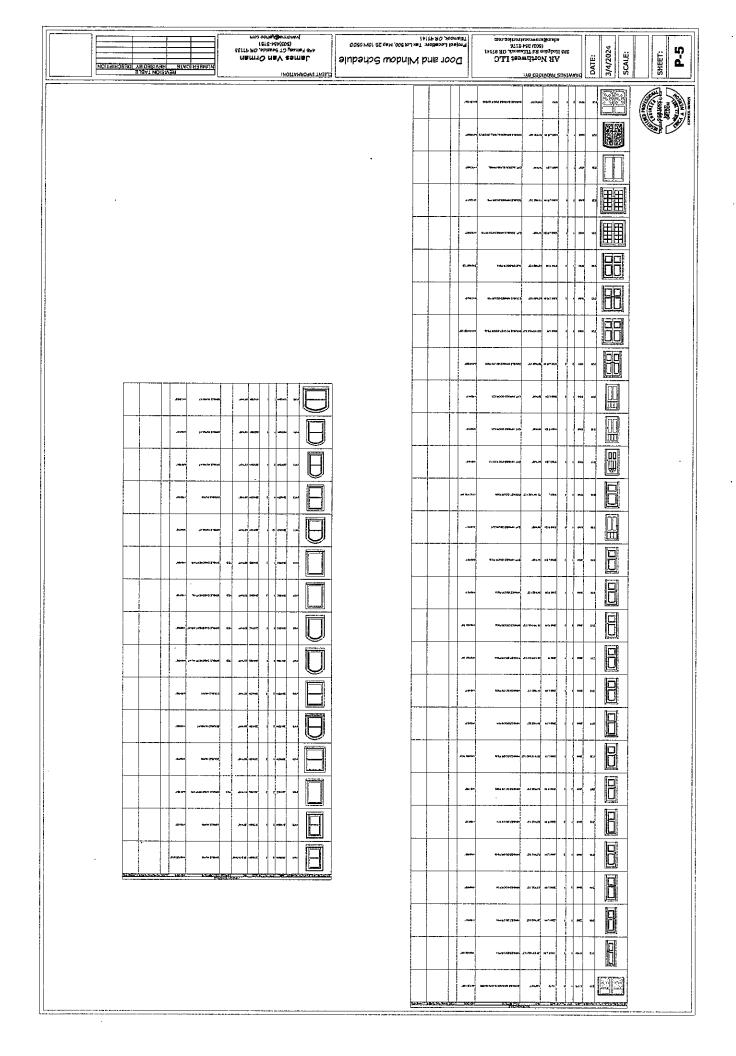
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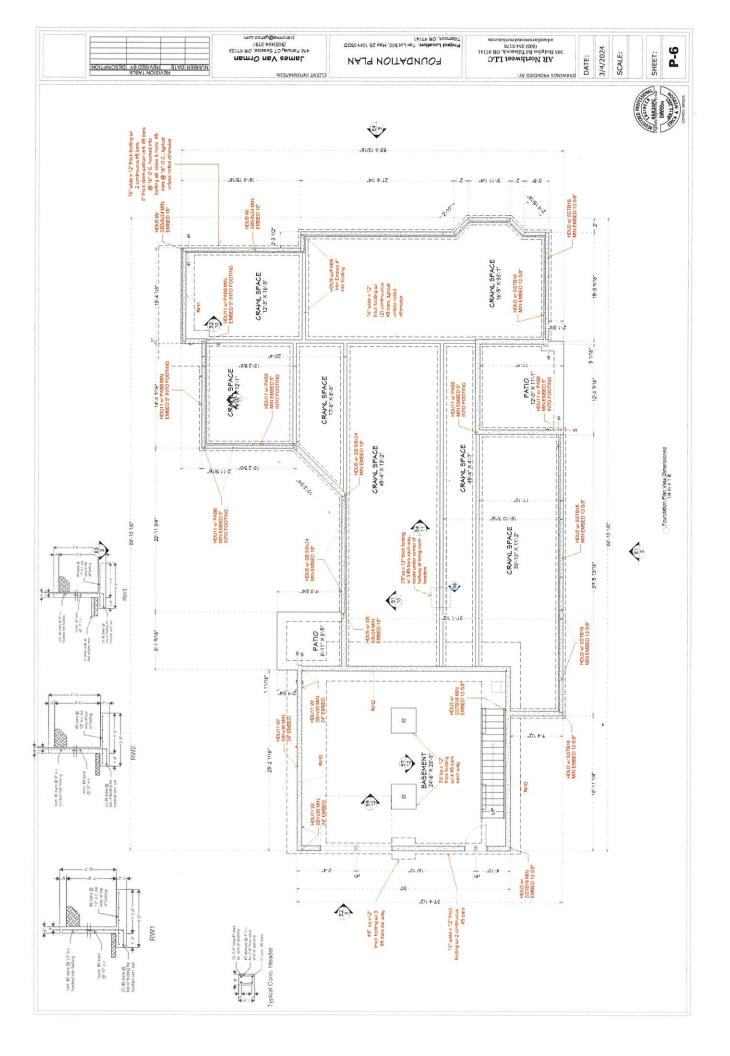
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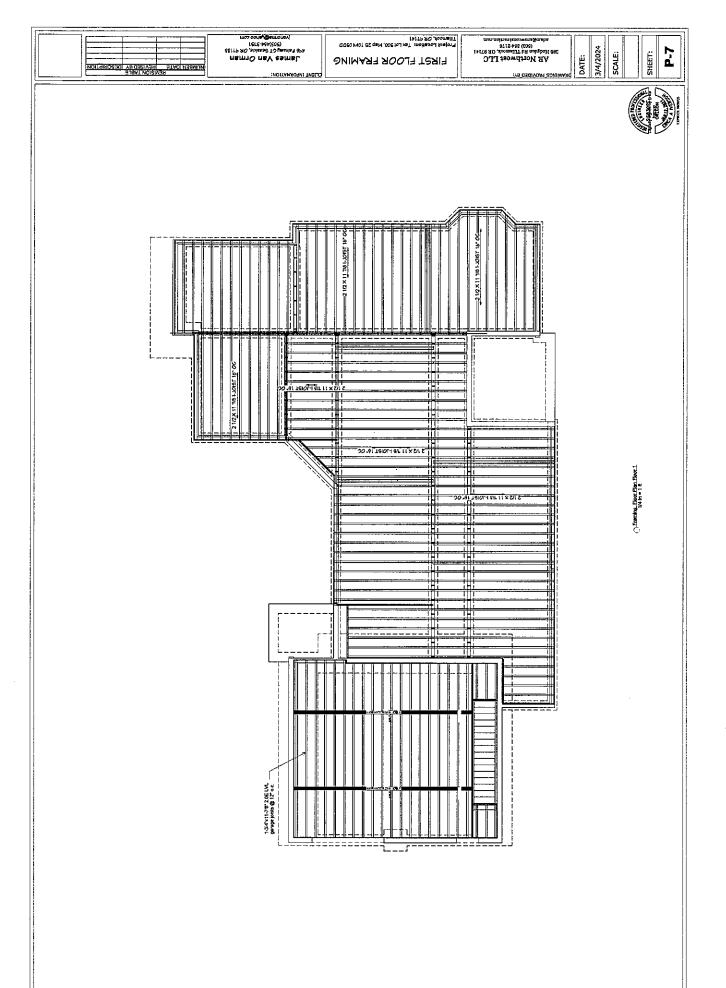
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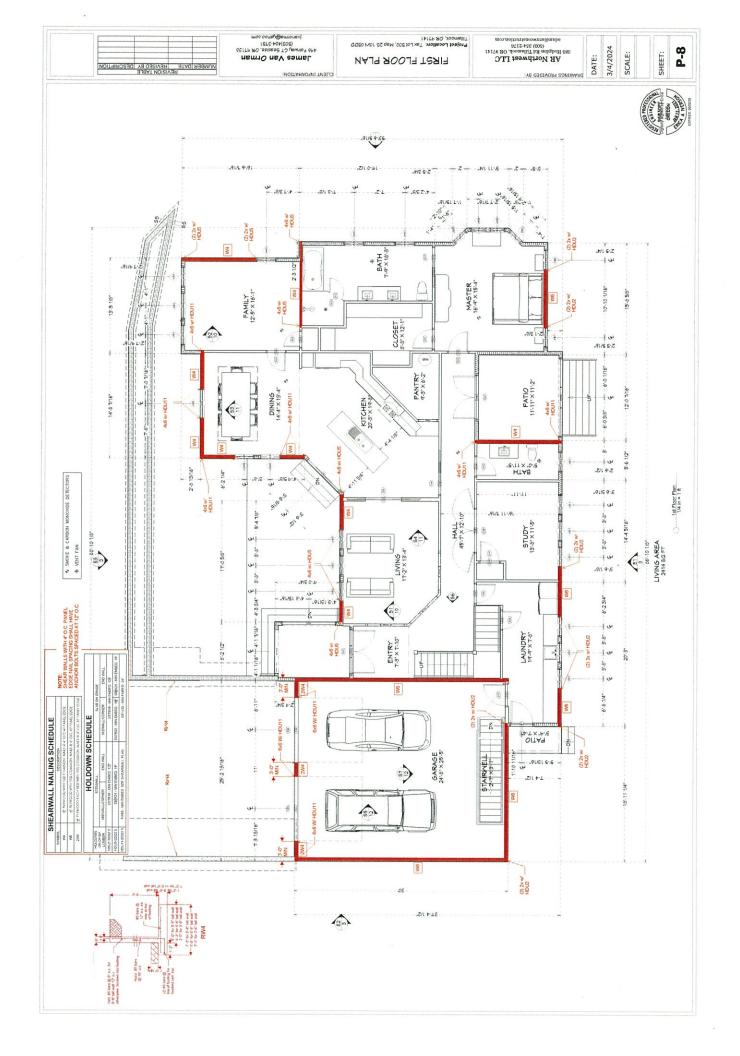
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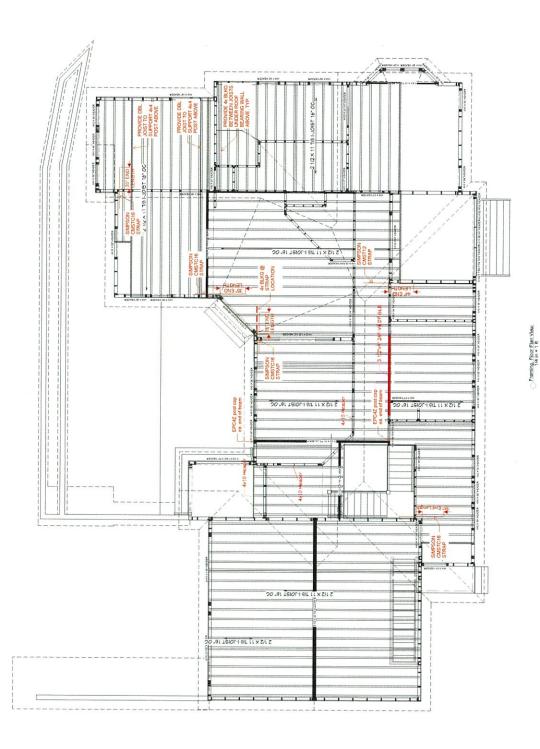
