### Tillamook County



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

1510 - B Third Street Tillamook, Oregon 97141 <a href="https://www.tillamookcounty.gov">https://www.tillamookcounty.gov</a> 503.842.3408

Land of Cheese, Trees and Ocean Breeze

### VARIANCE REQUEST #851-24-000399-PLNG: JAS ENGINEERING/HEDGES

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

January 15, 2025

Dear Property Owner:

This is to confirm that the Tillamook County Department of Community Development **APPROVED** the above-cited Variance Request on January 15, 2025.

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: <a href="https://www.tillamookcounty.gov/commdev/landuseapps">https://www.tillamookcounty.gov/commdev/landuseapps</a> 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 before **4:00 PM** on **January 27, 2025.** 

**Request:** A Variance request to reduce the required 20-foot front yard setback to 5-feet to allow

for the placement of a residential structure, to be used as an Accessory Dwelling Unit

(ADU) and garage.

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

accessed via a private easement, zoned Netarts Residential Manufactured Dwelling (NT-RMD) Zone and designated as Tax Lot 8001 of Section 5DB, Township 2 South,

Range 10 West, W.M., Tillamook County, Oregon.

**Zone:** Netarts Residential Manufactured Dwelling Zone (NT-RMD)

**Applicant:** JAS Engineering, 1419 Washington Street, Oregon City, OR 97045

**Property Owner:** Curtis Hedges, 2425 Martin Ave W, Tillamook, OR 97141

### **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. Variance approval is for a **five (5) foot front-yard** setback along the easterly (front) property line, for the proposed Accessory Dwelling Unit (ADU) only.
- 3. The applicant/property owner shall obtain an approved consolidated Building and Zoning Permit from the Tillamook County Department of Community Development.
- 4. The applicant/property owner shall submit a site plan, drawn to scale and confirming all required yard setbacks are met, other than that approved through this Variance request, at the time of consolidated Building and Zoning Permit application submittal.
- 5. The applicant/property owner shall submit updated service provided letters from the Netarts-Oceanside Rural Fire District, Netarts-Oceanside Sanitary District, and Netarts Water District at the time of consolidated Building and Zoning Permit application submittal.
- 6. An approved road approach permit from the Tillamook County Public Works Department shall be submitted at time of consolidated Building and Zoning Permit application submittal, for the access located at Martin Avenue.
- 7. Development of the property shall otherwise adhere to applicable development standards in TCLUO Section 3:344: Netarts Residential Manufactured Dwelling (NT-RMD) zone, and TCLUO Section 5.110: Accessory Dwelling Unit (ADU) Standards.
- 8. A Geologic Hazard Report in compliance with TCLUO Section 4.130 and TCLUO Section 3.530 shall be provided at the time of Consolidated Zoning/Building Permit submittal if the slope at the building site exceeds an average of 29% from the lowest to highest point of the footprint. The slope shall be indicated on the site plan submitted with the Consolidated Zoning/Building Permit application.
- 9. This approval shall be void on two years from the date of the approval (January 15, 2027), unless construction of approved plans has begun, or an extension is requested from, and approved by this Department.

Sincerely,

Melissa Jenck, CFM, Senior Planner

Sarah Absher, CFM, Director

Enc.: Vicinity, Assessor & Zoning maps

### **Tillamook County**

### DEPARTMENT OF COMMUNITY DEVELOPMENT

BUILDING, PLANNING & ON-SITE SANITATION SECTIONS



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Land of Cheese, Trees and Ocean Breeze

### VARIANCE #851-24-000399-PLNG: JAS Engineering/Hedges

### ADMINISTRATIVE DECISION AND STAFF REPORT

**DECISION: Approved with Conditions** 

**Decision Date:** January 15, 2025

REPORT PREPARED BY: Melissa Jenck, CFM, Senior Planner

### I. **GENERAL INFORMATION:**

**Request:** A Variance request to reduce the required 20-foot front yard setback to 5-feet to allow

for the placement of a residential structure, to be used as an Accessory Dwelling Unit

(ADU) and garage.

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

accessed via a private easement, zoned Netarts Residential Manufactured Dwelling

(NT-RMD) Zone and designated as Tax Lot 8001 of Section 5DB, Township 2 South,

Range 10 West, W.M., Tillamook County, Oregon.

Zone: Netarts Residential Manufactured Dwelling Zone (NT-RMD)

JAS Engineering, 1419 Washington Street, Oregon City, OR 97045 **Applicant:** 

**Property Owner:** Curtis Hedges, 2425 Martin Ave W, Tillamook, OR 97141

**Description of Site and Vicinity:** The subject property contains 0.65 acres, is currently improved with a residence, is generally vegetated with grasses, generally level along the easterly portion, with steep terrain up to 60% on the westerly portions of the property (Exhibit A & B). The subject property is triangular in shape and is accessed via a private easement through an adjoining private property, off of Martin Avenue, a County road (Exhibit A).

The property is located on the border of the Netarts Unincorporated Community Boundary along its easterly property line (Exhibit A). The surrounding properties are zoned Rural Residential 2-Acre (RR-2) to the east and south, and to the north and west are zoned Netarts Residential Manufactured Dwelling (NT-RMD) (Exhibit A). The area generally consists of single-family residential development (Exhibit A).

No riparian features or wetlands are mapped on the subject property. (Exhibit A). The subject property is in Flood Zone "X", areas of minimal flooding, according to FEMA FIRM 41057C0565F dated September 28, 1990 and is not in a Special Flood Hazard Area (Exhibit A).

The property maintains areas of shallow & deep landslide susceptibility as detailed in the Oregon Department of Geology and Mineral Industries (DOGAMI) Open File Report O-20-13 (Exhibit A). The property also is located within an Older Stabilized Dune, as detailed in the Oregon Department of Geology and Mineral Industries (DOGAMI) Open File Report O-20-04 (Exhibit A).

The applicant is requesting a reduction to the required 20-foot front yard setback to 5-feet to allow for the placement of a residential structure, to be used as an Accessory Dwelling Unit (Exhibit B).

### II. APPLICABLE ORDINANCE AND COMPREHENSIVE PLAN PROVISIONS:

The request 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 3.344: Netarts Residential Manufactured Dwelling (NT-RMD) Zone
- B. TCLUO Section 5.110: Accessory Dwelling Unit (ADU) Standards
- C. TCLUO Section 4.130: Development requirements for Geologic Hazard Areas
- D. TCLUO Section 3.530: Beach and Dune Overlay Zone (BD)
- E. Article VIII: Variance Procedures and Criteria (including Section 4.005: Residential and Commercial Zone Standards)

### III. ANALYSIS:

### A. TCLUO Section 3.344: Netarts Residential Manufactured Dwelling (NT-RMD) Zones

- (2) USES PERMITTED OUTRIGHT: In the NT-RMD zone, the following uses and their accessory uses are permitted outright, subject to all applicable supplementary regulations contained in this ordinance.
  - (a) One or two dwelling units (attached or detached).

**Findings:** Staff find that the existing single-family dwelling is a use permitted outright in the underlying zone. Section 3.344(2)(a) 'Uses Permitted Outright' lists single-family dwellings as a use permitted outright. The applicant is proposing placement of an Accessory Dwelling Unit (ADU), which requires compliance with TCLUO Section 5.110. Section 5.110 is discussed in this staff report, in Section B.

**Section 3.344 (4)**, Standards: Land divisions and development in the NT-RMD zone shall conform to the following Requirements and Dimensional Standards, unless more restrictive supplemental regulations apply:

- (e) The combination of front and rear yard setbacks shall be 30 feet, but neither shall be less than 10 feet.
- (f) Minimum side yard shall be 5 feet; on the street side of a corner lot it shall be no less than 10 feet.

**Findings**: The subject property is a lot of record and encompasses approximately 0.65 acres according to Tillamook County Assessor's record (Exhibit A). The Applicant is proposing to reduce the required front yard setback to 5-feet, for the placement of the Accessory Dwelling Unit (ADU). The required front yard may be 10- to 20-feet setback, as it allows for a combination of a rear and front yard to total 30-feet, neither less than 10-feet.

The front yard setback is applied to the easterly property line of the subject property as the property is served by vehicular access via a private easement from the adjacent property (Exhibit A & B). The side

yard setbacks are established to the northerly and southerly, boundaries, with the westerly boundary being the rear property line (Exhibit A). Applicant has requested relief (a variance) from the required 20-foot front yard setback along the easterly property line to 5-feet for reasons cited in the application and made part of this review (Exhibit B).

Staff find the requested variance and relief to application of the required 20-foot street side yard setback may be permitted only if the criteria of TCLUO Article 8 are met. The requirements of TCLUO Article 8, 'Variance Procedures and Criteria' are addressed below.

### B. TCLUO Section 5.110: Accessory Dwelling Unit (ADU) Standards

An Accessory Dwelling Unit (ADU) may be either integrated into the same structure as the primary dwelling or constructed as a separate freestanding dwelling. If constructed within or as an addition to an existing or under construction primary dwelling, the ADU shall conform to all building code requirements for fire separation between the two units. Attached or detached, an ADU shall be subordinate to the primary dwelling and shall meet the following use and development standards:

- (A) Location. An ADU may be sited on a lawfully established property located in unincorporated community residential zoning districts. There is no minimum land area requirement for an ADU.
- (B) Number. Only one ADU shall be permitted per property.

**Findings:** The Applicant is proposing the siting of one (1) ADU, in conjunction with the existing single-family residence established on the property located within the Netarts Unincorporated Community. The placement of an ADU is permissible and Staff find these standards are met.

(C) Setbacks. For a detached ADU, the minimum rear yard setback shall be five feet; the minimum side yard setback shall be five feet and where applicable, the minimum street-side yard setback shall be ten feet. The required front yard setback of the underlying residential zone shall apply or the required front yard setback for small lots allowed under Section 4.100 and Section 4.110, where applicable. A detached ADU shall be physically separated from the primary residence by a minimum distance of six feet. A covered walkway which contains no habitable space may connect the two buildings without violation of the setback requirements.

If constructed within or as an addition to an existing or under-construction primary dwelling, the ADU shall conform to the setback requirements of the underlying zone or the required setbacks for small lots allowed under Section 4.100 and Section 4.110, where applicable.

**Findings:** The Applicants site plan identifies the ADU is separate from the primary dwelling, and maintains over six (6) feet of separation (Exhibit B). Applicant has proposed to reduce the required front yard setback in the NT-RMD zone from 20-feet to 5-feet (Exhibit B). Staff find the requested variance and relief to application of the required 20-foot street side yard setback may be permitted only if the criteria of TCLUO Article 8 are met. The requirements of TCLUO Article 8, 'Variance Procedures and Criteria' are addressed below.

(D) Design. An ADU shall be set on a permanent foundation; have any wheels, tongues, and running gear removed; and be connected to domestic sewer and water or connect to an onsite wastewater treatment system for those properties in unincorporated communities not served by sewer. A Recreational Vehicle (RV), yurt, travel trailer or other non-habitable structures not intended for residential occupancy shall not be utilized as an ADU.

**Findings:** Applicant is proposing a permanent, stick-built structure, to maintain a first-level as a garage and storage, with the second-level dedicated to the ADU (Exhibit B). Staff find this standard is met.

(E) Area. The floor area of an ADU shall not exceed 75% of the living space of the primary residence or 800 square feet, whichever is less. If free-standing, the building footprint of the ADU shall also not exceed 75% of the building footprint of the primary dwelling or 800 square feet, whichever is less.

**Findings:** The proposed floor area of the ADU is to take place on the second-level of the proposed structure, at approximately 26-feet by 22-feet, for a total floor area of 792-square feet (Exhibit B). According to the Accessors Summary, the existing dwelling is approximately 1,344-square feet with an area of 24-feet by 56-feet (Exhibit A & B). The proposal of 792-square feet for the floor area of the ADU does not exceed 75% of the living space and building footprint of the primary residence and does not exceed 800-square feet (Exhibit B). Staff find this standard is met.

(F) Height. The maximum height of a freestanding ADU shall not exceed the height of the primary residence or the allowable maximum height of the underlying zone, whichever is less. An ADU built within or as an addition to the primary dwelling unit or over a detached garage shall not exceed the maximum height of the zone.

**Findings:** The Applicants plans include plans that detail the proposed building height is approximately 21-feet tall (Exhibit B). Staff find the maximum building height of the NT-RMD zone is 35-feet. The proposed ADU is to be built over a detached garage (Exhibit B). Staff find this standard is met.

(G) Lot Coverage. Where applicable, maximum lot coverage requirements of the underlying zone shall not apply to the placement of an ADU. Maximum lot coverage requirements for properties developed under TCLUO Section 4.100 shall apply.