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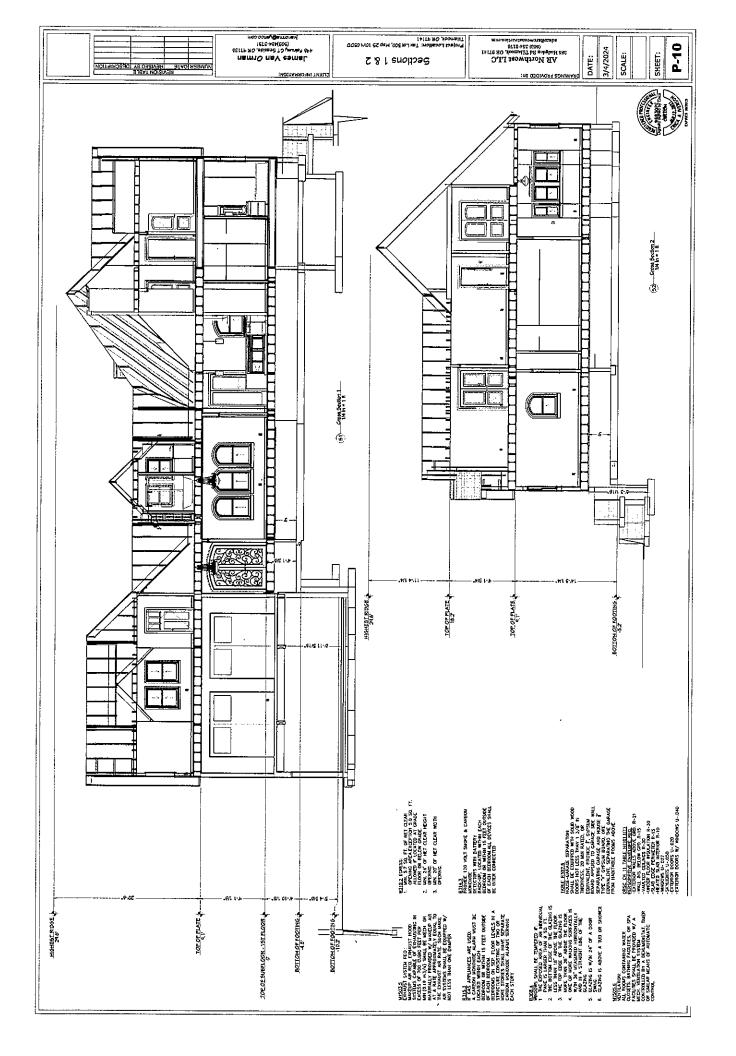
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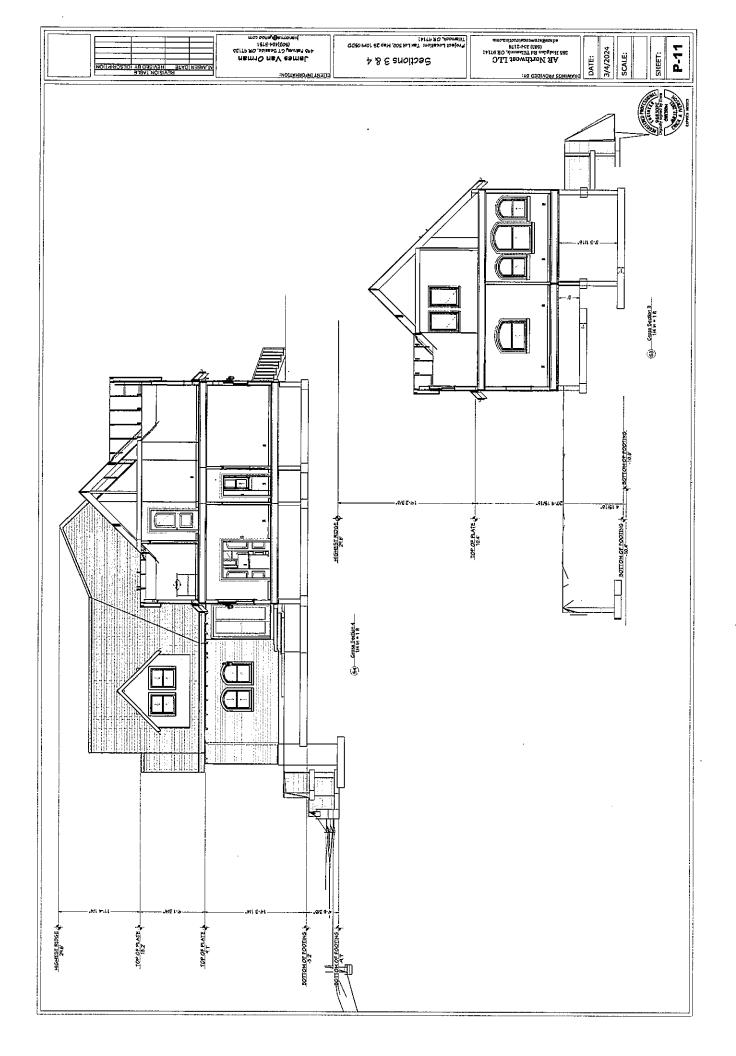
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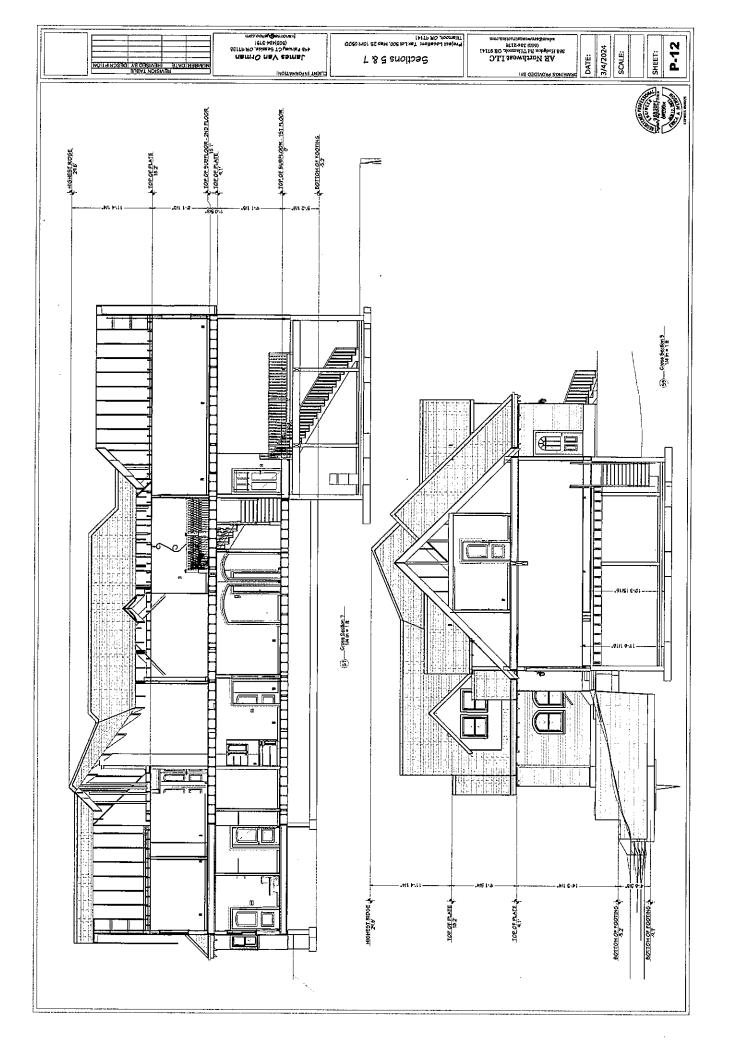
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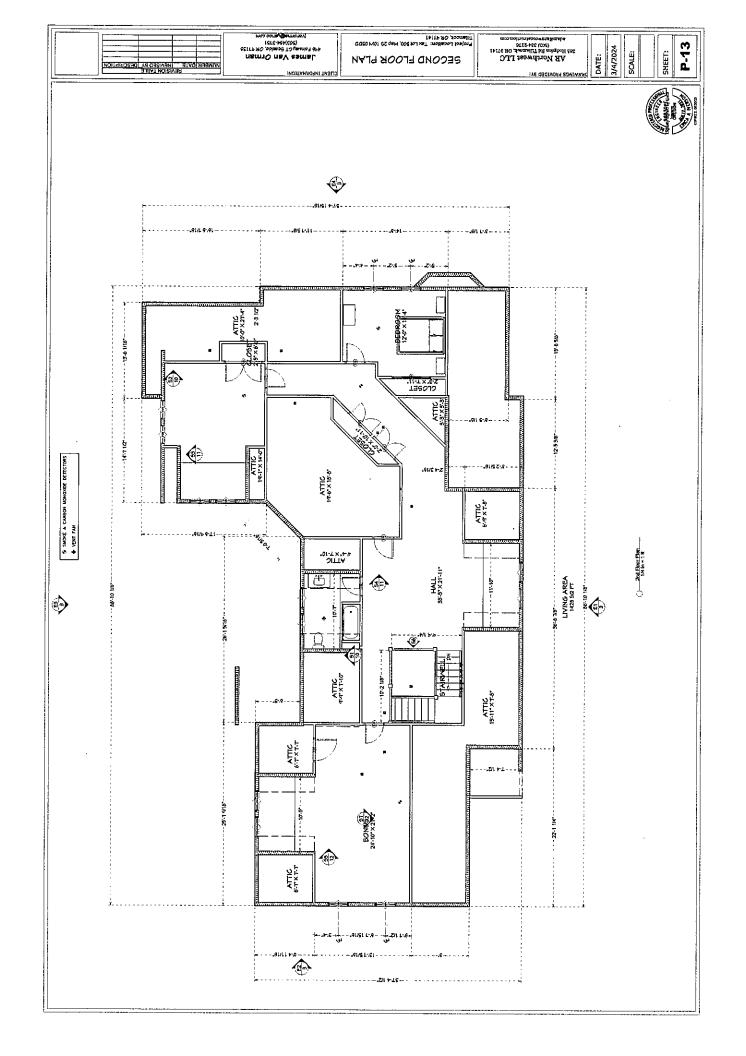