**Findings:** The NT-RMD zone maintains a 40% lot area shall not be covered by above-ground structures. Staff find application of the 40% lot coverage is not applicable to the proposed placement of the ADU. Staff find this standard has been met.

(H) Parking. One off-street parking space shall be maintained for the ADU. The parking space shall be a minimum of 8-feet by 20-feet in size.

**Findings:** Staff find the Applicant has described the location of one (1) 8'x20' parking space placed outside the proposed ADU to the west (Exhibit B). Staff find this standard has been met.

(I) Transient Lodging Prohibition. The ADU shall not be utilized for transient lodging purposes.

**Findings:** Staff find this standard can be met through compliance with conditions of approval.

(J) Non-Conforming Structures. Any legal nonconforming structure may be allowed to contain, or be converted to, an ADU, provided the ADU does not increase the nonconformity and meets applicable building and fire code requirements. Expansion of a Non-Conforming structure to accommodate an ADU may be allowed, subject to the provisions of Article VII: Nonconforming Uses.

**Findings:** Staff find the proposed development not a non-conforming structure, as it is new construction. Staff find this standard is met.

### C. TCLUO Section 4.130: Development requirements for Geologic Hazard Areas

**4.130(1) Purpose**: The purpose of these Development Requirements for Geologic Hazard Areas is to protect people, lands and development in areas that have been identified as being subject to geologic hazards. The provisions and requirements of this section are intended to provide for identification and assessment of risk

from geologic hazards, and to establish standards that limit overall risk to the community from identified hazards to a level acceptable to the community. Development in identified hazard areas is subject to increased levels of risk, and these risks must be acknowledged and accepted by present and future property owners who proceed with development in these areas

**4.130(2)** Applicability: The following areas are considered potentially geologically hazardous and are therefore subject to the requirements of Section 4.130:

- a) All lands partially or completely within categories of "high" and "moderate" susceptibility to shallow landslides as mapped in Oregon Department of Geology and Mineral Industries (DOGAMI) Open File Report O-20-13, Landslide hazard and risk study of Tillamook County, Oregon;
- b) All lands partially or completely within categories of "high" and "moderate" susceptibility to deep landslides as mapped in DOGAMI Open File Report O-20-13, Landslide hazard and risk study of Tillamook County, Oregon;
- f) Lots or parcels where the average existing slopes are equal to or greater than 19 percent within or adjacent to hazard risk zones described in 4.130(2)(a) through (d) for any lot or parcel less than or equal to 20,000 square feet or lots or parcels where the average existing slopes are equal to or greater than 29 percent within or adjacent to hazard risk zones described in 4.130(2)(a) through (d) for any lot or parcel greater than 20,000 square feet.
  - 1. For the purpose of this section, slopes are determined by:
    - The average existing slope of the building footprint or area to be disturbed measured from the highest to lowest point within the footprint or area to be disturbed is 29 percent or greater for properties 20,000 square feet or larger.

**Findings:** The subject property lies within the shallow & deep landslide susceptibility areas as mapped in DOGAMI Open File Report O-20-13 (Exhibit A). Future development of the subject property will be subject to development standards of the TCLUO Section 4.130, specifically for proposed development if slopes exceed 29% within the area to be disturbed as measured from the highest to lowest point within the footprint. This requirement can be met through the Conditions of Approval.

### D. TCLUO Section 3.530: Beach and Dune Overlay Zone (BD)

- (1) PURPOSE: The purpose of the Beach and Dune Overlay Zone is to establish criteria and performance standards to direct and manage development and other activities in beach and dune areas in a manner that:
  - (a) Conserves, protects and, where appropriate, restores the resources and benefits of coastal beach and dune areas;
  - (b) Reduces the risks to life and property from natural and man-induced actions on these inherently dynamic landforms; and
  - (c) Ensures that the siting and design of development in beach and dune areas is consistent with Statewide Planning Goals 7 and 18, and the Hazards Element and Beaches and Dunes Element of the Tillamook County Comprehensive Plan.

Risk is ever present in identified beach and dune areas. The provisions and requirements of this section are intended to provide for identification and assessment of risk from beach and dune natural hazards, and to establish standards that limit overall risk to the community from identified hazards to a level acceptable to the community. Development in identified hazard areas is subject to increased levels of risk, and these risks must be acknowledged and accepted by present and future property owners who proceed with development in these areas.

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- (2) AREAS INCLUDED: All beach and dune areas categorized in the table below and as identified in Open File Report O-20-04, Temporal and Spatial Changes in Coastal Morphology, Tillamook County, Oregon by the Oregon Department of Geology and Mineral Industries (DOGAMI) are subject to the provisions of this section. . .
- (3) PERMITTED USES: Within the Beach and Dune Overlay Zone, all uses permitted pursuant to the provisions of the underlying zone may be permitted, subject to the additional requirements and limitations of this section.

### (5) DUNE AREA DEVELOPMENT PERMIT:

(a) Except for activities identified in subsection (5)(b) as exempt, any new development, new construction, substantial improvement, shoreline alteration (including activities outside of OPRD's jurisdiction) or grading activity in an area subject to the provisions of this section shall require a Dune Area Development Permit. The Dune Area Development Permit may be applied for prior to or in conjunction with a building permit, grading permit, or any other permit or land use approval required by Tillamook County. ...

**Findings:** The subject property lies within an Older Stabilized Dune areas as mapped in DOGAMI Open File Report O-20-04 (Exhibit A). Future development of the subject property will be subject to development standards and criteria of the TCLUO Section 3.530. This requirement can be met through the Conditions of Approval.

### E. TCLUO Article VIII: Variance Procedure and Criteria; including Section 4.005 Residential and Commercial Zone Standards

The purpose of a VARIANCE is to provide relief when a strict application of the dimensional requirements for lots or structures would cause an undue or unnecessary hardship by rendering the parcel incapable of reasonable economic use. No VARIANCE shall be granted to allow a use of property not authorized by this Ordinance.

Article VIII of the Tillamook County Land Use Ordinance governs the applications of Variances within the County. Article IV, Section 4.005 lists the purposes of the land use standards in each of the residential and commercial zones.

**Section 8.020** requires notification of the request be mailed to landowners within 250-feet of the subject property, to allow at least 14 days for written comment and requires Staff to consider comments received in making the decision.

**Findings:** A notice of the request was mailed to property owners within 250 feet of the subject property and other agencies on October 14, 2024. Comments were received from Oregon Department of State Lands (DSL) and Tillamook County Public Works, and are included in 'Exhibit C'. DSL states there is no potential wetlands on the subject property (Exhibit C). Public Works concludes that the property does not maintain an approved Road Approach at the location of the access easement abutting Martin avenue, a County Road (Exhibit C). Tillamook County Public Works states a Road Approach permit must be obtained for the access location at Martin Avenue, which may require coordination with the neighboring property which abuts Martin Avenue and provides the easement to access Mr. Hedges property (Exhibit C).

**Section 8.030** states that a Variance may be authorized if the applicants/property owners adequately demonstrate that the proposed use satisfies all relevant requirements, including all four review criteria in Section 8.030. These criteria, including Section 4.005 Residential and Commercial Zone Standards, along with Staff's findings and conclusions are indicated below.

(1) Circumstances attributable either to the dimensional, topographical, or hazardous characteristics of legally existing lot, or to the placement of structures thereupon, would effectively preclude the enjoyment of a substantial property right enjoyed by the majority of landowners in the vicinity, if all applicable standards were to be met. Such circumstances may not be self-created.

**Findings:** Applicant states the subject property maintains steep slopes located within the westerly portion of the property, making it unreasonable to construct the proposed ADU. Applicant provided a copy of a geologic hazard report completed by Warren Krage which notes the steep slopes, and identifies that site grading and construction within 15-feet of the slope is not recommended. Morgan Civil Engineering in the geologic hazard report indicates that building foundations should be located at least 20-feet from descending slope. Applicants states that by reducing the required 20-foot front yard setback, the proposed exception allows for siting of the proposed ADU a safe distance from the slope (Exhibit B).

A copy of a recent Boundary Survey recorded with the Tillamook County Surveyor's Office is included in 'Exhibit D' which depicts the location of the property lines, as well as the easement which affords access to the subject property through the adjacent easterly property (Exhibit B & D). Evidence submitted by the Applicant depicts areas for the proposed ADU, as well as depicts the location of the existing single-family dwelling, with application of a 5-foot front yard setback if relief were granted through a variance process (Exhibit B).

The subject property is triangular in shape, approximately 0.65-acres, with a width of approximately 312-feet, and a depth of 152-feet in the north, with the southerly portion of the property descending down to only a 26.89-ft depth running east to west (Exhibit D). The subject properties established front and rear yards are established at the easterly and westerly property boundaries, as the easterly property boundary abuts and is served by the private access easement (Exhibit A, B & D). With the prescriptive front and rear setbacks for the NT-RMD zone, which is a combination of 30-feet with neither no less than 10-feet, the front and rear setbacks are prescribed against lesser of area for the triangular shaped lot, as the width is much greater than the depth. With the proposed limitations as presented by the geoprofessional for siting areas outside of the steep slopes, the dimensional area of the development is limited towards the easterly portion of the lot. In addition, the area of the lot towards the largest depth is already improved with the existing single-family dwelling, which limits future development to the southeasterly portion of the property (Exhibit A, B & D).

Applicant is proposing a 40-ft by 22-ft structure (Exhibit B). In review of lot patterns and development of properties (building footprints) within the vicinity and zone, staff find properties of comparable size with development of residential uses established with similar areas of improvement (Exhibit B). Staff's findings for review of properties within the vicinity are outlined in the table below:

Map and tax lots	Acres	Building Square Footages
2S10-05AC-04100	0.77-acres	816 sq. ft. (24-ft by 34-ft): Dwelling
2S10-05DB-00100	0.59-acres	1,158 sq. ft. (30-ft by 36-ft): Dwelling, 1,200 sq. ft. (40-ft by 30-ft): Shop
2S10-05DB-03600	0.55-acres	896 sq. ft.: Dwelling, 2,616 sq. ft.: Dwelling, 132 sq. ft.: Shed

Staff find that these similar sizes properties maintain generally rectangular shapes, and also maintain frontage along platted public right-of-ways, including State Highway 131 and County roads (Exhibit A). Additionally, these properties maintain lot sizes of similar area, but their depths are not reduced due to their shape, unlike the Applicants property due to its triangular shape (Exhibit A, B & D). Based upon the

findings outlined above and the evidence contained within this report, staff finds circumstances attributable to dimensional and hazardous characteristics of the subject property effectively preclude the owner from enjoying development of similar sized residential uses to those in the area and that these circumstances are not self-created.

Staff find this criterion is met.

(2) A variance is necessary to accommodate a use or accessory use on the lot which can be reasonably expected to occur within the zone or vicinity.

**Findings:** Accessory Dwelling Units (ADU) are an outright use allowed in the NT-RMD Zone in accordance with TCLUO Section 3.344 and TCLUO Section 5.110; this use is consistent with surrounding properties. This criterion is met.

(3) The proposed variance will comply with the purposes of relevant development standards as enumerated in Section 4.005 and will preserve the right of adjoining property owners to use and enjoy their land for legal purposes.

Findings: Analysis of TCLUO Section 4.005 follows in a subsequent section.

(4) There are no reasonable alternatives requiring either a lesser or no variance.

**Findings:** Applicant states that there are no other reasonable alternatives due to the shape of the property, and hazardous condition of slopes located on the westerly portion of the property. The applicant identifies that the proposed size of the ADU is the minimum size needed to provide function within the unit, and that narrowing the building further will reduce accessibility to the ADU (Exhibit B).

Staff find that development, as detailed in criterion #1, is of similar size and design as the applicants proposal. Staff find that other same zoned and similarly sized properties maintain similar residential development areas for residences and accessory structures, but do not face similar dimensional issues relating to the shape of the property and the assignment of lot depth whereas the front and rear yard setbacks are prescribed (Exhibit B).

Staff find that due to hazardous conditions present on the property, along with geoprofessionals recommendations that the proposed development avoid and be setback from these slopes, that siting areas are limited due to areas of topography, and the location of existing improvements (Exhibit A, B & D).

Staff find that the hazardous conditions of the property due to steep slopes, along with the shape and size of the property, that it is reasonable to maintain a 5-foot front yard setback for the proposed ADU. Staff find this criterion have been met and can be met through compliance with Conditions of Approval.