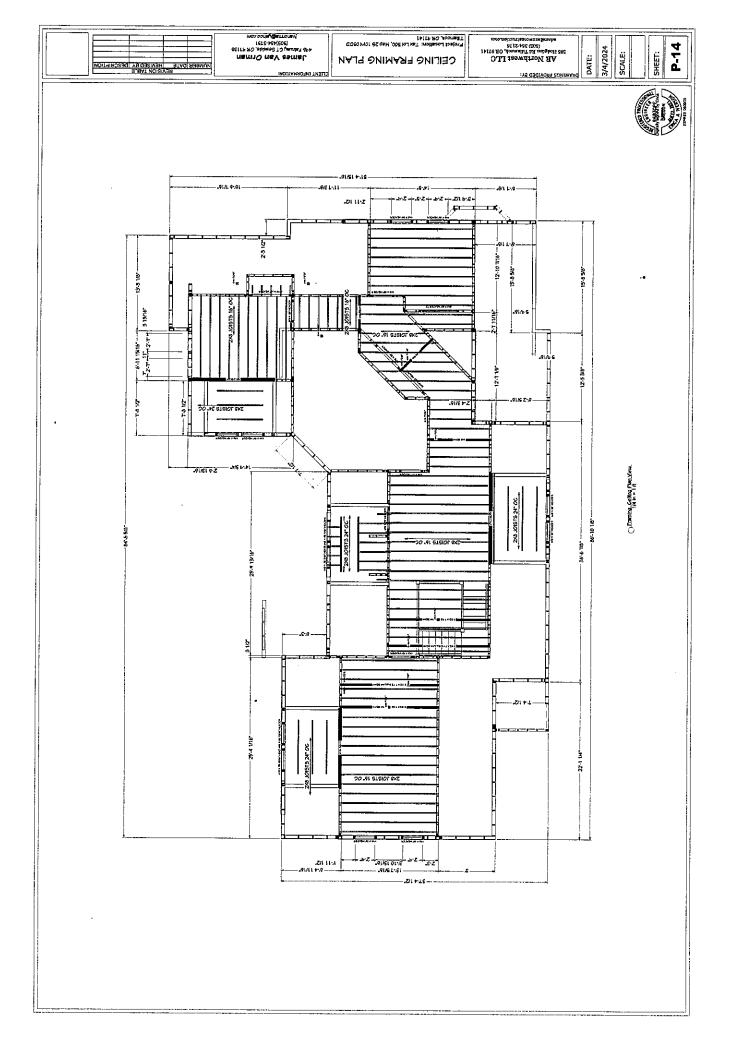


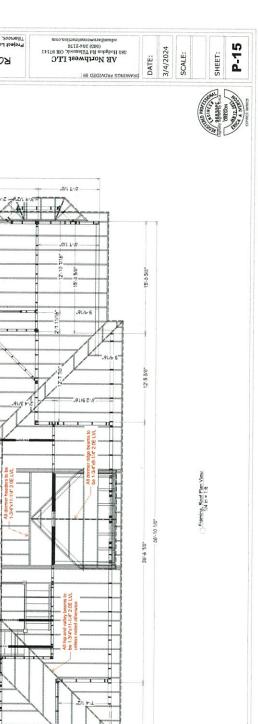


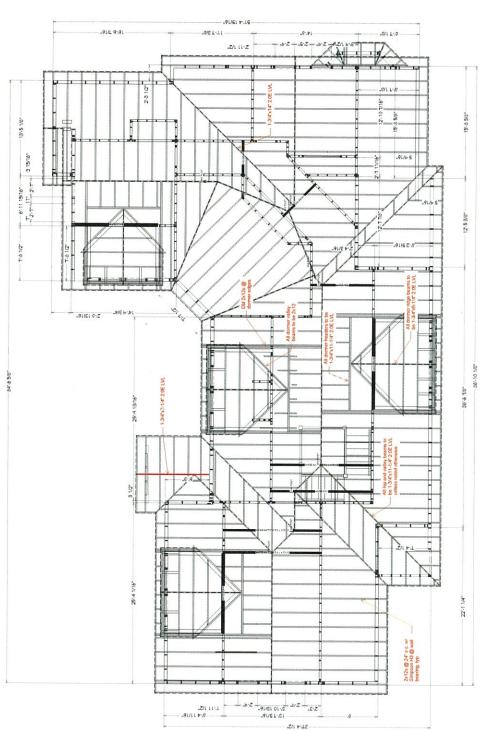












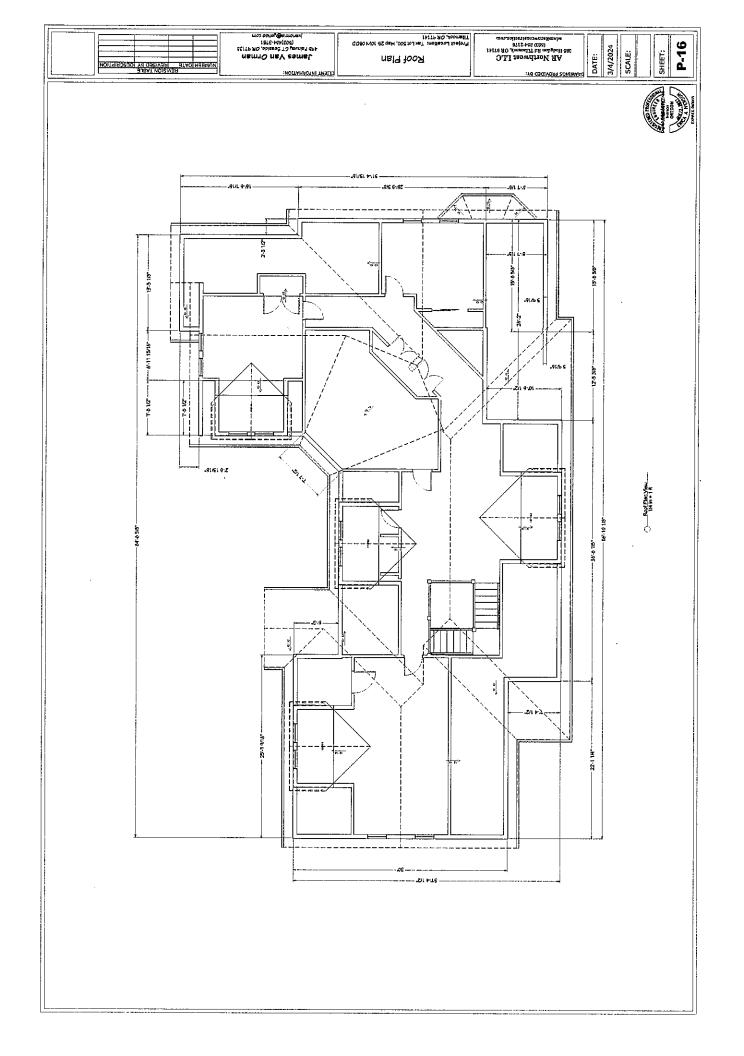
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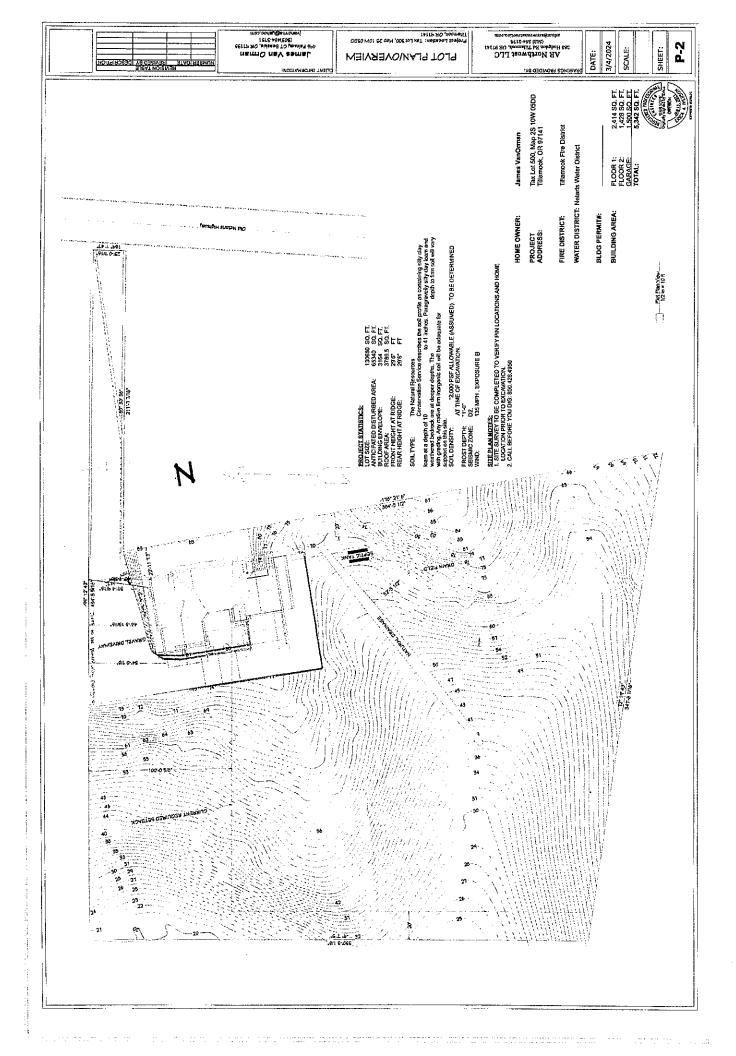
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NOWBER DATE REVISED BY DESCRIPTION







Morgan Civil Engineering, Inc.

PO Box 358, Manzanita, OR 97130 ph: 503-801-6016 www.morgancivil.com

September 5, 2023

Adam Rushing adam@arnwconstruction.com

Re:

Engineering Portion of Geologic Hazard Report for Tax Lot 500, Map 2S 10W 5DD, Old Netarts Road, Netarts, Tillamook County, Oregon - (Van Orman Property)

Project #22-09-Rus

Dear Mr. Rushing:

At your request, we have completed the site investigation of the subject property, referenced above. Available maps and previous reports of nearby properties were utilized in this investigation. This investigation also included a site inspection of the subject property with Warren Krager, Certified Engineering Geologist. Mr. Krager investigated the geologic conditions of the site and has addressed them in his report. Morgan Civil Engineering, Inc. (MCE) has then developed the engineering recommendations related to construction on the site. The two reports combined constitute the Geologic Hazards Investigation required by Tillamook County. This engineering portion of the report is prepared for your use in the construction of a single-family home on the property. The standards set forth herein should be incorporated into the development plans for that project.

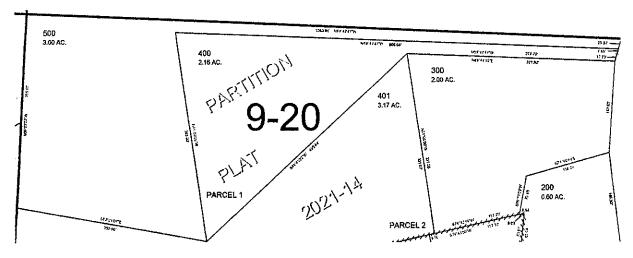
Site elevations noted in this report are based on topographic information obtained from the Oregon Department of Geology and Mineral Industries (DOGAMI) LiDAR project. The elevations are based on the NAVD88 datum, which is approximately sea level.

A detailed topographic survey should be completed for the planned building area on this property. Detailed topographic information would be beneficial in the design and layout of the driveway, grading, retaining walls, and other work to be done on this site.

We understand construction is proposed in the northeastern corner of the building areas. No development plans are currently available for review. After the development plans are prepared, a further addendum to this report should be completed in order to allow for a review of the final site plans and building design. This review is designed to ensure that the site improvements and building have been designed in accordance with the requirements noted in this, and other applicable reports.

Site Conditions

The site and its geologic conditions are generally as described by the geologist in his report. Mr. Krager has investigated the geologic hazards on the site and included those hazards in his report. Krager's 7-page report, dated June 30, 2023 is attached for your use. The subject property is a flag lot that fronts Old Netarts Road to the east for about 25 feet. The flag portion is about 800 feet long to the west. The building area is roughly rectangular, widening to the south. The property extends about 355 to the south and gradually widens to the south to a width of 350 feet. See the attached portion of the assessor's map for property orientation and dimensions.



The property includes a large undeveloped building area. Access has been constructed with a rough gravel driveway and a few dirt paths and roads have been cut into the northeastern portion of the property. A drainage channel cuts across the property near the southern boundary. There is also a ridge on the property entering from the northeast and ending at the drainage channel. See the attached topographic maps.

Rushing GHR Page 2 of 14

Elevations on the property vary from 20 feet above sea level at the west end of the drainage channel to 96 feet near the northeastern corner of the building area. Most of the property slopes steeply towards west and southwest, mostly towards the drainage channel. Most slopes are around 30 to 35 percent. There is a graded flat area at the northeastern corner of the building areas. The slopes at the northwestern corner increase to over 50 percent.

The Old Netarts Road is a gravel roadway. The adjacent properties to the east and west are developed. However, the homes are far from the property and do not affect it. The other adjacent properties are undeveloped and the site to the north is zoned as forestry land.

The site is vegetated with mature evergreen trees and underbrush, including ferns, blackberries, grasses, elderberry, and many others species typical to the coast.

In undisturbed areas, silty clay loam soil is expected to be about 12 inches below the surface. Paragravelly silty clay loam is expected to be near 40 inches depth, with weathered bedrock at depth of about 5 feet.

The site is in a 135 miles per hour basic wind gust speed zone, unprotected from the ocean winds (Exposure 'D' as per the 2021 State of Oregon Residential Specialty Code (ORSC)). Therefore, the building must be designed in order to withstand the minimum required lateral wind gust loads. In general, one- and two-story wood frame construction designed in order to withstand 135 miles per hour Exposure 'D' wind loading will also withstand even severe earthquake loads. According to the International Building Code (IBC) and ORSC, structures in Exposure 'D' are typically required to have an engineering analysis calculation of lateral wind loads. Such calculations must be submitted with the building permit application.

Rushing GHR Page 3 of 14

Findings and Hazards Analysis

The primary relevant geologic hazards on this site relate to: 1) steep slopes; 2) soft surface soil; 3) drainage control; 4) erosion potential, and; 5) regional seismic hazards.

Mitigation of these hazards is discussed in the Development Standards addressed herein and in the detailed recommendations set forth in the report prepared by the geologist.

The North Oregon Coast is defined by the 2021 ORSC as lying within a D_2 Seismic Design Category. As such, structures built in this area must, at a minimum, comply with the structural requirements for the D_2 Seismic Design Category. Strong seismic acceleration will likely result in widespread landsliding, and no slope can be considered immune from failure under these conditions.

Mandatory Development Standards

In addition to the required standards of Section 4.130 (2) of the Tillamook County Land Use Ordinance, the following site-specific standards shall also be required:

A. Development Density – This property should be developed for uses consistent with current zoning (outright or conditional uses). All development should take place in conformance with all other requirements of the Tillamook County Land Use Ordinance, or approved variances, as applicable.

The property is located in the Rural Residential (RR-2) Zone. See Section 3.010 of the ordinance for additional information.

B. Structure Foundation and Road Location – The building should be located in the northeastern corner of the building area, away from the steep slopes and drainage channel.

No other site-specific setbacks were recommended by the geologist in his report. All footings should be embedded so that the outside edge lies no closer than 10 feet from the face of the slope. When constructing on a 30 percent slope, this coincides with a depth of 3 feet below the surface.

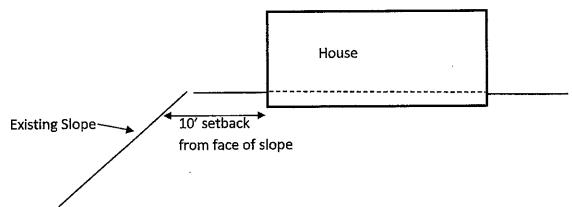


Figure 1. Cross-Section Through Property, Showing Setback from Face of Slope

The actual depth to adequate bearing material may be greater than is required by this setback. The building foundations should be designed in accordance with Development Standard "E", noted below.

Locally, all footings, including piers for overhanging decks, should be placed at least 5 feet from the toe of any dressed and graded cut slope, or at least 3 feet from the foundation of any retaining structure. Site access should take place from Old Netarts Highway.

The house structure should be placed upon this property in accordance with County setback standards. Footing design and the depth of all footings should be in accordance with Development Standard E, noted below.

C. Land Grading Practices — All excavations for driveway and house foundation construction should be done during reasonably dry weather (while it is not actually raining). All exposed native soil should be protected from exposure to rainfall. Protect all cleared areas by covering them with crushed rock or straw according to use; cover driveway and foundation areas with crushed rock and cover landscaping areas with straw.

Additionally, the site should be graded in order to prevent standing water in the excavated area during construction of the foundation and all subsequent activities. All cut slopes should be retained using temporary or permanent means of stabilization. No excavated material should be placed in any sidehill fill. All excavated material should be disposed of by hauling it off the site.

Rushing GHR Page 5 of 14

Temporary cut slopes should not be steeper than 1H:1V. Permanent cut slopes should be graded to 2H:1V or retained.

Slopes steeper than 2:1 should be supported by a retaining wall, designed by a licensed engineer, and constructed according to the standards set forth herein. The top of retaining walls, including foundation walls, should be set at least 5 feet horizontally from the face of the retained slope. No grading of the remaining slope, beyond that required for construction, shall take place.

The property should be graded in order to provide positive surface drainage away from the proposed building.

D. Vegetation Removal and Revegetation – Natural vegetation should remain on all areas of the property that are not required for construction. All areas that are disturbed by construction should be promptly revegetated in order to reduce the potential for erosion. The Oregon Fish and Wildlife Department's recommended revegetation program for sites such as this is as follows:

Seed disturbed areas with the following grass mixture. Application rate is 12 to 14 pounds per acre.

Species	Percentage of Mixture
Annual Ryegrass	26%
Potomac Orchardgrass	25%
New Zealand White Clover	20%
Perennial Ryegrass	15%
Annual Crimson Clover	14%

Use a 16-20-0 fertilizer in order to speed the establishment of the cover material. In order to further contribute to the stability of the disturbed areas, jute matting, straw cover, or another stabilization product such as SoilGuard®, should be placed over the soil in order to help protect against erosion before the seeds are allowed to germinate. In addition, planting shrubs and trees, such as salal, red elderberry, barberry, escallonia, cistus, ceanothus, etc., will further contribute to the long-term stability of the site.

Prior to planting, I recommend spreading organic topsoil over the disturbed areas in order to improve the likelihood of long-term vegetation growth. Use topsoil imported from a nearby site.

Vegetation on the slopes should be monitored and replaced, as necessary. Ground cover is important to stabilizing any disturbed slope and prevents future sloughing.

E. Foundations – The foundation should be a continuous, reinforced concrete perimeter system, using reinforced concrete foundation walls, where required. If a crawl space is planned beneath a wood first floor, I recommend the use of continuous, reinforced concrete strip footings running between perimeter foundation walls, in order to allow for continuity of the reinforced concrete footings. Isolated footings should not be used within the perimeter foundation walls. Interior footings should be integral with the continuous perimeter footings. The first-floor joists should then be supported either with conventional posts and beams, or pressure treated pony walls on continuous strip footings tied together with the continuous perimeter footings.

The site lends itself toward the use of a daylight basement design for the home to economically use the existing slope of the site. Alternatively, the foundation should be stepped to roughly follow the existing slope of the property.

All footings should rest at least 12 inches into the firm silty clay loam soil. Constructing deeper footings on the weathered bedrock is also acceptable, where encountered. Regardless of depth, the bottom of all footings and pads should be excavated to below any organic material and previously placed fill material. There is a potential for buried topsoil or isolated pockets of organic material that extend deeper into the bearing material than in other locations. Regardless of depth, all organic debris and topsoil should be removed from the building footprint.

Rushing GHR Page 7 of 14

The construction of a concrete slab on grade is acceptable on a prepared pad. The area to support the slab should consist entirely of cut material and be covered with at least 6 inches of compacted crushed rock.

Below any concrete slab, I recommend the use of a capillary break in order to prevent moisture directly under the slab. Below the slab, use a layer of plastic sheeting, clean 3/4-inch crushed rock (no fines), or a combination of both options.

When excavation takes place, it is recommended that a representative of MCE, or an equivalent geotechnical specialist or engineer, be consulted in order to determine whether the appropriate materials have been exposed for foundations. I believe that such an inspection is extremely important and, therefore, I recommend that inspection of the foundation excavation prior to footing construction be a **mandatory requirement for construction**.

Over-excavate the foundation and place at least 4 inches of 3/4"- crushed rock over the soil, then mechanically compact the crushed rock before the footings are constructed.

Do not use concrete slab-on-grade construction built upon fill. Slabs supported simultaneously on cuts and fills will be subject to differential settling. Use structural slabs on supports or alternative methods of construction when possible.

Soil bearing pressures at the bottom of all footings should not exceed 2,000 pounds per square foot on approved soil. All footings should be at least 18 inches in width.