**Section 4.005:** Residential and Commercial Zone Standards of the Tillamook County Land Use Ordinance lists the purposes of the land use standards in each of the residential and commercial zones as follows:

- (1) To ensure the availability of private open spaces;
- (2) To ensure that adequate light and air are available to residential and commercial structures:
- (3) To adequately separate structures for emergency access:
- (4) To enhance privacy for occupants or residences;

**Findings:** Applicant is proposing to maintain rear and side yard setbacks for the proposed ADU (Exhibit B). Access to the subject property is served via an existing private easement, through the benefit of an

adjacent property, off Martin Avenue, a County road. The location of the proposed ADU is within the southerly portion of the property (Exhibit B). Neighboring structures are located to the north on adjacent residentially zoned properties. The property located at 2S10-05DB-08102 is zoned Rural Residential 2-Acre (RR-2) and maintains approximately 2.31-acres of area and is currently unimproved. There is a residence located to the northeast, which is located north of the proposed ADU development (Exhibit B).

Applicants states the existing easement serving the subject property maintains appropriate emergency access to the property, and the placement of the ADU is placed within the property boundaries, maintaining availability of open space, and limits proximity to adjacent development.

Staff finds that allowing the proposed development with a 5-foot front yard setback with application of side and rear yard setbacks will maintain privacy and adequate access to air, light and open space for the subject property, the surrounding properties and provide for adequate separation of structures for emergency access. Staff find that these standards have been met and can be met through compliance with Conditions of Approval.

(5) To ensure that all private land uses that can be reasonably expected to occur on private land can be entirely accommodated on private land, including but not limited to dwellings, shops, garages, driveway, parking, areas for maneuvering vehicles for safe access to common roads, alternative energy facilities, and private open spaces;

**Findings:** Applicant's submittal documents that all private land uses will occur on the subject property including off-street parking (Exhibit B). Staff finds this standards have been met and can be met through compliance with Conditions of Approval.

- (6) To ensure that driver visibility on adjacent roads will not be obstructed;
- (7) To ensure safe access to and from common roads;

**Findings:** The property is served via a private easement across an adjacent private property, off of Martin Avenue, a County road (Exhibit A & B). Tillamook County Public Works provided comments that there is no current road approach from Martin Avenue to serve the private easement. Public Works requests that a Road Approach Permit shall be obtained through their office to allow for the private easement access from Martin Avenue, for the construction of the ADU (Exhibit C).

Staff find that the location of Martin Avenue itself is approximately 300-feet or more away from the front property line of the subject property (Exhibit A, B & D).

Staff find that allowing the proposed development with a 5-foot front yard setback with application of side and rear yard setbacks will maintain privacy and adequate access to air, light and open space for the subject property, the surrounding properties and provide for adequate separation of structures for emergency access. Staff find that these standards have been met and can be met through compliance with Conditions of Approval.

(8) To ensure that pleasing view are neither unreasonably obstructed nor obtained;

**Findings:** The County regulates views through compliance with building height requirements. Staff find that compliance with building height requirements can be demonstrated at the time of consolidated Zoning Permit and Building Permit application submittal. Applicant has provided plans which identify the proposed building height at approximately 21-feet tall (Exhibit).

Staff finds this standard can be met through compliance with the Conditions of Approval.

(9) To separate potentially incompatible land uses;

**Findings:** The applicant proposes to develop an Accessory Dwelling Unit (ADU) which is a use permitted outright in the NT-RMD zone in accordance with TCLUO Section 5.110, and is a use consistent with the use of surrounding properties. Staff find that the standard in Section 4.005(9) has been met.

(10) To ensure access to solar radiation for the purpose of alternative energy production.

**Findings:** County records do not indicate any such facilities in the vicinity of the subject property (Exhibit A). Staff find that the proposed development does not unreasonably shadow or otherwise inhibit access to solar radiation on adjacent properties and find that the standards of Section 4.005(10) have been met.

Staff conclude the standards outlined in TCLUO Section 4.005 are met or can be met through the Conditions of Approval outlined below. Variance criterion #3 is met and can be met through the Conditions of Approval outlined below.

### IV. DECISION: APPROVED WITH CONDITIONS

Staff concludes, based on the findings of fact and other relevant information in the record, that applicant has satisfied/or is able to satisfy through the Conditions of Approval the applicable ordinance requirements related to applicant's request to reduce the required front yard setback along the easterly boundary of the subject property to 5-feet for the placement of an Accessory Dwelling Unit (ADU) and therefore, approves the request to reduce the front yard setback to 5-feet subject to the provisions in Section V below.

By accepting this approval, the applicants/property owners agree 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 applicants/property owners shall obtain all of the necessary local, state, and federal permits and comply with all applicable regulations for the proposed building site.

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 before 4:00 PM on January 27, 2025.

### V. <u>CONDITIONS OF APPROVAL:</u>

Section 8.060: COMPLIANCE WITH CONDITIONS, and 8.070: TIME LIMIT requires compliance with approved plans and Conditions of this decision, and all other ordinance provisions, and allows 24 months for compliance with Conditions and start of construction. Failure to comply with the Conditions of Approval and ordinance provisions could result in nullification of this approval.

- The applicant/property owner shall obtain all Federal, State, and Local permits, as applicable.
- 2. Variance approval is for a <u>five (5) foot front-yard</u> setback along the easterly (front) property line, for the proposed Accessory Dwelling Unit (ADU) only.
- 3. The applicant/property owner shall obtain an approved consolidated Building and Zoning Permit from the Tillamook County Department of Community Development.

- 4. The applicant/property owner shall submit a site plan, drawn to scale and confirming all required yard setbacks are met, other than that approved through this Variance request, at the time of consolidated Building and Zoning Permit application submittal.
- 5. The applicant/property owner shall submit updated service provided letters from the Netarts-Oceanside Rural Fire District, Netarts-Oceanside Sanitary District, and Netarts Water District at the time of consolidated Building and Zoning Permit application submittal.
- 6. An approved road approach permit from the Tillamook County Public Works Department shall be submitted at time of consolidated Building and Zoning Permit application submittal, for the access located at Martin Avenue.
- 7. Development of the property shall otherwise adhere to applicable development standards in TCLUO Section 3:344: Netarts Residential Manufactured Dwelling (NT-RMD) zone, and TCLUO Section 5.110: Accessory Dwelling Unit (ADU) Standards.
- 8. A Geologic Hazard Report in compliance with TCLUO Section 4.130 and TCLUO Section 3.530 shall be provided at the time of Consolidated Zoning/Building Permit submittal if the slope at the building site exceeds an average of 29% from the lowest to highest point of the footprint. The slope shall be indicated on the site plan submitted with the Consolidated Zoning/Building Permit application.
- 9. This approval shall be void on two years from the date of the approval (January 15, 2027), unless construction of approved plans has begun, or an extension is requested from, and approved by this Department.

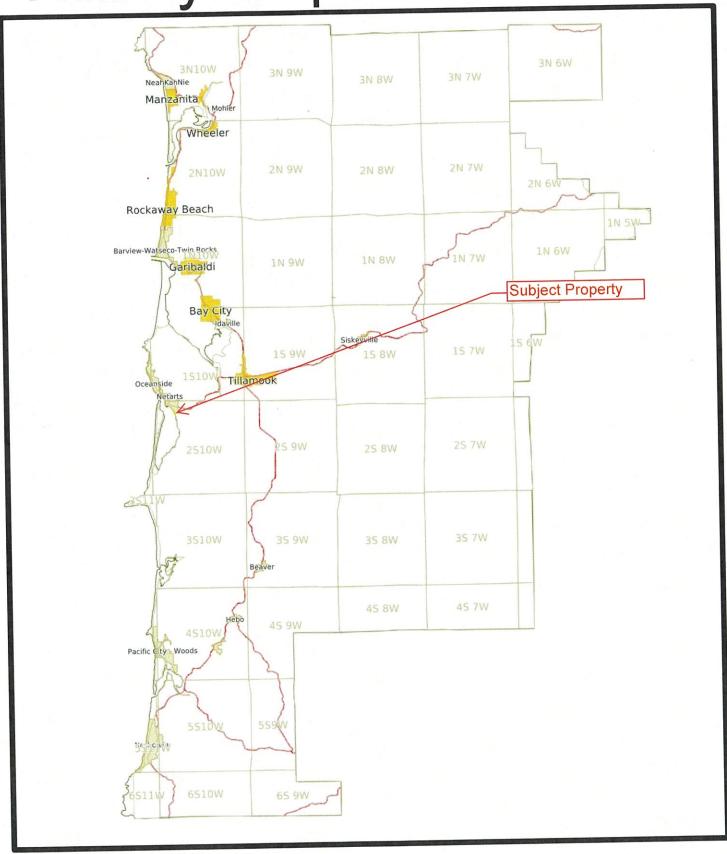
### VI. EXHIBITS:

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

- A. Vicinity map, Assessor's map, Zoning map, Assessor's Summary Report,
- B. Applicant/Property Owner's Submittal
- C. Public Comments
- D. Boundary Survey A-8707

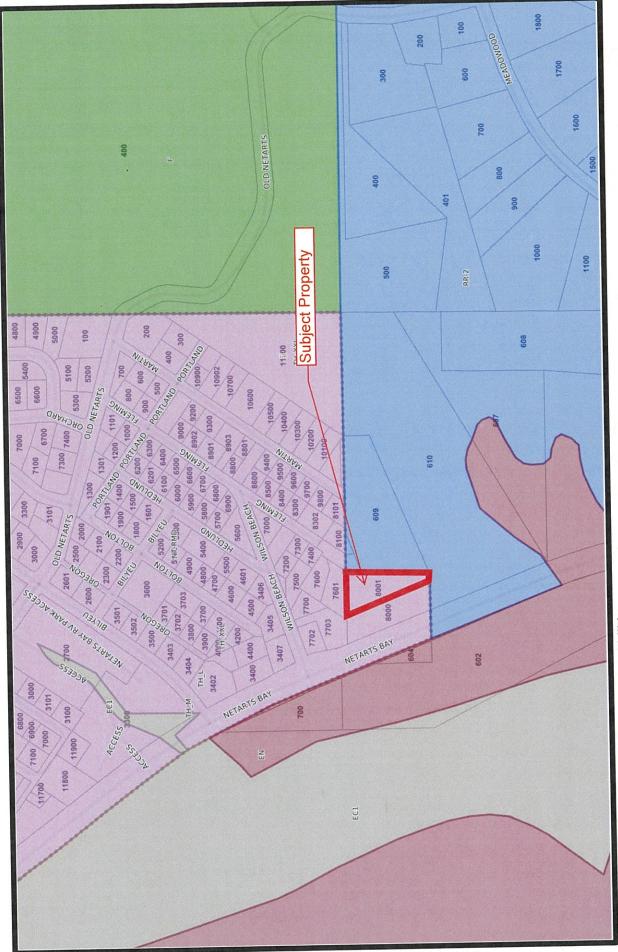
## EXHIBIT A

Vicinity Map

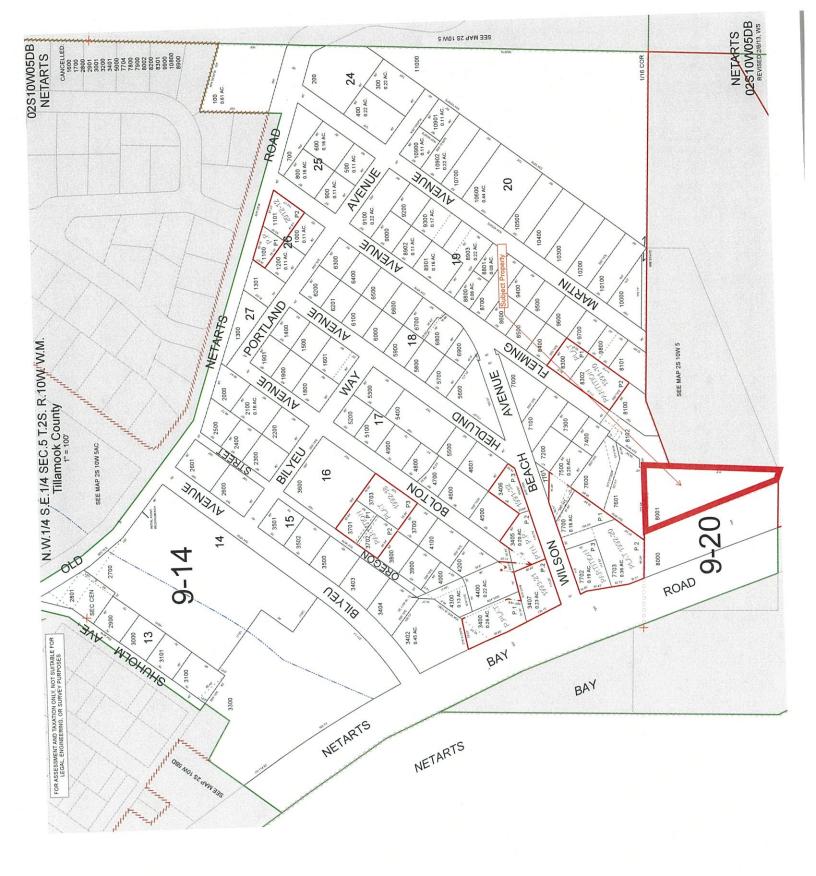


# Zoning Map





Generated with the GeoMOOSE Printing Utilities



### **Tillamook County** 2024 Real Property Assessment Report

Account 190616

Map

2S1005DB08001

Code - Tax ID

0914 - 190616

**Tax Status** 

Assessable

**Account Status** Subtype

Active NORMAL

Legal Descr

See Record

Mailing

HEDGES, CURTIS NEAL 2121 SE MULBERRY DR MILWAUKIE OR 97267

Deed Reference # Sales Date/Price

(SOURCE ID: 408-367) 07-22-1996 / \$189,000

**Appraiser** 

LINDA RODRIGUEZ

**Property Class** 

**RMV Class** 

109

MA

NH SA

109

08

OV 815

Site Situs Address	City
	COUNTY
1 2425 MARTIN AVE	0001111

		RMV	Value Summary MAV	AV	RMV Exception	CPR %
Code Are				Land	0	
0914	Land	246,100			0	
	Impr	31,580		Impr	0	
Codo	Aroa Total	277,680	191,540	191,540	0	- SMARTHAN
Code Area Total Grand Total		The second state of the second	191,540	191,540	0	
		277,680	101,040			

				Land Brea	akdown		
Code	ID#	RFPD	Plan Ex Zone	Value Source	Trend %	Size Land Class	Trended RMV
<b>Area</b> 0914	יוט #	KFFD	LX ZOIIC	LANDSCAPE - AVERAGE	100		1,500
0914	1	V	NT-RMD		123	0.67 AC	219,600
				OSD - AVERAGE	100		25,000
				TO THE STATE OF TH	Area Total	0.67 AC	246,100

				Impr	ovement Breakdown			
Code	"	Year	Stat	Description	Trend %	Total Sqft	Ex% MS Acct	Trended RMV
Area	ID#				118	1.344	E-319364	31,580
0914	1	1978	952	Class 5, Double Wide				C
	2	1978	910	M S Other Improvements	101	0		
	2	1370	310	We care impress	Code Area Total	1,344		31,580

Exemptions / Special Assessments / Notations						
Code Area 0914 Special Assessments	Amount 12.00		Year Used			
<ul> <li>SOLID WASTE</li> <li>Fire Patrol</li> </ul>	Amount	Acres	Yea			
<ul><li>FIRE PATROL SURCHARGE</li><li>FIRE PATROL NORTHWEST</li></ul>	47.50 18.75	0.67	2024 2024			

Comments

1/13/11 Land re-appraisal, tabled land, EJ.

### BUILDING DIAGRAM AND OUTBUILDINGS 35 7 7 **DECK W/RLG** 21 24 MH 24 56 30 SF SHED 245 SF CONCRETE 56 24 **BASEMENT UNFIN**

### 2425 MARTIN AVE.

Appraiser CB	Date 4/23/2009	Bldg 1 1 1	Description MH BASEMENT UNFIN DECK W/RLG	SqFt 1344 1344 245	Dimension		

# Vational Flood Hazard Layer FIRMette







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

Area with Reduced Flood Risk due to Chance Flood Hazard Zone X Levee. See Notes. Zone X Future Conditions 1% Annual

Area with Flood Risk due to Levee Zone D

OTHER AREAS OF

FLOOD HAZARD

NO SCREEN Area of Minimal Flood Hazard Zone X

Effective LOMRs

OTHER AREAS STRUCTURES | 1111111 Levee, Dike, or Floodwall GENERAL - --- Channel, Culvert, or Storm Sewer Area of Undetermined Flood Hazard Zone

(B) 20.2 Cross Sections with 17.5 Water Surface Elevation Cross Sections with 1% Annual Chance Base Flood Elevation Line (BFE) Coastal Transect Baseline Coastal Transect Hydrographic Feature Limit of Study **Profile Baseline** Jurisdiction Boundary

No Digital Data Available Digital Data Available **FEATURES** 

OTHER

MAP PANELS

Unmapped

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

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

authoritative NFHL web services provided by FEMA. This map time. The NFHL and effective information may change or was exported on 10/12/2024 at 4:59 PM and does not accuracy standards reflect changes or amendments subsequent to this date and The flood hazard information is derived directly from the become superseded by new data over time.

FIRM panel number, and FIRM effective date. Map images for elements do not appear: basemap imagery, flood zone labels, unmapped and unmodernized areas cannot be used for legend, scale bar, map creation date, community identifiers, This map image is void if the one or more of the following map regulatory purposes.

220

200

1.000

1,500

2,000 Feet

1:6,000



httns://www.oregon.gov/dsl/WW/Pages/SWI.aspx

SWI Predominantly Hydric Soil Map Units

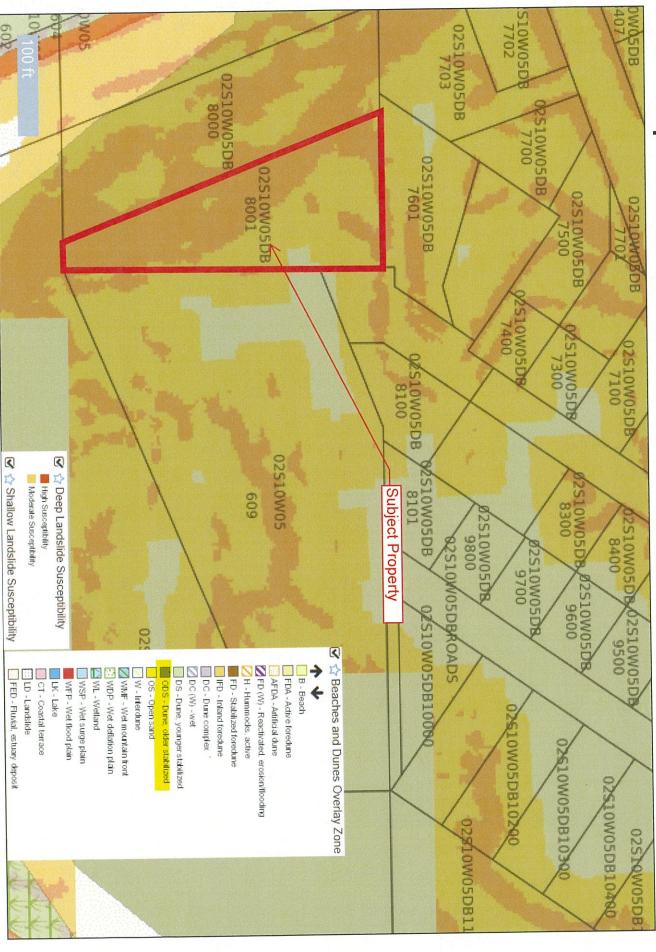
The Statewide Wellands Inventory (SWI) represents the best data available at the time this map was published and is updated as new data becomes available. In all cases, actual field conditions determine the presence, absence and boundaries of wellands and waters (such as creeks and ponds). An onsite investigation by a wetland professional can verify actual field conditions.

□**(**Co)Z

State of Oregon
Department of State Lands
775 Summer Street, NE, Ste 100
Salem, OR, 97301-1279

## Hazard Map

Oregon Coastal Atlas



Disclaimer: The spatial infor implied, including the warranty of merchantability or fitness for a particular purpose, accompanying any of these products. However, notification of any error ation 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 responsibility for errors, omissions, or positional accuracy in the digital data or underlying records. There are no warranties, ocation of property boundaries, the precise shape or contour of the earth or the precise location of fixed works of humans

### **Tillamook County** 2024 Real Property Assessment Report

Account 187390

Map

2S1005DB03600

**Tax Status** 

Assessable

Code - Tax ID

0914 - 187390

**Account Status** Subtype

Active **NORMAL** 

**Legal Descr** 

See Record

Mailing

STUMPF, LA VELLE P

**PO BOX 165** 

NETARTS OR 97143

Deed Reference # See Record

Sales Date/Price

See Record

**Appraiser** 

**ELIZABETH LOFTIS** 

**Property Class** 

101

MA

SA NH

Site Situs Address

80

City

**RMV Class** 

101

OV 815

2255 OREGON ST 2260 BOLTON AVE COUNTY COUNTY

			Value Summary			
Code Ar	ea	RMV	MAV	AV	<b>RMV Exception</b>	CPR %
0914	Land	236,840		Land	0	
	Impr	712,360		Impr	0	
Code	Area Total	949,200	532,400	532,400	0	
G	rand Total	949,200	532,400	532,400	0	

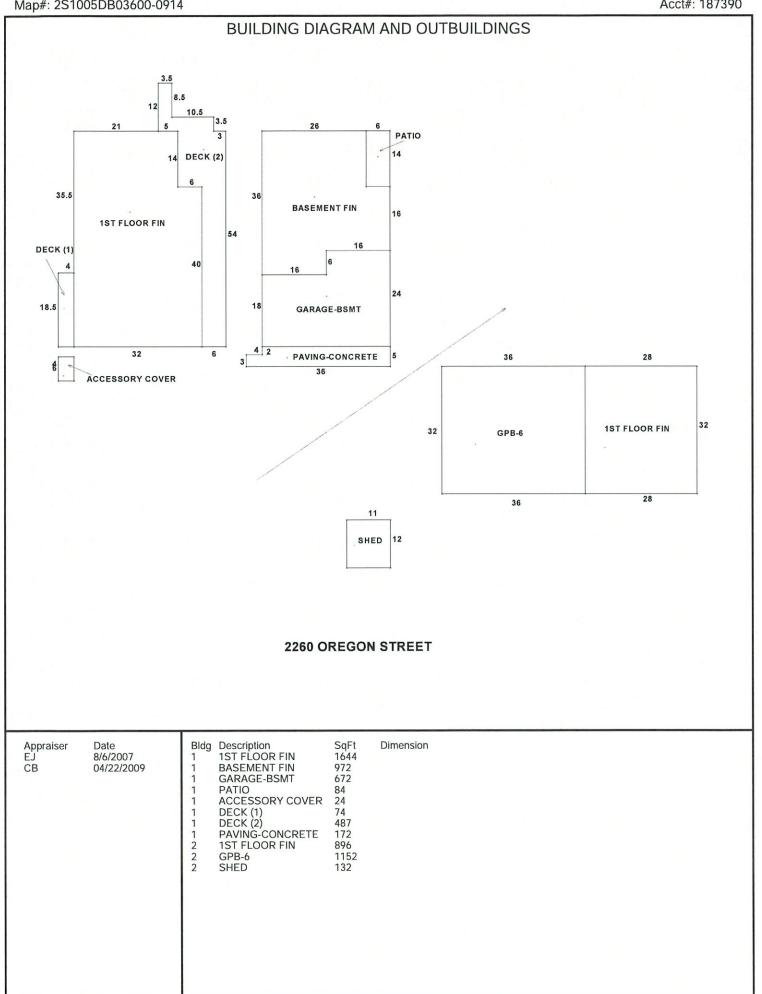
	Land Breakdown								
Code			Р	Plan		Trend			913
Area	ID#	RFPD	Ex Z	Zone	Value Source	%	Size	Land Class	Trended RMV
0914					LANDSCAPE - GOOD	100			2,500
	1	~	N	NT-RMD	Market	123	0.55 AC		209,340
					OSD - AVERAGE	100		33: 3	25,000
				18	Code	Area Total	0.55 AC		236,840

	Di i i			Imp	provement Breakdown			
Code		Year	Stat		Trend			
Area	ID#	Built	Class	Description	%	Total Sqft	Ex% MS Acct	Trended RMV
0914	1	1994	131	One story	101	896		197,590
	2	2006	139	Basement First Floor	101	2,616		514,010
	3	1994	382	MULTI-PURPOSE SHED	101	132		760
					Code Area Total	3,644		712,360

Exemptions / Special Assessments / Notations						
Code Area 0914						
Exemptions (AV)	Amount	Letter Year				
<ul> <li>VETERANS AND SPOUSES 307.250 NON-SERVICE</li> </ul>	25,537	2021				
Special Assessments	Amount	Year Used				
<ul> <li>SOLID WASTE</li> </ul>	24.00	2024				

Comments

8/6/07 New residence (upper home) 100% complete, KL/EJ. 1/27/11 Land re-appraisal, tabled land, EJ.