Rushing GHR Page 8 of 14

Any retaining walls should be designed according to the following criteria:

Allowable Soil Bearing Pressure, psf (on approved soil)	2,000
Lateral Soil Bearing Pressure on Unrestrained retaining walls with level backfill, pcf/ft of depth, equivalent fluid weight (Active pressure excluding surcharge effects)	38
Lateral Soil Bearing Pressure on Restrained retaining walls with level backfill, pcf/ft of depth, equivalent fluid weight (Active pressure excluding surcharge effects)	48
Lateral Soil Bearing Pressure (Passive), pcf/ft of depth	504
Friction Angle, degrees	29°
Maximum unit weight, pcf	120
Coefficient of Friction	0.35

The backfill behind all retaining walls should be clean, well-drained, imported, select granular backfill. Using native material for backfill behind retaining walls will not be acceptable. All retaining walls require foundation drains, as described in Section H below.

The retaining wall designer should determine whether a retaining wall is restrained or not.

F. Driveway Location and Design – The driveway should be constructed such that the roadbed is entirely on cut soil or engineered fill material. Access should be from Old Netarts Highway. The flag portion of the property must be used.

Driveway design standards should include the use of a geo-textile support fabric, a minimum of an 8-inch-thick layer of pit-run base rock, and a 3-inch-thick layer of 3/4"-minus crushed rock surfacing. Paving the driveway is optional.

The culvert under the driveway should be replaced or maintained in order to allow water to pass unimpeded.

G. Stormwater Management, Runoff and Drainage – All roof drainage should be collected with eave gutters and downspouts and then piped in order to discharge into the vegetation downslope of the home. Accumulated surface drainage should also be collected and discharged with the roof drainage. The complete roof drainage system, including roof gutters and downspouts, should be installed immediately after the roof sheathing in order to protect the ground from erosion during construction. When the surface is not protected from roof runoff, the surface soil will continue to erode.

I recommend discharging the collected water into a mat of pit-run rock in order to prevent erosion. Use a perforated cap on the end of the drainpipe. Use multiple discharge locations.

The vegetated areas of the property downslope of the actual home construction should be protected from erosion and siltation due to runoff from the construction site by using silt fencing or "bio-bags" during construction. Specifically, silt fencing should be placed along the downslope of the disturbed surface area and "bio-bags" (or hay bales) should be placed at the locations of visible discharge. These temporary measures should be left in place and properly maintained until all surface revegetation is established.

The temporary gravel driveway is adequate for a rock entrance pad. The driveway should be rebuilt with fresh base rock and gravel after the house is constructed in order to provide a smooth driving surface.

During construction, the excavated building area should be graded and maintained in order to avoid standing water. The site should be graded in order to allow water in the excavated area to drain during construction of the foundation and all subsequent activities.

H. Foundation Drains — Groundwater is not expected to be an issue at the building location since it is at a local high point. Regardless, foundation drains should be installed on the uphill side of all continuous concrete retaining walls over 4 feet in height. The use of a fabric covered, perforated drainage pipe, such as ADS DrainGuard®, or an equivalent alternative, is recommended. The backfill around and above the foundation drains should be clean, washed drain rock or angular ballast rock in order to ensure good drainage. The drain rock backfill should extend from the foundation drains (at the bottom of the footings) to about 12 inches below the finish ground surface. All foundation drains should discharge toward the lowest point along the wall.

All roof and surface area drainage piping should be separated from the foundation drainage piping. Discharge the water collected by the foundation drains at a separate location from the stormwater system.

- I. Topographic Survey Based on the variable grades on the property and your plans for the site, a topographic survey should be prepared. Having a topographic survey of the property will allow for a house design and site plan specifically for this property. The topographic survey should extend throughout the planned building area.
- J. Site Plan I further recommend that the topographic information be used in order to develop a site-specific development plan. The development of a detailed site plan should include all grading, driveway slopes, house location, and any retaining walls. Development of a detailed site plan prior to construction will reduce costs, unexpected costs, and delays. A house foundation designed specifically for this property will likely reduce the amount of excavation.

Summary Findings and Conclusions

The proposed use is currently single-family residential. There are no development plans currently available for review. There are no immediate adverse effects on adjacent properties from future house construction. Future development may result in increased stormwater runoff or decreased runoff quality on adjacent properties. Future development proposals should be further evaluated in the context of the recommendations of this report at the time of issuance of a building permit.

- Hazards to life, public and private property, and the natural environment, which may be caused by the proposed use, are discussed herein and addressed in each of the Development Standards.
- 3. The methods for protecting the surrounding area from the adverse effects of the proposed development are set forth in each of the Development Standards.
- 4. The maintenance of new and existing vegetation, and temporary and permanent stabilization programs, are discussed in Development Standard "D".
- 5. The proposed development of this property, according to the mandatory standards set out herein, will result in the new parcels and future developments being adequately protected from the above described reasonably foreseeable ordinary hazards, although not necessarily from major earthquake, the possibility of which is discussed herein.
- 6. The proposed development of this property, according to the recommended standards, is designed in order to minimize adverse environmental effects.
- 7. Periodic monitoring is necessary to ensure that the recommended development standards are implemented for the long-term success of the development.

Limitation

The engineering portion of this report is based on a site inspection of the subject property and vicinity, as well as a review of the site topography. The engineering conclusions and recommendations in this engineering portion of the report are based upon the conclusions presented in the geologic report prepared by Warren Krager, CEG. The engineering conclusions and recommendations presented herein are believed to represent the site and are offered as professional opinions derived according to current standards of professional practice for a report of this nature. No warranty is expressed or implied. This report has been prepared for the timely use of the above addressee and parties to the pending development of the subject property, and it does not extend to the activities of unidentified future owners or occupants of the property for which the writer bears no responsibility.

Rushing GHR Page 12 of 14

ADAM RUSHING

September 5, 2023

MORGAN CIVIL ENGINEERING, INC.

GHR for Tax Lot 500, Map 2S 10W 05DD

Old Netarts Road

Netarts, Tillamook County, Oregon

(Van Orman Property)

Should you have any questions regarding my investigation or this report, please contact me.

Sincerely,

MORGAN CIVIL ENGINEERING, INC.

· R My

Jason R. Morgan, PE

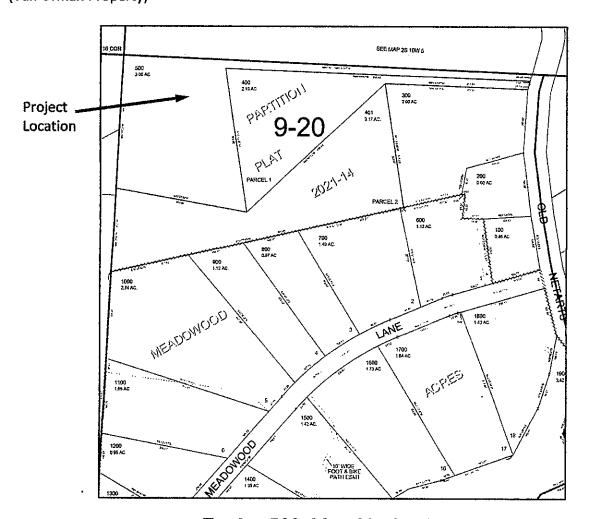
Professional Engineer

RENEWAL DATE: DECEMBER 31, 2024

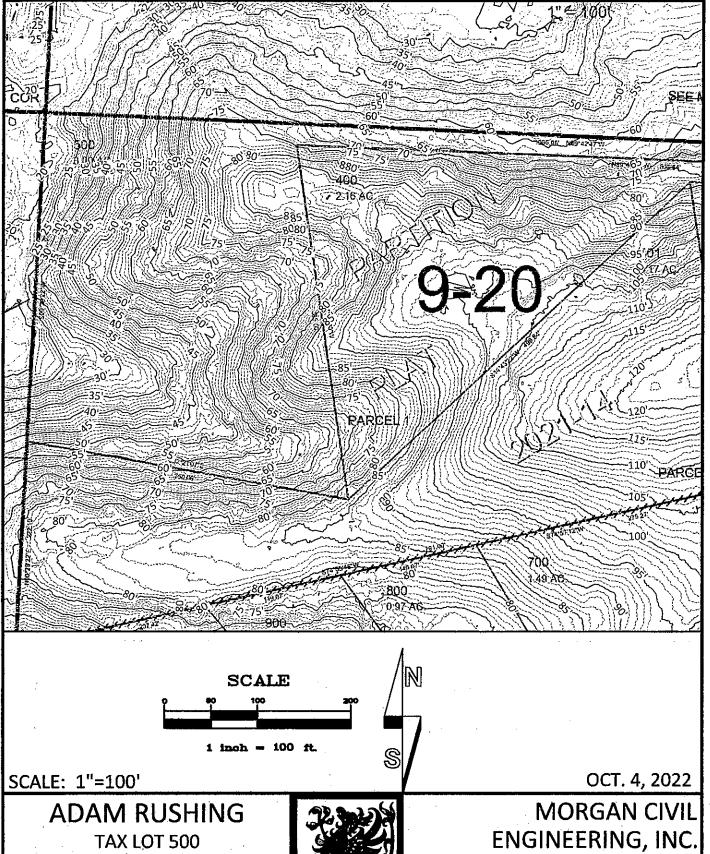
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Tax Lot 500, Map 2S 10W 5DD
Old Netarts Road
Netarts, Tillamook County, Oregon
Van Orman Property



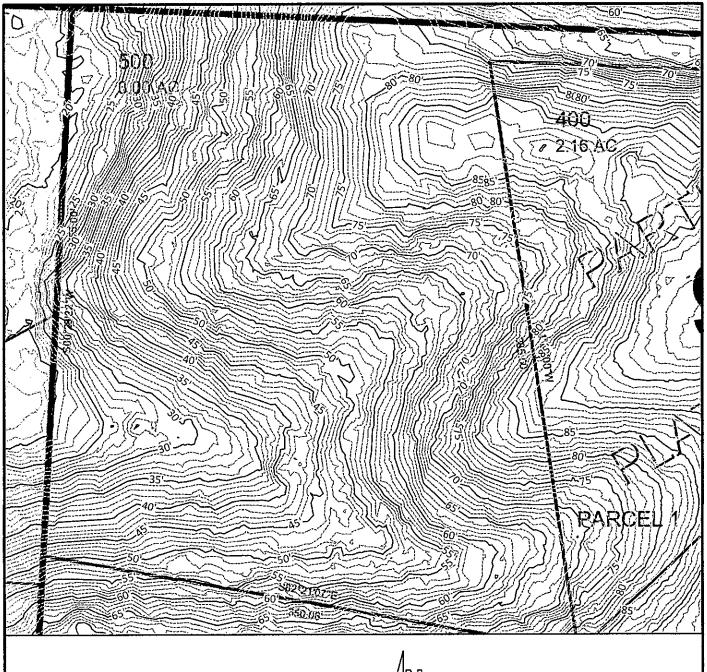
TAX LOT 500 OLD NETARTS ROAD 2008 LIDAR TOPOGRAPHY

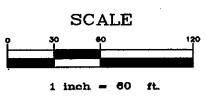
NETARTS/MAP 2S 10W 5DD



PO BOX 358 MANZANITA, OR 97130 (503) 801-6016 www.morgancivil.com

- CIVIL ENGINEERING
- INSPECTION
- PLANNING





SCALE: 1"=60'

OCT. 4, 2022

ADAM RUSHING

TAX LOT 500 OLD NETARTS ROAD 2008 LIDAR TOPOGRAPHY

NETARTS/MAP 2S 10W 5DD



MORGAN CIVIL ENGINEERING, INC.