### **Tillamook County** 2024 Real Property Assessment Report

Account 187513

Map

2S1005AC04100

0914 - 187513

**Tax Status** 

Subtype

Assessable

**Account Status** 

Active **NORMAL** 

**Legal Descr** 

Code - Tax ID

See Record

Mailing

ZINK, MICHAEL & JENIFER

PO BOX 1185

WHITE SALMON WA 98672

Deed Reference # 2021-8584

Sales Date/Price

10-07-2021 / \$50,000

**Appraiser** 

City

**Property Class** 

100

MA

SA NH

**RMV Class** 

100

80

OV 815

Site Situs Address

COUNTY 4310 ORCHARD LP W

			Value Summary		A Secretary	
Code Ar	ea	RMV	MAV	AV	<b>RMV Exception</b>	CPR %
0914	Land	111,850		Land	0	
4 <u>2</u> 1 1 1 2 1	Impr	0		Impr	0	
Code Area Total		111,850	55,250	55,250	0	
G	rand Total	111.850	55.250	55.250	0	

						Land Breakdown			
Code				Plan		Trend			
Area	ID#	RFPD	Ex	Zone	Value Source	%	Size	Land Class	Trended RMV
0914	0	V		NT-RMD	Market	123	0.77 AC		111,850
						Code Area Total	0.77 AC		111,850

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

Comments

1/02 Corrected acreage to map. LR 1/13/11 Land Reappraisal- tabled land.LM

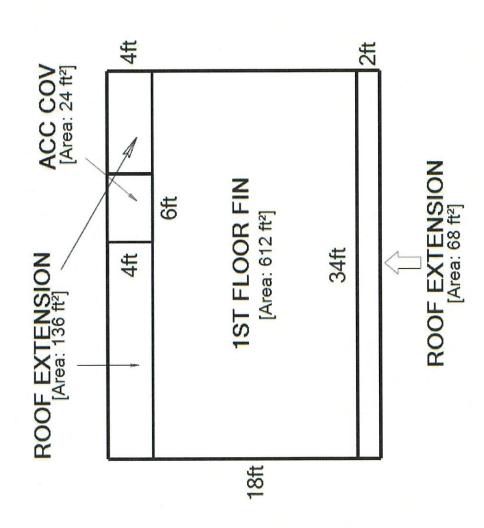
Page 1 of 1 1/15/2025 11:32 AM



MAP ID: 2S 10 05 AC 04100

ACCT: 187513 SITUS: 4310 ORCHARD LP W, COUNTY BY: RK 3/28/23

# PENDING FIELD INSPECTION



### **Tillamook County** 2024 Real Property Assessment Report

Account 185542

Map

2S1005DB00100

**Tax Status** 

Assessable

Code - Tax ID

0914 - 185542

**Account Status** Subtype

Active **NORMAL** 

**Legal Descr** 

See Record

Mailing

BROAD, IAN M

2270 OLD NETARTS RD W

Sales Date/Price

Deed Reference # 2017-6516

TILLAMOOK OR 97141

10-25-2017 / \$290,000

**Property Class** 

101

MA SA

101

NH

**Appraiser** 

**ELIZABETH LOFTIS** 

**RMV Class** 

Site Situs Address

80

OV 815

City

2270 OLD NETARTS RD W COUNTY

			Value Summary			
Code Ar	ea	RMV	MAV	AV	RMV Exception	CPR %
0914	Land	197,870		Land	0	
1.5%	Impr	323,100		Impr	0	
Code	Area Total	520,970	241,990	241,990	0	
G	rand Total	520,970	241,990	241,990	0	

				Land Brea	akdown			
Code			Plan		Trend			
Area	ID#	RFPD	Ex Zone	Value Source	%	Size	Land Class	Trended RMV
0914				LANDSCAPE - AVERAGE	100			1,500
	1	~	NT-RMD	Market	123	0.61 AC		171,370
				OSD - AVERAGE	100			25,000
				Code A	rea Total	0.61 AC		197,870

	Improvement Breakdown							
Code Area	ID#	Year Built	Stat Class	Description	Trend %	Total Sqft	Ex% MS Acct	Trended RMV
0914	1	2011	143	One and 1/2 story	101	1,158		286,190
	2	2016	345	GENERAL PURPOSE BUILDING	101	1,200		36,910
11.0				Code	Area Total	2,358		323,100

Exemptions / Special Assessments / Notations							
Code Area 0914							
Special Assessments	Amount	Acres	Year Used				
<ul> <li>SOLID WASTE</li> </ul>	12.00	0.00	2024				
Notations							
DEMOLISHED PROPERTY RMV & MAV ADJUSTED 308,146 ADDED 2010							

Comments

9-11-04 SANITARY LIEN ENTRY/pka; 9-12-05 SANITARY LIEN ENTRY/cp.

1/7/10 Home demolished, adjusted RMV and MAV, EJ.

1/10/11 Land Re-appraisal, tabled land. EJ.

05/09/12 Added new residence at 62% complete. Applied exception. Added solid waste. RBB

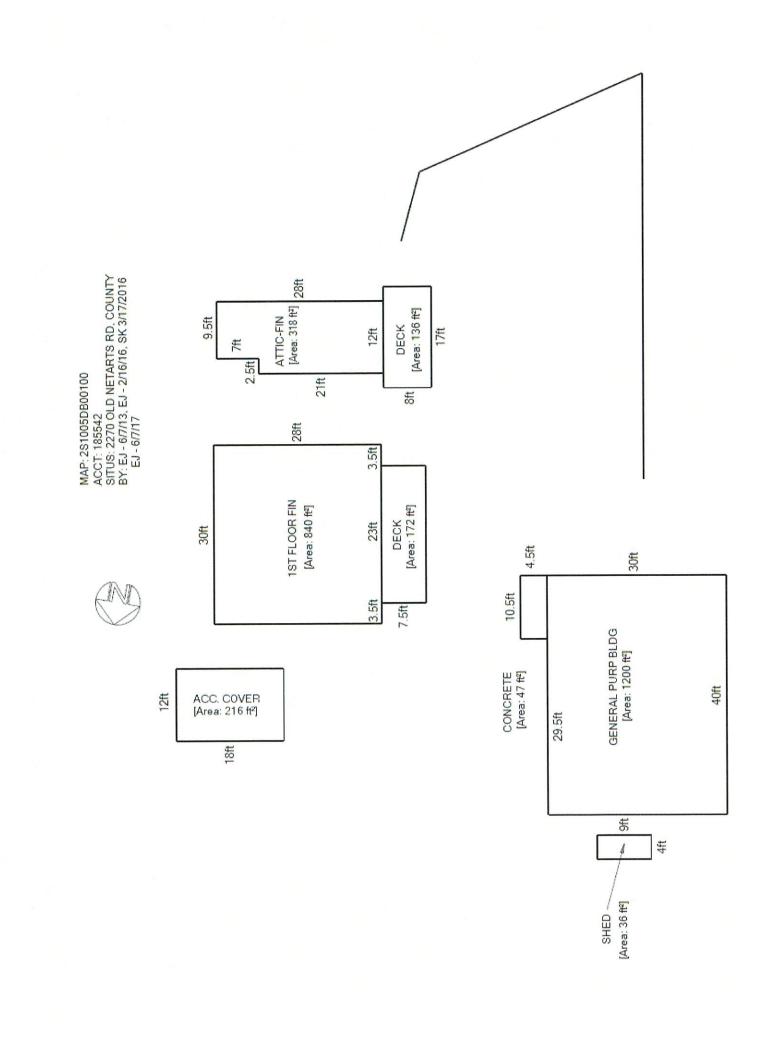
6/7/13 Residence 100% complete - applied exception. EJ.

2/11/16 - Sales Review. Updated inventory, increased class to 4-, RMV changes only. Added accessory cover -

minor exception. EJ.

6/7/17 - New GPB 100% complete - applied exception. 25/5 Rule met - added 2016 minor exception. EJ.

03/27/19 Changed heat source to DHP per permit-applied exception.ef



### EXHIBIT B



Tillamook County Department of Community Development 1510-B Third Street. Tillamook, OR 97141 | Tel: 503-842-3408

www.co.tillamook.or.us

Tel: 503-842-3408 Fax: 503-842-1819

### OFFICE USE ONLY PLANNING APPLICATION **Applicant** □ (Check Box if Same as Property Owner) Phone: 503-651 Address: 1419 Washington St State: OR □ Approved □ Denied Email: Received by: Receipt #: **Property Owner** Fees: Phone: 503-799-2444 Name: Curtis Hedge Permit No: Address: 2425 Martin 85124-000399-PLNG Zip: 97141 State: OR City: West Tillamook Email: chedges@issquaredinc.com Request: WE REQUEST A 5'FRONT MARD SETBACK VARIANCE. THE LOT HAS A SLOPE AT THE WEST SIDE OF THE PROPERTY ADU BACK FURTHER FRONTYARD. THE Type IV Type III Type II Extension of Time □ Ordinance Amendment ☐ Farm/Forest Review □ Detailed Hazard Report ☐ Large-Scale Zoning Map Conditional Use Review Amendment ☐ Conditional Use (As deemed X Variance ☐ Plan and/or Code Text by Director) ☐ Exception to Resource or Riparian Setback Amendment ☐ Nonconforming Review (Major or Minor) □ Ordinance Amendment ☐ Map Amendment ☐ Development Permit Review for Estuary ☐ Goal Exception Development ☐ Non-farm dwelling in Farm Zone ☐ Foredune Grading Permit Review ☐ Neskowin Coastal Hazards Area Location: Site Address: 2425 Martin Ave, West Tillamook, OR 9714 Map Number: Tax Lot(s) Section Range Township Clerk's Instrument #: Authorization This permit application does not assure permit approval. The applicant and/or property owner shall be responsible for obtaining any other necessary federal, state, and local permits. The applicant verifies that the information submitted is complete, accurate, and consistent with other information submitted with this application. Date Property/Owner Signature (Required) 7-2-24 JOHN ANDREW STEMBER

Rev. 8/25/20

Land Use Application



### Curt & Lucy Hedges Proposed ADU Variance

We request a variance for the front yard setback to allow the construction of a 22'x36' ADU above a 22'x40' garage at 2425 Martin Ave W, Tillamook, OR 97141 as shown in the attached drawings. We feel that the project demonstrates that the proposed variance satisfies all of the following criteria.

- 1. Circumstances attributed to the dimensional, topographic, or hazardous characteristics of a legally existing lot, or the placement of structures thereupon, would effectively preclude the enjoyment of a substantial property right enjoyed by the majority of landowners in the vicinity, if all applicable standards were to be met. This lot has a slope on the west side making it not reasonable to construct the ADU with the required front yard setback. The geologic reconnaissance geologic hazards report developed by Warren Krager, RG, CEG, notes: "the natural slopes are steep to very steep ... and are mapped as a historical land slide and potentially unstable slopes by DOGAMI. Site grading or construction within 15' of the slope is not recommended." And later" Figure 4 shows a DOGAMI mapped landslide on the subject property. The slide is characterized as a deep, seated, rotational earth slide of probable historic age" Morgan Civil Engineering in their report also indicate that the "building foundations should be located at least 20' from the face of the adjacent descending slope." By decreasing the setback to 5' allows the building to be built on a stable foundation a safe distance from the slope. Other landowners in the area are allowed to build ADUs on their property so the same opportunity should be available to the Hedges on their property.
- 2. A variance is necessary to accommodate an accessory use on the parcel which can be reasonably expected to occur within the zone or vicinity. ADUs are allowed in similar zones or vicinities in this area of Tillamook County. As noted above, This lot has a slope on the west side making it not reasonable to construct the ADU with the required front yard setback. By decreasing the setback to 5' allows the building to be built on a stable foundation a safe distance from the slope.
- 3. The proposed variance will comply with the purposes of the relevant development standards of Section 4.005 and will preserve the right of adjoining property owners to use and enjoy their land for legal purposes.

The proposed ADU project will be in conformance with all zoning relevant standards including Section 4.005 (along with building code standards) and will not impact the adjacent lot for their existing structures and to further develop their property at a future date. Section 4.005:

- To ensure the availability of private open space; Reducing the front yard setback for the construction of the proposed ADU over garage does not reduce the open space of the lot. There are still many flat areas of open space available on the lot and the sloped areas are also very open.
- 2. To ensure that adequate light and air are available to residential structures; The proposed location of the ADU/Garage does not block light or restrict air to the existing residence and has a very small impact on the 344' adjacent property affecting only 11.6% of that property line.
- 3. To adequately separate structures for emergency access; The proposed location of the ADU/Garage does not constrict the 25' existing road/easement through the existing adjacent property easement and is 32' from the existing residence, so maintains the emergency access to the property.
- 4. To enhance privacy for occupants of residences; The adjoining property is very large and there is no development or buildings near the location of the proposed ADU/Garage. Reducing the front yard setback will have very little effect on the privacy for this property and no impact on other properties.
- 5. To ensure that all private land uses that can be reasonably expected to occur on private land for dwellings, shops, garages, driveways, parking, maneuvering vehicles, safe access to roads, alternative energy facilities and private open spaces; This project creates a accessory dwelling unit and garage on the Hedges property. The proposed location allows for an 8'x20' parking space as shown on C-1.0b. There is plenty of room to maneuver vehicles with the location shown. The adjoining property is very large and the ADU/Garage will not limit future dwellings, shops, garages, driveways, parking, maneuvering vehicles or alternative energy facilities placement and maintains the existing private open

- spaces. It will not change or have any impact on it's safe access to roads or to any other property.
- 6. To ensure driver visibility on adjacent roads will not be obstructed; The ADU/Garage proposed location is adjacent to a driveway easement after it enters the Hedges property through the adjacent property and will have no impact to existing driver visibility on adjacent roads or obstruct any driver visibility.
- 7. To ensure safe access to and from common roads; The proposed ADU/Garage location will have no impact or create any changes in regards to the safe access to and from common roads.
- 8. To ensure that pleasing views are neither unreasonably obstructed nor obtained; The views on this property are to the bay and ocean to the west and the proposed location of the ADU/Garage is moving it to the east so further from the view. As noted above, the location at 5' from the property line, has a very small impact on the 344' adjacent property affecting only 11.6% of that property line. It does not change the views of any development or building on that property and allows future developments some very amazing views. There is no impact on other properties views.
- 9. To separate potentially incompatible land uses; The proposed location of the ADU/Garage will not create any issues with incompatible land uses for the adjacent property future development. Any shop, garage or residential structure will require a minimum 5' setback and the likelihood is that any structure constructed on that property will be placed away from this location as they have a very large lot. There are no other properties adjacent to the proposed project.
- 10. To insure access to solar radiation for the purpose of alternative energy production; Access to solar radiation for alternative energy production impact will be minimal due to the proposed location of the ADU/Garage. As noted above, the location at 5' from the property line, has a very small impact on the 344' adjacent property affecting only 11.6% of that property line. There is ample access to solar energy development on the adjacent lot. No other properties are impacted by this project.

4. There are no reasonable alternatives requiring either a lesser or no variance to the front yard setback. As noted above, This lot has a slope on the west side making it not reasonable to construct the ADU with the required front yard setback. By decreasing the setback to 5' allows the building to be built on a stable foundation a safe distance from the slope. The geologic reconnaissance geologic hazards report developed by Warren Krager, RG, CEG, notes: "the natural slopes are steep to very steep ... and are mapped as a historical land slide and potentially unstable slopes by DOGAMI. Site grading or construction within 15' of the slope is not recommended." And later" Figure 4 shows a DOGAMI mapped landslide on the subject property. The slide is characterized as a deep, seated, rotational earth slide of probable historic age" Morgan Civil Engineering in their report also indicate that the "building foundations should be located at least 20' from the face of the adjacent descending slope." The 22' width of the proposed ADU is the minimum required to provide a bedroom, bathroom and stair access from the garage below, so it would be very difficult to narrow down the building to reduce the setback and still make a functioning ADU project.



PO Box 358, Manzanita, OR 97130

ph: 503-801-6016

www.morgancivil.com

June 25, 2024

Curtis Hedges 5558 SE International Way Portland, Oregon 97222

chedges@issquaredinc.com

Re:

Addendum to Geologic Hazard Report for Tax Lot 8001, Map 2S 10W 5DB, Netarts, Tillamook County, Oregon (2425 Martin Avenue)

Project #23-03-Hed

Dear Mr. Hedges:

At your request, we have prepared an addendum to the geologic report of your property. For this purpose, we re-visited your property in Netarts, referenced above. The previous Geologic Hazard Report was completed for the property by Morgan Civil Engineering, Inc. and Warren Krager, CEG, dated September 11, 2023.

We recently conducted an additional evaluation of the proposed garage site at the southern portion of the building area. The geologist has prepared an addendum report describing the findings of his field work, dated May 6, 2024.

Based on his findings, revisions to the engineering recommendations have been made regarding the garage foundation design.

We had previously recommended the use of helical anchors along the western side of the garage. We no longer recommend the use of these anchors.

We now recommend the use of cast concrete piers along the western side of the garage. The piers should be used to support a grade beam. The grade beam and the eastern foundation can then be used to support a structural slab for the garage. Additional footings in the center of the garage can be used if needed. The slab should be designed as if there is no supporting soil under the western half of the building.

The allowable soil bearing pressure can be increased to 2500 psf on the firm soil at a depth of 5 feet. The 1500 psf pressure on firm soil near the surface is still applicable.

### **CURTIS HEDGES**

GHR Add. for 2425 Martin Avenue Tax Lot 8001, Map 2S 10W 5DB Netarts, Tillamook County, Oregon

Please contact us if you have any questions or would like to discuss alternative options.

Sincerely,

MORGAN CIVIL ENGINEERING, INC.

Jason R. Morgan, PE Professional Engineer

cc: Project File #23-03-Hed

<V:\23-03-Hed\Reports\Hedges GHR-ADD.docx>

May 6, 2024

Curt Hedges, in care of:

Jason R. Morgan, P.E. Morgan Civil Engineering, Inc. PO Box 358, Manzanita, OR 97130

Subject:

Soil Exploration Findings and Foundation Recommendations

Proposed New ADU/ Garage

2425 Martin Avenue, Tax Lot 8001, Map 2S 10W 05DB

Tillamook County, Oregon

Dear Gentlemen:

As you requested, R. Warren Krager, R.G., C.E.G. (Oregon Licensed Engineering Geologist E-957), with Mr. Jason R. Morgan, P.E., of Morgan Civil Engineering, Inc. conducted a hand auger exploration boring in the approximate location of the proposed southwest corner of the 22 foot wide by 40 foot long garage. The boring was field located using a measureing wheel from the driveway corner 60 feet south parallel to the east property line, and west 30 feet to the approximate boring location.

The hand auger boring samples suggest a near surface profile of loose sand fill, black organic silt loam and silt loam; at 3 feet medium stiff gray silty clay was encountered. Stiff to hard light gray and rust mottled or marled clay was penetrated from a depth of about 4 feet to total boring depth of 5.5 feet below ground surface. The 6-inch drive probe intervals began at 3 feet and terminated at 6.5 feet. Blow counts from a 11-pound sliding hammer, dropping about 39 inches were recorded. The hammer drops drive a 1/2 pipe threaded with a merchant coupling end cap, of about 1 inch diameter area into undisturbed soil at the bottom of the advancing boring. For each 6-inch depth interval between 3 and 6.5 feet, drive probe blow counts are 5, 5, 8, 7, 8, 9, 9, 9. I interpret geotechnical soil classification conditions at 5 to 6.5 feet at very stiff to hard residual clay soil, derived from decomposed sedimentary bedrock, possibly the Astoria Formation.

Jason and I discussed the adjacent slide scarp and building setback from the break in slope and recommend that sonotube piers or similar augered concrete pier should be embeddd into the stiff to hard clay at depths greater that 5 feet at the southwest building corner, and along the southern length of the west foundation wall.

I recommend an allowable soil bearing capacity up to 2,500 psf for the stiff to hard clay at depth greater tthan 5 feet below ground surface in the boring location.

I recommend that the Civil Engineer or Engineering Geologist be contacted to review final design plans for foundations and final grading. It is also recommended that the Civil Engineer or Engineering Geologist be requested to observe and document design pier embedment or advance to refusal.

#### 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





10655 S.W. Park Street • Tigard, Oregon 97223 • Phone 360-903-4861• Email warrenkrager@gmail.com

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# MORGAN CIVIL ENGINEERING, INC.

PO Box 358, Manzanita, OR 97130 ph: 503-801-6016

www.morgancivil.com



September 11, 2023

Curtis Hedges 5558 SE International Way Portland, Oregon 97222

chedges@issquaredinc.com

Re:

Engineering Portion of Geologic Hazard Report for Tax Lot 8001, Map 2S 10W 5DB,

Netarts, Tillamook County, Oregon (2425 Martin Avenue)

Project #23-03-Hed

Dear Mr. Hedges:

At your request, we have completed the site investigation of your 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 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.

#### **Proposed Plans**

In general, a new home and garage are planned for the property. The new home will replace the existing structure near the northeastern corner of the site. The new garage will be located to the south of the access, near the southern end of the level area.

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. Mr. Krager's 8-page report, dated July 17, 2023, is attached for your use. The property is a triangular-shaped property that is accessed from the east via an easement through Tax Lot 609 (Map 2S 10W 05). The property runs 312 feet from north to south and is 170 feet wide at the northern end. The property tapers to the south to about 27 feet wide. See the attached portion of the assessor's map for property orientation and dimensions.



The property is developed with a single-family home that is located near the northeastern corner. According to the Tillamook County Tax Rolls, the home was built in 1978. The adjacent properties to the north and east are also developed. The properties to the west have not been improved.

Other than the house and the access to the site, the ground is generally undisturbed. There are clearly terraces on the properties that are not manmade.

Elevations on the property vary from about 35 feet at the western property line to 73 feet near the access easement from the east. The northeastern corner includes a flat area that is roughly 110 feet long and as wide as 35 feet. A lower bench is located near the northern property line that is 40 feet from north to south and 30 feet from east to west. The home is built with a daylight basement on the slope between these two levels.

Slopes vary from nearly flat at the benched areas in the northeastern portion to 100 percent on portions of the slope descending to the west. Most of the sloped area is near 50 percent.

On the flat areas, vegetation is primarily grasses with a few large evergreen trees. On the steep slopes to the west, there is a dense underbrush of blackberries, ferns, and other species typical of coastal forests.

Firm silty clay loam soil is expected at a depth of about 20 inches below the surface. This may vary in areas due to past grading and tree roots.

The site is in a 135 miles per hour basic wind gust speed zone, unprotected from the ocean and bay 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.

## **Findings and Hazards Analysis**

The primary relevant geologic hazards on this site relate to: 1) steep slopes; 2) landslide areas, 3) drainage control, and; 4) 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 Netarts Residential Manufactured Dwelling (NT-RMD) Zone. See Section 3.344 of the Ordinance for more information.

**B.** Structure Foundation and Road Location – Building foundations should be located at least 20 feet from the face of the adjacent descending slope. All footings should be embedded so that the outside edge lies no closer than 20 feet from the face of the slope. When constructing on a 50 percent slope, this coincides with a depth of 10 feet below the surface.

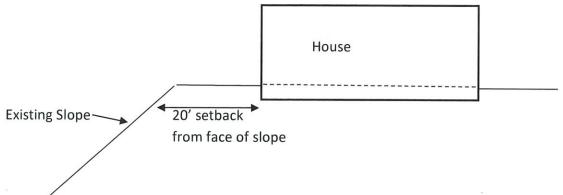


Figure 1. Cross-Section Through Property, Showing Setback from Face of Slope

The home can extend further to the west than the existing building, if preferred. The garage should utilize a deep pier foundation on the western side of the building in order to provide support during sloughing of the slope.

When constructing close to the slope, 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 Martin Avenue, though the existing private easement.

The structures should be placed upon this property in accordance with County setback standards. Coordinate with the County Planning Department in order to verify the setbacks. 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 a continuous period of predicted dry weather. 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.

Permanent cut slopes steeper than 2H:1V should be retained by a retaining wall. Temporary cut slopes can be as steep as 1H:1V.

Cut slopes 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 from the site that was stockpiled before excavation, or import topsoil 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. Do not use Isolated footings within the perimeter foundation walls. Interior footings should be integral with the continuous perimeter footings. The firstfloor 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.

In order to have adequate depth near the steep slopes and prevent undermining from sloughing, I recommend the use of a deep foundation on the western side of the planned garage. Use pin piles, or similar, that are driven to refusal. Use a structural slab for the garage.

All footings should rest at least 12 inches into the firm silty clay loam soil described by the geologist in his report. 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.

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 1500 pounds per square foot on approved soil. All footings should be at least 18 inches in width.

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

Allowable Soil Bearing Pressure, psf (on approved soil)	1,500
Lateral Soil Bearing Pressure on Unrestrained retaining	
walls with level backfill, pcf/ft of depth, equivalent fluid	30
weight (Active pressure excluding surcharge effects)	7
Lateral Soil Bearing Pressure on Restrained retaining	
walls with level backfill, pcf/ft of depth, equivalent fluid	40
weight (Active pressure excluding surcharge effects)	
Lateral Soil Bearing Pressure (Passive), pcf/ft of depth	400
Friction Angle, degrees	35°
Maximum unit weight, pcf	120
Coefficient of Friction	0.35

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.