PO BOX 358 MANZANITA, OR 97130 (503) 801-6016 www.morgancivil.com

- CIVIL ENGINEERING
- INSPECTION
- PLANNING

June 30, 2023

Adam Rushing, in care of: Jason R. Morgan, P.E. Morgan Civil Engineering, Inc. PO Box 358, Manzanita, OR 97130

Subject:

Engineering Geologic Reconnaissance

and Geologic Hazards Report

Proposed Residence, Old Netarts Road,

Tax Lot 500, Map 2S 10W 05DD Tillamook County, Oregon

Dear Gentlemen:

As you requested, I am pleased to submit my engineering geologic reconnaissance and geologic hazards report for the above referenced property and proposed development.

Introduction

This engineering geologic report has been prepared in general accordance with the requirements of Tillamook County Land Use Ordinance (TCLUO) Section 4.130, Development Requirements for Geologic Hazard Areas. The subject property is mapped by the Oregon Department of Geology and Mineral Industries (DOGAMI) as having moderate to high susceptibility to shallow Landslides (less than 15 feet below ground surface). Natural slope gradient within the property exceeds 50 percent.

R. Warren Krager, R.G., C.E.G. (Oregon Licensed Engineering Geologist E-957) visited the proposed building site on Tax Lot 500 site with you in October 2022, with Mr. Jason R. Morgan, P.E., of Morgan Civil Engineering, Inc. Upon your authorization of report preparation, Mr. Morgan and I returned to look over the subject property and proposed home building site again on June 24, 2023. In total, a little more than one hour was spent on site in observation of site conditions including natural and graded slopes, graded driveway and proposed home site. This reconnaissance level evaluation did not include geotechnical subsurface exploration in known foundation areas. The conclusions and recommendations are based on observation of the site, adjacent slope, background geologic literature review, and familiarity with general engineering geologic conditions in the local area.

The background geologic report and literature review includes information or images from the following sources:

- Environmental Geology of the Coastal Region of Tillamook and Clatsop Counties, Oregon, Oregon Department of Geology and Mineral Industries (DOGAMI), Bulletin 74, 1972.
- Geologic Map of the Tillamook Highlands, Northwest Oregon Coast Range, United States Geological Survey (USGS), Open File Report 94-21, 1994.

- Online research of DOGAMI Statewide Landslide Information layer for Oregon, Interactive SLIDO maps, accessed June 29, 2023.
- United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), Web Soil Survey: http://websoilsurvey.nrcs.usda.gov/. accessed June 29, 2023.
- Google Earth Aerial photographs of the Tillamook Bay, Oregon area, photo dates: August 29, 1994, July 29, 2000, June 15, 2003, June 29, 2005, December 12, 2005, August 1, 2011, July 6, 2012, July 30, 2014, August 23, 2016, June 22, 2017, and April 15, 2021.
- Pdf file of Lidar topographic tax lot plan provided by Jason Morgan, P.E. Morgan Civil Engineering, Inc., dated October 4, 2022.



Figure 1- Site Location Plan

Site and Project Description

The subject property consists of Tillamook County Tax Lot 500 of T2S R10W 05DD. The subject property is a 3-acre flag lot located west of old Netarts Road in the Meadowood Acres partition plat 2021-14 in Tillamook County, Oregon, as shown in Figure 1. The property is accessible via an approximately 800-foot-long driveway leading to the west from Old Netarts Road. Tax Lot 500 is bordered on the north by forest land, and on the remaining sides by partitioned rural residential land partially developed with homes.

Lidar topography of the northwestern corner of Tax Lot 500 is shown in Figure 2. Land surface elevation of the property ranges from about 20 feet above mean sea level along the western 10655 S.W. Park Street • Tigard, Oregon 97223 • Phone 360-903-4861• Email warrenkrager@gmail.com

boundary, to about 88 feet above mean sea level along the eastern border of Lot 500 excluding the 800-foot-long access driveway.

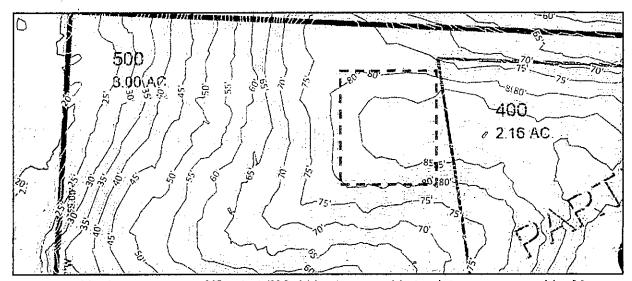


Figure 2- Northwest corner of Tax Lot 500, Lidar topographic tax lot map prepared by Morgan Civil Engineering.

I have not seen the proposed building site plan or driveway grading plans. From our discussions, it is my understanding that the home site is proposed on the highest elevation ridge crest plateau located southwest of the northwestern corner of Tax Lot 400, south of where the driveway enters the northeast corner of the larger area of Tax Lot 500. My understanding of the approximate planned building area is shown in dashed green outline in Figure 2.



Photo 1 – Existing cut slope on southern margin of driveway, adjacent to home site on upper elevation of Tax Lot 500. The view is to west-southwest from near the west end of the existing driveway.

It is expected that the driveway may be extended and graded upward around the promontory to the level of the homesite, and improved with additional crushed rock, and dressed or retained final slopes. At elevations above 75 feet mean sea level, natural slopes generally do not

exceed 25 percent, allowing for reasonably level, easily constructed conventional foundation and floor slab for the home. An existing 5-to 6-foot-high manmade cut slope showing soil and decomposed sedimentary rock material is present at the southwestern end of the driveway, shown in Photo 1. Photo 2 and Photo 3 show west and south views, respectively, from the highest elevation of the property at the presumed home site.



Photo 2 - View to west from planned homesite at about elevation 88 feet above mean sea level.



Photo 3 - View to south from planned home site.

Note that below elevation 75 feet mean sea level on Tax Lot 500, natural slopes are inclined up to about 60 percent and may be potentially unstable. Grading on the steeper slopes is not recommended without first developing an engineered grading plan. No potential home sites other than the green dashed outlined area of Figure 2 are considered or approved in this engineering geologic evaluation.

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Soils and Engineering Geologic Overview

Surface soils up to five feet deep in the project area are mapped as Munsoncreek-Flowerpot complex, 5 to 30 percent slopes by the USDA NRCS Web Soil Survey. The Munsoncreek-Flowerpot complex forms in colluvium and residuum from marine sedimentary rock. This soil classifies primarily as silty clay loam through its depth profile to decomposed sedimentary bedrock.

During site reconnaissance, the author observed the driveway cut slope that exhibited finegrained clay and silt soil, consistent with the silty clay loam of a typical soil profile described by the USDA.

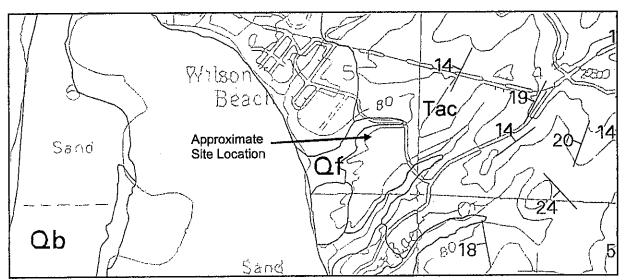


Figure 4- Portion of the Geologic Map of the Tillamook Highlands Northwest Oregon Coast Range, Tillamook 15 Minute Quadrangle, USGS Open File Report 94-21, 1994.

A USGS Geologic map of the local project area is shown in Figure 4. Tertiary, early Miocene age Astoria Formation sedimentary bedrock is mapped in the project area by the USGS. It is described as Astoria Formation, Cannon Beach member of Niem and Niem, 1985, map unit **Tac**. Texturally, the Astoria Formation, Cannon Beach member is characterized as a bedded micaceous siltstone and mudstone.

Regional Seismic Setting

The Oregon Coast is located near the western margin of the North American continental tectonic plate. The Pacific and Juan de Fuca Tectonic plates that form the ocean floor are converging upon, and being subducted beneath, the North American Continental Plate off the Oregon coastline. This zone of tectonic plate convergence is called the Cascadia Subduction Zone (CSZ). It is defined by a set of compressional geologic stresses between continental and oceanic plates that influence the seismic and volcanic activity of the Pacific Northwest. The CSZ is a type of global scale thrust fault zone located approximately 50 miles off the Oregon coastline. The CSZ is an active source of some of the largest earthquakes. A significant

rupture of the CSZ would cause strong ground shaking, slope and earth movement and structural damage throughout western Oregon. Ground motion could last up to several minutes during a strong CSZ.

Recent geologic research has shown that the CSZ fault zone has repeatedly produced large earthquakes on approximately 250-year to 700-year recurrence intervals through the late Pleistocene epoch. Geologic research of historic Japanese tsunami records assisted by dendrochronology (tree ring dating techniques) has established that the last large CSZ earthquake occurred in January of 1700 AD. Although seismic researchers do not agree on the likely magnitude of the next CSZ earthquake, it is widely believed that earthquake energy release of moment magnitude (M_w) 8.5 or greater is possible.

Seismic Hazards Discussion

The undersea CSZ fault displacement at time of earthquake rupture will displace the seafloor and cause an ocean tsunami that will arrive at the Oregon coast about 15 to 20 minutes after the strong earthquake strikes. A CSZ produced tsunami has been modeled by DOGAMI to inundate low-lying coastal areas up to about elevations of 40 to 50 feet above mean sea level or possibly higher in areas of topographic constriction of the tsunami flood waters, such as creek mouths. The presumed home site should be above the upper range of tsunami inundation expected from a moderate to large scenario CSZ earthquake. However, significant local variation of tsunami run up height should be expected based on recent global seismic tsunami events in Japan and the Indian Ocean. The force of tsunami flooding and scour may engulf and destroy many structures not already weakened or damaged by earthquake shaking. Soil slopes would be scoured nearly anywhere a tsunami could reach in the Netarts Bay area. Thick or loose soils on steep slopes and poorly constructed fills may fail during strong seismic ground shaking.