Hedges GHR Page 9 of 14

**F. Driveway Location and Design** – Any driveway improvements should be constructed such that the roadbed is entirely on cut soil or engineered fill material. Access should be from Martin Street; use the existing easement.

New 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. Asphalt surfacing on the driveway is optional.

**G. Stormwater Management, Runoff and Drainage** – All roof drainage from the home should be collected with eave gutters and downspouts and then piped in order to discharge into the vegetation downslope of the structure. Using multiple discharge locations is preferred. Accumulated surface drainage should also be collected and discharged downslope of the buildings. Stormwater run-off from the garage should be separated and routed to the north and south of the building. Discharge water on the slope using a levelly set tee with perforated end caps. Secure the tee to the pipe in order to prevent it blowing-off.

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 run-off, the surface soil will continue to erode.

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 west side of the disturbed surface areas 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.

I do not recommend silt fencing downslope of the garage site due to disturbance to the slope. The site should be excavated during dry weather and promptly covered with gravel in order to avoid sediment run-off.

A rock entrance pad should be installed prior to beginning building excavation or grading work on the site. I recommend placing the fabric and pit-run rock for the first 20 feet or more of driveway for use as a construction entrance pad.

MORGAN CIVIL ENGINEERING, INC.

**CURTIS HEDGES** GHR for 2425 Martin Avenue Tax Lot 8001, Map 2S 10W 5DB Netarts, Tillamook County, Oregon

> 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.

> Soil should only be stockpiled near the northeastern corner, away from any descending slopes. Cover stockpiled soil and surround it with silt fencing in order to prevent run-off.

> H. Foundation Drains - Foundation drains should be installed on the uphill side of all continuous concrete retaining walls and foundation footings. 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 is also acceptable.

- 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. A topographic survey should extend from the access easement to the top of the slope to the west. As part of a topographic survey map, all easements and utilities that cross the property should be shown.
- 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, building locations and drainage. Development of a detailed site plan prior to construction will reduce costs, unexpected costs, and delays. A building foundation designed specifically for this property will likely reduce the amount of excavation.

Page 11 of 14 Hedges GHR

## **Summary Findings and Conclusions**

- 1. 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.
- 2. 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.

**CURTIS HEDGES** 

GHR for 2425 Martin Avenue Tax Lot 8001, Map 2S 10W 5DB

Netarts, Tillamook County, Oregon

## 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.

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

RENEWAL DATE:

**DECEMBER 31, 2024** 

Sincerely,

cc:

MORGAN CIVIL ENGINEERING, INC.

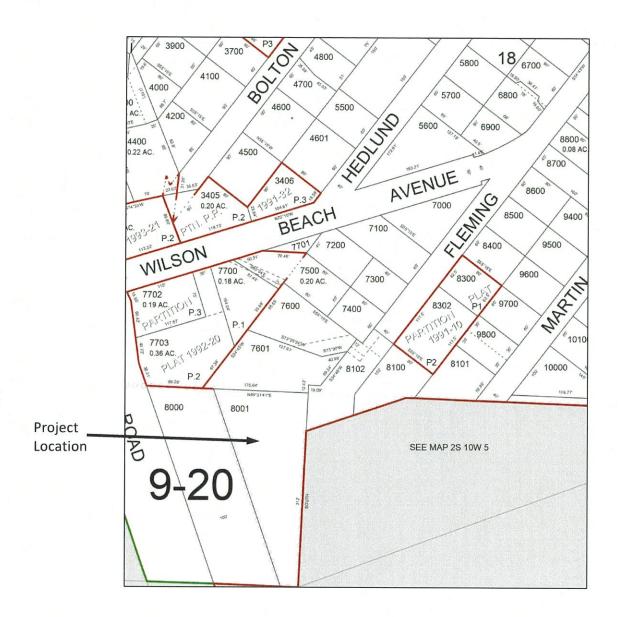
Jason R. Morgan, PE

Professional Engineer

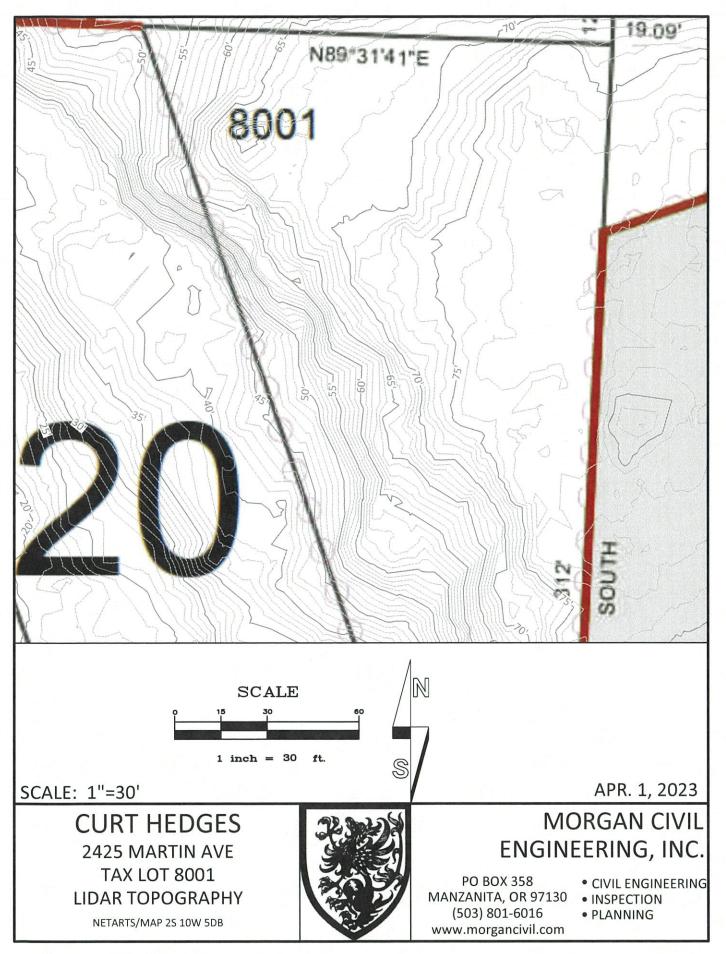
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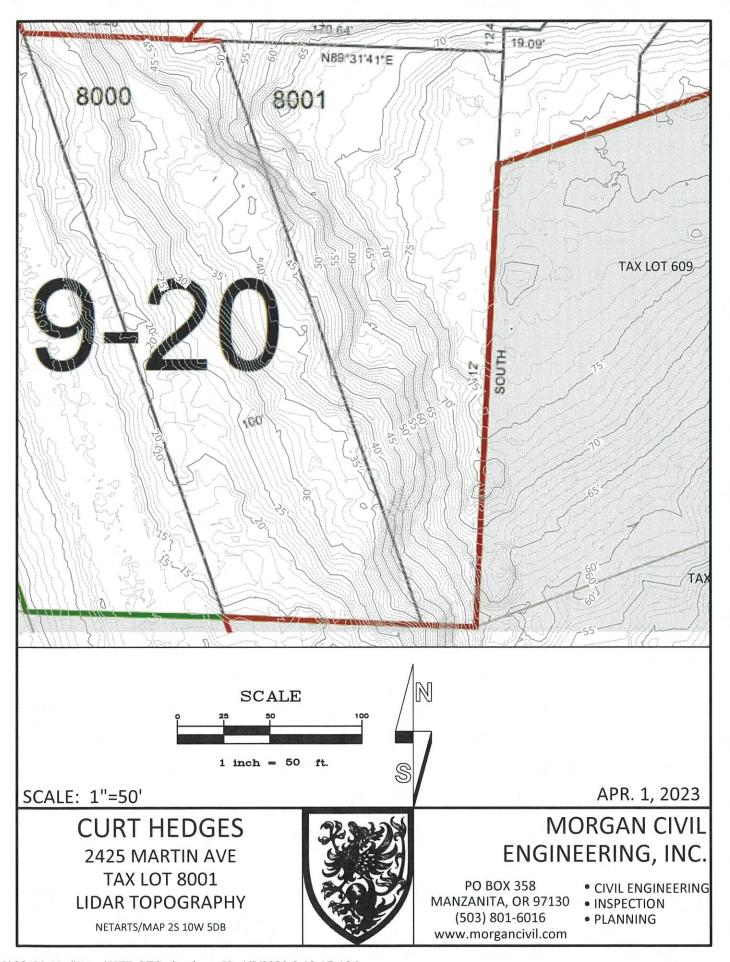
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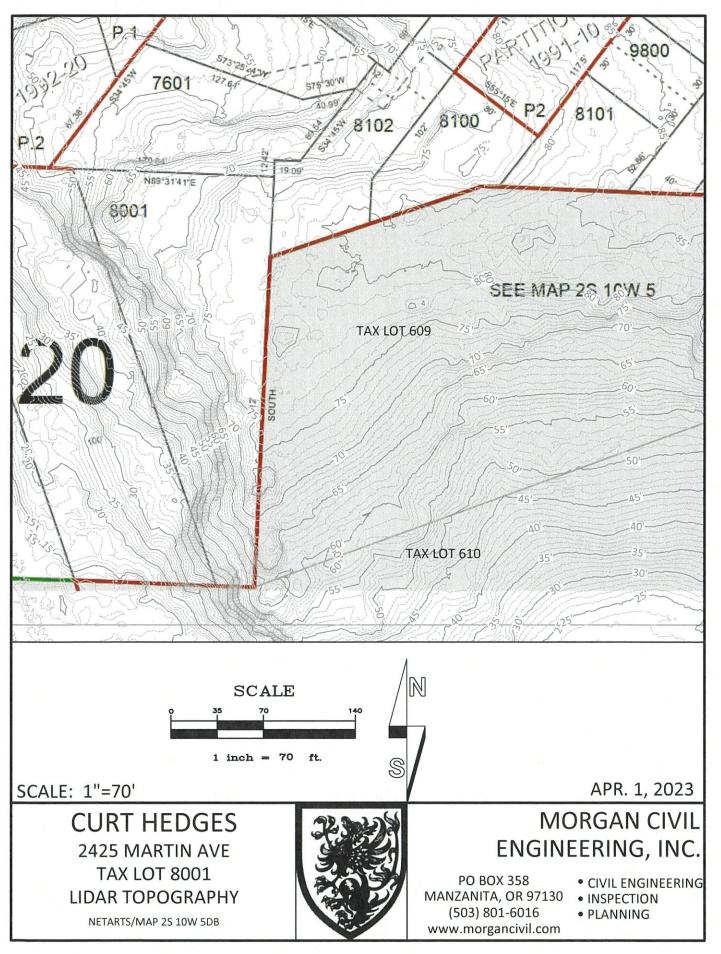
MORGAN CIVIL ENGINEERING, INC.



Tax Lot 8001, Map 2S 10W 5DB Netarts, Tillamook County, Oregon (2425 Martin Avenue)







R. Warren Krager, R.G., C.E.G. Consulting Engineering Geologist Oregon CEG #E957

July 17, 2023

Curt Hedges, 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 New Garage and Residence Remodel 2425 Martin Avenue, Tax Lot 8001, Map 2S 10W 05DB 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 contains landslide area mapped by the Oregon Department of Geology and Mineral Industries (DOGAMI), and the property has a moderate to high susceptibility to deep seated landslides (more than 15 feet below ground surface). The 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 with you on site on April 27, 2023, with Mr. Jason R. Morgan, P.E., of Morgan Civil Engineering, Inc. In total, a little more than one hour was spent on site in observation of site conditions. We observed and discussed natural and graded slopes, graded driveway and proposed garage building site, and area of home or deck remodel. 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 July 17, 2023.

- United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), Web Soil Survey: <a href="http://websoilsurvey.nrcs.usda.gov/">http://websoilsurvey.nrcs.usda.gov/</a>. accessed July 17, 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 April 1, 2023.