Other seismically induced ground effects such as soil liquefaction, ground surface rupture, lateral spreading, seismically induced landslides, and broad areas of coastal subsidence may occur during or following a strong earthquake. Subsurface conditions on the subject property have not been geotechnically evaluated for co-seismic soil or slope failure. However shallow sedimentary bedrock would be unlikely to liquefy, spread laterally or fail on low slope angles.

The CSZ earthquake is considered the most likely seismic source in the region and the greatest threat to engineered structures. The full-length, simultaneous rupture CSZ earthquake model dictates standards for engineered structural design. Most ordinary structures cannot be economically and practically engineered and designed to withstand a subduction zone earthquake without some damage. The goal of engineered structure design is generally to prevent catastrophic collapse and loss of life during a strong earthquake. The current edition of the Oregon Structural Specialty Code is considered appropriate for prescriptive design of proposed structures with foundations and floor slab supported on firm native undisturbed soil as the code allows.

Conclusions and Recommendations

From an engineering geologic standpoint, it is my opinion that the proposed building site shown in Figure 2 has no significant geologic hazard risks that require mitigation or avoidance. In my opinion, the proposed home site, driveway grading, and final landscape improvements discussed in this report can be designed and constructed in accordance with applicable code requirements, without negatively influencing slopes or increasing geologic hazard risks to the subject lot or adjacent property.

I recommend that the Engineer or Geologist be contacted to review final design plans for foundations and slope grading. It is also recommended that the Civil Engineer or Engineering Geologist be requested to observe and document that final excavated structural subgrade soil conditions are appropriate for the proposed structural design.

Limitations

The engineering geologic services performed for this project have been conducted with that level of care and skill ordinarily exercised by members of the profession currently practicing in this discipline and area under similar budget and time constraints. No warranty, expressed or implied, is made regarding the interpretations and conclusions of this report.

This report may be used only by the client and their authorized agents for the purposes stated, within a reasonable time from its issuance. 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 beyond two years from its date of issue. If the project is delayed, I would be happy to review site and design conditions and revise or update this report as appropriate. If you have any questions regarding the information presented in this report, please do not hesitate to contact the undersigned.

Sincerely,

R. Warren Krager, R.G., C.E.G.

Oregon Licensed Engineering Geologist E-957

Tillamook County 2023 Real Property Assessment Report

Account 372117

Map

2S1005DD00500

Tax Status

Assessable

Code - Tax ID

0920 - 372117

Account Status Subtype

NORMAL

Active

Legal Descr

See Record

Mailing

VAN ORMAN, JAMES WELBURN & HEIDI COLLEEN

Deed Reference # 2022-6935

496 FAIRWAY CT

Sales Date/Price

11-18-2022 / \$210,000

SEASIDE OR 97138

Appraiser

ELIZABETH LOFTIS

Property Class

400

MA

SA

RMV Class

400

08

NH AC 842

Site Situs Address

City

			Value Summary			
Code Ar	ea	RMV	MAV	AV	RMV Exception	CPR %
0920	Land	176,970		Land	0	
	Impr	0		Impr	0	
Code	Area Total	176,970	72,500	72,500	0	
G	rand Total	176,970	72,500	72,500	0	

					Land Breakdown			
Code Area	ID#	RFPD	Plan Ex Zone	Value Source	Trend %	Size	Land Class	Trended RMV
0920	0		RR-2	Market	112	3.00 AC		176,970
					Code Area Total	3.00 AC		176,970

<u> </u>				,	Improvement Breakdown			
Code		Year	Stat		Trend			
Area	ID#	Built	Class	Description	%	Total Sqft	Ex% MS Acct	Trended RMV

Exemptions / Spec	ial Assessments / Notations		
Code Area 0920			
Fire Patrol	Amount	Acres	Year
■ FIRE PATROL NORTHWEST	18.75	3.00	2023
Fire Patrol	Amount	Acres	Year
■ FIRE PATROL SURCHARGE	0.00		2023

Comments

2/25/11 Moved to 542 neighborhood, zoned RR-2. EJ. 3/17/14 Land re-appraisal, tabled land. EJ.

3/27/2024 10:34 AM Page 1 of 1

Tillamook County 2023 Real Property Assessment Report

Account 189343

Map

2S10050000400

Tax Status

Assessable

Code - Tax ID

0920 - 189343

Account Status

Sales Date/Price

Deed Reference # 2020-8535

Active NORMAL

Legal Descr

See Record

Mailing

ROBERTS, MARK A &

SNOW ROBERTS, HANNAH Y 2830 WHISKEY CREEK RD

TILLAMOOK OR 97141

11-27-2020 / \$445,000

Appraiser

Subtype

HANNAH HANCOCK

Property Class

601

MA

SA NH

RMV Class

401

01 BV 107

Site Situs Address	City
2350 OLD NETARTS RD W	COUNTY

			Value Summary			
Code Arc	ea	RMV	MAV	AV	RMV Exception	CPR %
0920	Land	440,320		Land	0	51.4
:	Impr	260,850		Impr	134,080	
Code	Area Total	701,170	134,080	173,247	134,080	
Gı	rand Total	701,170	134,080	173,247	134,080	

				Land B	reakdown			
Code Area	ID#	RFPD	Plan Ex Zone	Value Source	Trend %	Size	Land Class	Trended RMV
0920	0		F	Classified Forest Land	111	46.19 AC	OB	422,050
	1		F	Forest Site	111	2.00 AC	SFR	18,270
				Code	Area Total	48.19 AC		440,320

					Improvement Breakdown			
Code Area	ID#	Year Built	Stat Class	Description	Trend %	Total Sqft	Ex% MS Acct	Trended RMV
0920	1	2022	145	Two story or more	105	3,208		260,850
					Code Area Total	3,208		260,850

Exemptions / Speci	ial Assessments / Notations		
Code Area 0920			
Special Assessments	Amount		Year Used
■ SOLID WASTE	12.00		2023
Fire Patrol	Amount	Acres	Year
■ FIRE PATROL NORTHWEST	80.97	48.19	2023
■ FIRE PATROL SURCHARGE	47.50		2023

Comments

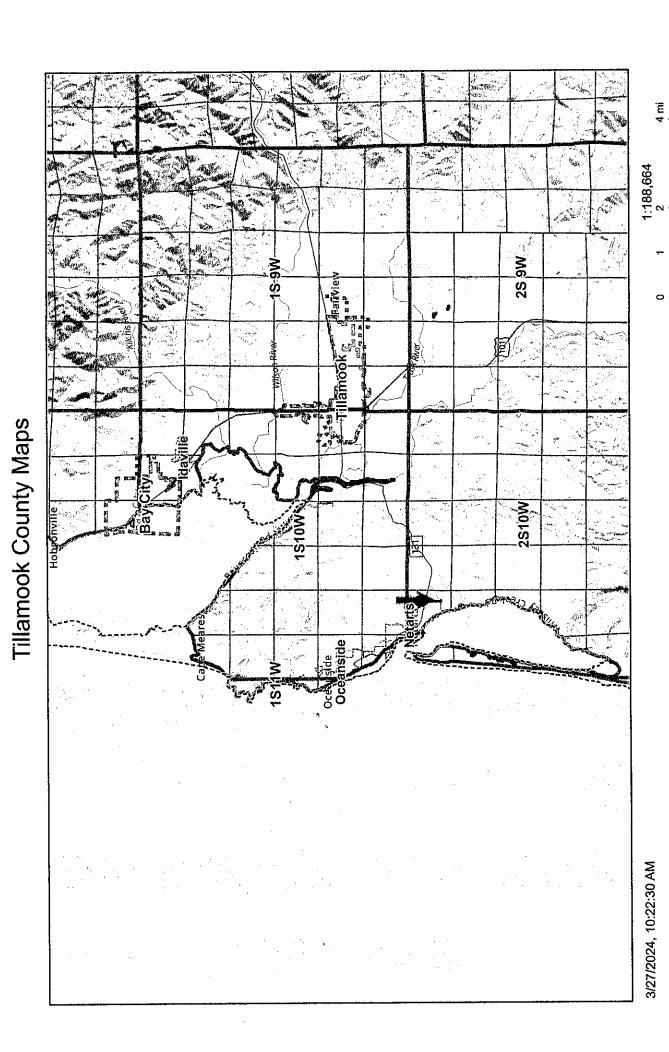
8/16/11 Due to a LLA, a portion of taxlot 2S10 5 200 will now be carried in taxlot 400. There was also a size change per the survey. Apportioned MAV, RMV is tabled, EJ.

5/5/16 Size change per GIS and code changed per map,LM

05/28/2021 Due to an annexation to the Netarts Water District, a portion of tax tot 2S10050000400 in code area 901 will now be carried in 920. Removed MAV from SA land. HT

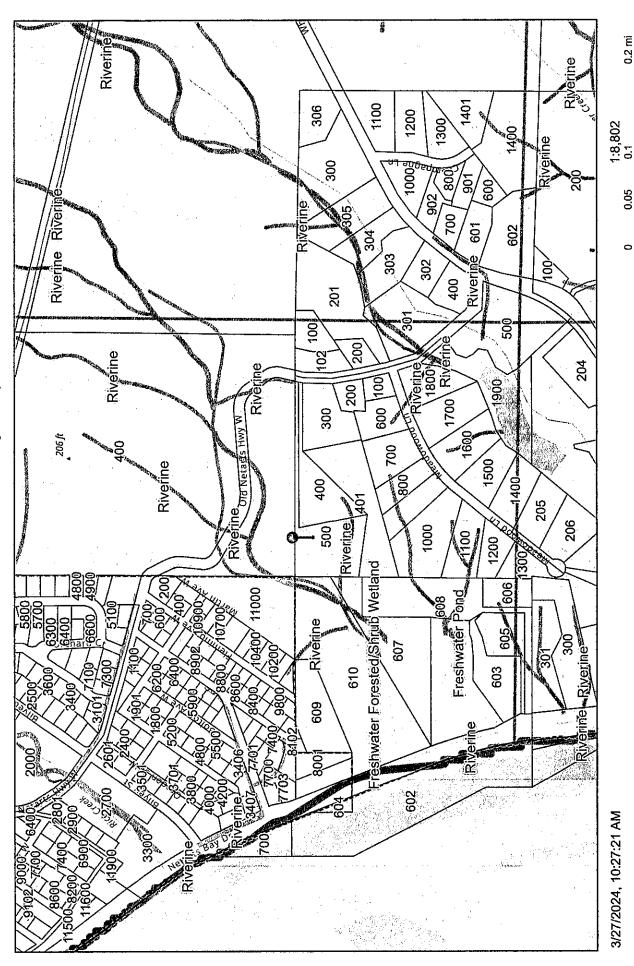
05/11/2023 Created new specially assessed forest homesite. Tabled land using SFW-20 schedule due to size and zone. HT

9/13/23 - Calculated Homesite MSAV. EL



Oregon State Parks, State of Oregon GEO, Esri, Tomfom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS,

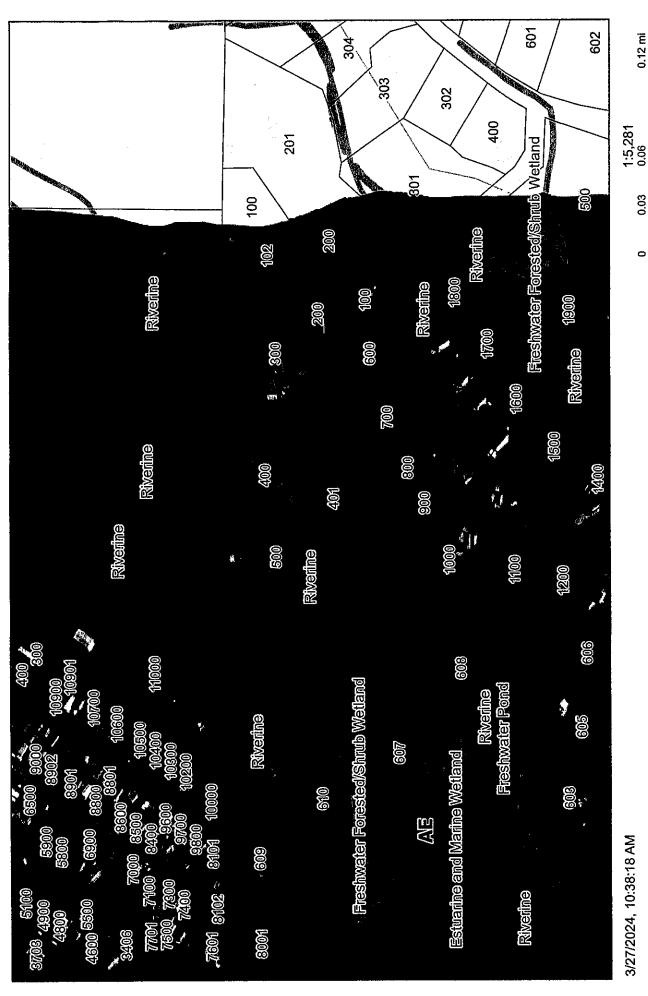
Tillamook County Maps



Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, Oregon State Parks, State of Oregon GEO, © OpenStreetMap, Microsoft,

0.2 mi

0.05



3/27/2024, 10:38:18 AM

Sources: Esri, Arbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelson, Rijkswaterstaat, GSA, Geoland, FEMA,

0.2 km

0.12 mi

0.03

0.05

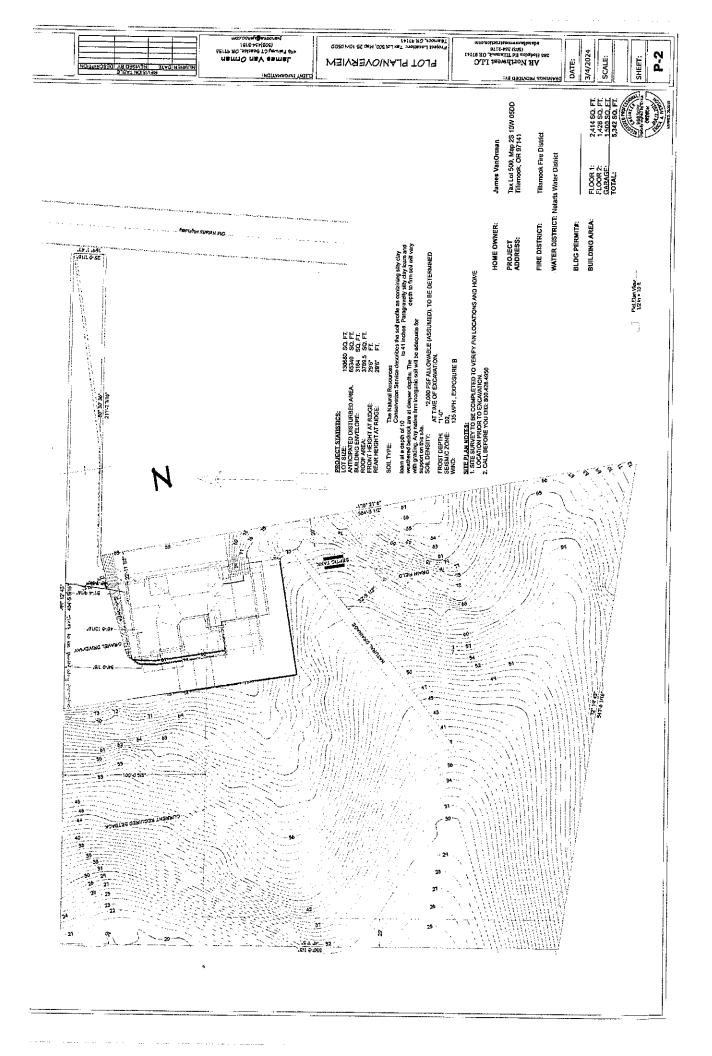


EXHIBIT C

Wetland Land Use Notice Response

Response Page

Department of State Lands (DSL) WN#*

WN2024-0355

Responsible Jurisdiction

Staff Contact

Jurisdiction Type

Municipality

Lynn Tone

County

Tillamook

Local case file #

851-24-000168-PLNG

County

Tillamook

Activity Location

Township

Range

Section

QQ section

Tax Lot(s)

028

10W

05

DD

500

Street Address

Old Netarts Rd

Address Line 2

Postal / Zip Code

City

State / Province / Region OR

Netarts

Country

Tillamook

Latitude

Longitude

45.424140

-123.932346

Wetland/Waterway/Other Water Features



- There are/may be wetlands, waterways or other water features on the property that are subject to the State Removal-Fill Law based upon a review of wetland maps, the county soil survey and other available information.
- The National Wetlands Inventory shows wetland, waterway or other water features on the property
- The National Hydrography Dataset shows wetland, waterway or other water features on the property

Applicable Oregon Removal-Fill Permit Requirement(s)



A state permit is required for 50 cubic yards or more of fill removal or other ground alteration in wetlands, below ordinary high water of waterways, within other waters of the state, or below highest measured tide.

DSL Review



Wetland Ecologist Comments

A site specific map of the home development footprint was not included in the materials, therefore a site-specific review of a requirement for a wetland delineation or removal-fill permit cannot be completed for this Wetland Land Use Notice. The included hand-drawn map did not show where the homesite or any additional development would specifically occur. The included Engineering Report also references that they didn't have site-specific information.

A general comment is that if any land disturbing activities are proposed in the low areas west of the hillslope that the Engineer assumes construction is on, or is near any of the mapped streams, a wetland review of the site by a consultant is recommended.

This is a preliminary jurisdictional determination and is advisory only.

This report is for the State Removal-Fill law only. City or County permits may be required for the proposed activity.

A Federal permit may be required by The Army Corps of Engineers: (503)808-4373

Contact Information

- For information on permitting, use of a state-owned water, wetland determination or delineation report requirements
 please contact the respective DSL Aquatic Resource, Proprietary or Jurisdiction Coordinator for the site county. The
 current list is found at: http://www.oregon.gov/dsl/ww/pages/wwstaff.aspx
- The current Removal-Fill permit and/or Wetland Delineation report fee schedule is found at: https://www.oregon.gov/dsl/WW/Documents/Removal-FillFees.pdf

Response Date

6/14/2024

Response by:

Response Phone:

Daniel Evans

503-428-8188

EXHIBIT D

INSTRUCTIONS FOR FILING RESTRICTIVE COVENANT FOR THE CREATION OF A PARCEL OR PLACEMENT OF A DWELLING ADJACENT TO LAND ZONED FOR FARM OR FOREST USE

- location/placement of dwellings adjacent to an area designated by the County as farm or This acknowledgment is required when the County permits the creation of parcels or the forest lands (F, F-1, SFW-20). Ţ.
- Deed Records. This is what is referred to as Exhibit A and must accompany the Obtain the legal description of the subject property as it's recorded in the Tillamook County affidavit/covenant. \sim i
- The attached affidavit/covenant must be filled out showing the names of ALL current property owners who appear on the property deed or contract, and signed before a Notary Public. Community Development has Notaries that can provide the service for free. $\ddot{\circ}$
- Once the affidavit/covenant is signed and notarized with the attached legal description, bring these to the Tillamook County Clerk's office to be recorded. **The Clerk's will charge a recording fee.** Please contact the Clerk's office at (503)842-3402 for current fees. 4.
- A copy of the recorded and notarized affidavit/covenant will be given to DCD to put on ហ
- If you have any questions about the affidavit/covenant, or the recording procedure, please contact the Department of Community Development Staff at (503)842-3408 x3410. 6

RESTRICTIVE COVENANT	•
(GRANTORS) are the owners of real property described as follows:	
PROPERTY LEGAL DESCRIPTION attached as <u>Exhibit A</u> hereto and incorporated by reference	d by
Do hereby promise and covenant as follows:	
The property herein described is situated adjacent to a Farm or Forest resource zone such as F, F-1, or SFW-20 zones in Tillamook County, Oregon where the intent is to encourage farm and forest use and minimize conflicts with those uses. The owners/residents of this parcel understand that on the adjacent land customary and accepted farm or forest management practices, conducted in accordance with federal and state laws, ordinarily and necessarily produce noise, dust, smoke, odors, the application of manure, fertilizers, or herbicides (including aerial spraying), road construction, changes in view, and other impacts related to a resource zone.	F-1, tuse un the ance, the tion,
I/We do hereby accept the potential impacts from farm and forest practices as normal and necessary and part of the risk of establishing a structure in this area and shall not pursue a claim for relief or cause of action of alleging injury from farming or forest practices for which no action or claim is allowed under ORS 30.936 or ORS 30.937.	ssary ef or im is
This covenant shall run with the land and is intended to and hereby shall bind my/our heirs, assigns, lessees, and successors and it can not be deleted or altered without prior contact and approval by the Tillamook County Department of Community Development (GRANTEE) or its successor.	igns, y the
IN WITNESS WHEREOF, the said Party has executed this instrument thisday of	jc
Signature Print Names	
State of, County of	
Subscribed and sworn to before me thisday of	
SEAL Notary Public of Oregon My Commission Expires:	

After Recording Return To:

STATE OF OREGON COUNTY OF TILLAMOOK