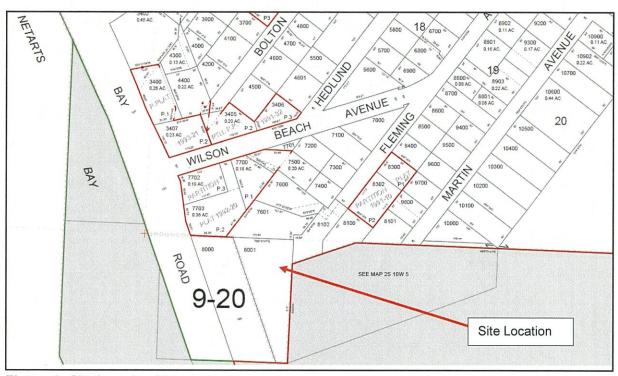


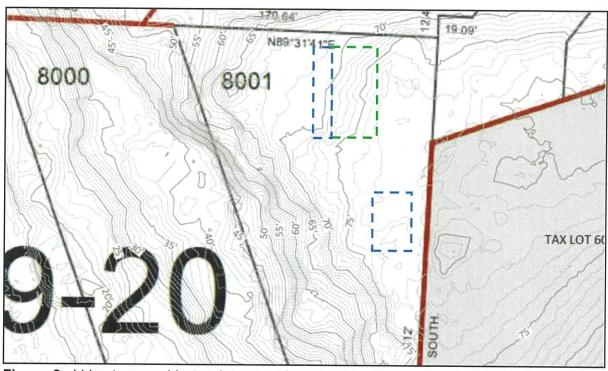
Figure 1- Site Location Plan

#### Site and Project Description

The subject property consists of Tillamook County Tax Lot 8001 of T2S R10W 05DB. The 0.67-acre lot is located west of the south end of Martin Avenue, in Tillamook County, Oregon, as shown in Figure 1. The lot has an existing two-story home, constructed in 1978, with an address of 2425 Martin Avenue. The property is accessible via a driveway easement through private property from Martin Avenue. Tax Lot 8001 is bordered on the north by existing homes, and on the remaining sides by vacant, partitioned rural land with landslide scarps and steep slopes inclined downslope to the west on the west side of the garage site.

Curt Hedges – Proposed New Garage and Residence Remodel Engineering Geologic Reconnaissance Geologic Hazards Report July 17, 2023 Page 3 of 8

Lidar topography of the northern part of Tax Lot 8001 is shown in Figure 2. The existing ground surface elevation of the property ranges from about 77 feet above mean sea level along the nearly level eastern lot boundary, to about 35 feet above mean sea level on a steep slope along the western border of the lot.



**Figure 2-** Lidar topographic tax lot map of northern portion of Tax Lot 8001, prepared by Morgan Civil Engineering. Green dashed outlined area is approximate existing home footprint. Blue outlined areas are proposed home remodel and garage footprints.

I have not seen the proposed garage or home remodel plans. From our discussions, it is my understanding that the new garage is planned south of the home in the highest elevation area of the lot. The garage will be located as far east as possible to avoid steep landslide slopes on the western part of the property. It is my understanding that the planned home remodel may include adding exterior deck, building wall, and foundations on the west side of the existing home, in the approximate position shown in dashed blue outline in Figure 2. We do not expect significant excavation or grading other than foundation or pier installation and placing compacted backfill. It is expected that the existing gravel driveway will be extended to the south to the new garage.

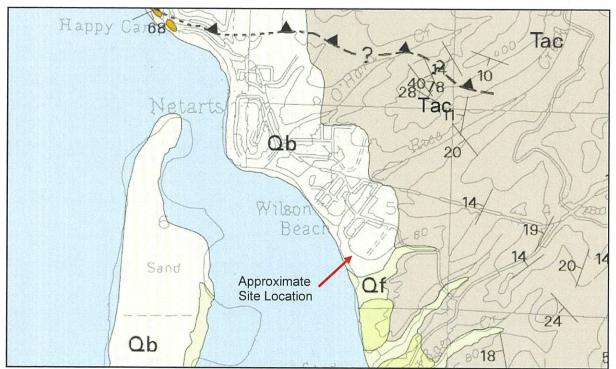
Note that below elevation 75 feet above mean sea level, natural slopes are steep to very steep, inclined up to about 60 percent, and are mapped as historical landslide and potentially unstable slopes by DOGAMI. Site grading or construction within 15 feet of existing steep slopes is not recommended without first developing an engineered grading plan.

#### Soils and Engineering Geologic Overview

Surface soils up to five feet deep on the northern portion of the property are mapped as Knappa medial silt loam, 3 to 15 percent slopes by the USDA NRCS Web Soil Survey. The Knappa medial silt loam forms in mixed alluvium and/or fluvio-marine deposits derived from sedimentary rock. This soil is classified as silty clay loam to more than 60 inches below the ground surface. Typical depth to sedimentary bedrock was not described for the Knappa medial silt by the USDA. The Munsoncreek-Flowerpot complex, 5 to 30 percent slopes, soil complex is mapped on the southern part of the lot. The Munsoncreek-Flowerpot complex forms in colluvium and residuum from marine sedimentary rock. This soil is also classified primarily as silty clay loam through its depth profile to decomposed sedimentary bedrock at about 68 inches below ground surface.

During site reconnaissance, the author observed the existing driveway and front yard area, planned garage site, and other areas that exhibited fine-grained clay and silt soil, consistent with the silty clay loam of a typical soil profile described by the USDA. I do not interpret existing manmade fill in the proposed garage area. However, soil or organic fill material may be present on the steep landslide head scarp slope adjacent to the garage site.

A USGS geologic map of the local project area is shown in Figure 4. The USGS maps the surficial geology in the Netarts area as Quaternary age beach, dune, and marine terrace deposits, (**Qb**) in Figure 3.



**Figure 3-** Portion of the Geologic Map of the Tillamook Highlands Northwest Oregon Coast Range, Tillamook 15 Minute Quadrangle, USGS Open File Report 94-21, 1994.

Marine terraces of middle to late Pleistocene age from a platform upon which late Pleistocene age sand dunes reach elevations above 400 feet above sea level in the Netarts to Oceanside area. The underlying Tertiary sedimentary bedrock of the area is Miocene age Astoria Formation, mapped in the project area by the USGS and others. 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. The Astoria Formation sedimentary bedrock dips westerly from 14 to 20 degrees below horizontal in the foothills east of Netarts Bay.

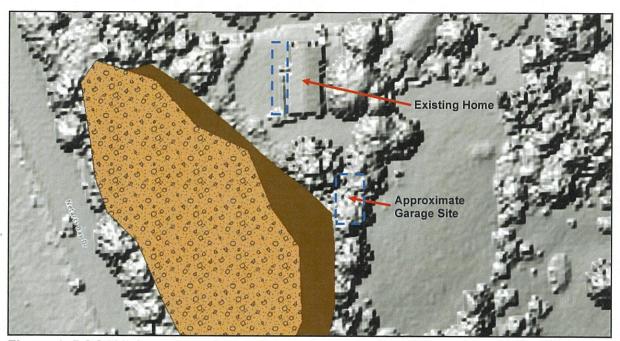


Figure 4- DOGAMI Statewide Landslide Information Database of Oregon, Interactive SLIDO.

Figure 4 shows a DOGAMI mapped landslide on the subject property. The slide is characterized as a deep-seated, rotational earth-slide of probable historic age. The outline of the existing home at 2425 Martin Avenue can be seen in Figure 4. The proposed improvements to the existing home are not within mapped landslide area and are not significantly at risk of future landslide movement in my opinion. However, the proposed garage site lies within a few feet of the mapped landslide head scarp and could be at risk if ongoing or future landslide movement or retrogressive head scarp slope failure occurs. I am not aware of recent landslide activity or earth movement in this location. Nonetheless, proposed construction on or near any landslide can have risk of future slope or earth movement.

#### 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

Curt Hedges – Proposed New Garage and Residence Remodel Engineering Geologic Reconnaissance Geologic Hazards Report July 17, 2023 Page 6 of 8

Zone (CSZ). It is defined by compressional geologic stresses between continental and oceanic plates that influence seismic and volcanic activity of the Pacific Northwest. The CSZ is a type of global scale thrust fault zone, located approximately 50 miles west of the Oregon coastline. The CSZ is an active source of the strongest potential 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 earthquake.

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 most recent 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 ( $M_{\rm w}$ ) 8.5 or greater is possible.

#### Seismic Hazards Discussion

Thick or loose soils on steep slopes, poorly constructed fills, and dormant, ancient or historic landslides may remobilize during strong seismic ground shaking of a CSZ earthquake. The undersea CSZ fault displacement 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 home and garage 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.

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, if present under the site, would be unlikely to liquefy or spread laterally.

The CSZ earthquake is considered the most likely active 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.

#### Conclusions and Recommendations

From an engineering geologic standpoint, it is my opinion that the level yard area within about 20 feet of the west side of the existing home has no significant geologic hazard risks that require mitigation or avoidance. In my opinion, foundation support for an addition to the existing home and deck could consist of conventional shallow spread foundations, designed prescriptively per the Oregon Structural Specialty Code. In my opinion, structural and foundation additions to the west side of existing home and deck 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.

The proposed garage site lies adjacent to the break in slope at the crest of a mapped landslide scarp as shown in Figure 4. In my opinion the garage site is not appropriate for use of shallow foundation support, at least not under the west side of the garage, adject to the landslide head scarp. I have concerns that over the design life of the garage, the slide scarp could fail retrogressively, up slope toward the margin of the garage. Were such slope failure to occur, shallow foundations could lose lateral or vertical support and could experience eventual cracking and settlement, or failure. The time frame for this type of slope failure is unpredictable. Strong storms and heavy rain would factor in erosion and slope stability. Storm water runoff from roof and driveway areas should not be allowed to pool or saturate shallow soils or flow over the landslides scarp.

I recommend that at least the western foundation wall of the garage be supported on deep foundations such as piers or piles, advanced or driven to refusal in consolidated colluvium or decomposed bedrock, below the potentially active slope. Deep piles or piers could be expected to support the garage if erosion or minor failure of the landslide scarp occurs. This type of deep foundation and connecting grade beam will need to be designed by an Oregon Registered Professional Engineer.

I recommend that the Engineer or Engineering Geologist be contacted to review final design plans for foundations and final grading. It is also recommended that the design Engineer or Engineering Geologist be requested to observe and document pier or pier advance to refusal and that excavated foundation subgrade for the home addition or new deck is firm and suitable.

#### 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 10655 S.W. Park Street • Tigard, Oregon 97223 • Phone 360-903-4861• Email warrenkrager@gmail.com

Curt Hedges – Proposed New Garage and Residence Remodel Engineering Geologic Reconnaissance Geologic Hazards Report July 17, 2023 Page 8 of 8

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.

12-31-2023

Sincerely,

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

Oregon Licensed Engineering Geologist E-957



## Tillamook County Fire Defense Board

Protecting all of Tillamook County

## **Road Access and Water Supply Review Form**

This form must be completed and signed by the local fire code official prior to applying for a building permit. If after ten working business days upon submission to the local fire code official the form has not been completed, it will default to the County Building Official for review.

Fire Department Netarts-Oceanside Fire Dis	trictDate Received5-24-24
ApplicantCurt Hedges	_Street Name2425 Martin Ave.
	_SectionTax Lot
Address	Mailing 2121 SE Mulberry Dr.
City_Milwakee	State OR Zip 97262
Phone_503-799-2444	_Emailchedges@issquaredinc.com
Proposed Development / Construction Garage	and apartment
Fire Department to 0	Complete Information Below
The proposed road access meets or exc County Fire Defense Board Road Access  YES  YES  YES	seeds the minimum requirements of the Tillamook S Guidelines. NO
	ninimum requirements for adequate fire suppression in OFC 2014 or as calculated in NFPA 1142. NO
Access and water supply meet the mini responsible jurisdiction.  YES	mum fire-fighting capability requirements of the
Additional Comme	entary Attached if NO Above
Printed Name Tim Carpenter	Title_Fire Chief
Signature	



emailed 6/5

Tillamook County Department of Community Development 1510 Third St. Suite B Tillamook, OR 97141

TO: TILLAMOOK COUNTY ONE-STOP PERMIT COUNTER

RE: WATER AVAILABILITY

Water Availability letter is valid for 6 months from the date of issuance.

I confirm that water service is available to the following tax lot within our District:

Range: 10 Section: 05 DB Tax Lot: 18001\* Township: 25

According to our records, the legal owner is:

Curtis and Kimberlee Hedges

2121 SE Mulberry Dr.

Milwaukie, OR 97267-4533

\*1 Existing service at this property location: 2425 Martin Ave /dh

This property is zoned residential and approved for a Single Family Dwelling. This water availability letter will be considered null and void if changing the classification of lot or dwelling unit.

#### NOTICE TO OWNER:

System Development Charges (SDC) and administration fees are required and are due when foundation or substructure is started. If SDC fees are not paid at the time construction begins, a fee of 1.5% a month will be assessed from the date construction commences. No water connection shall be made until all charges and fees are paid in full. Meter installation fees are due following the install. If you have questions regarding potential costs of installation, please contact the office.

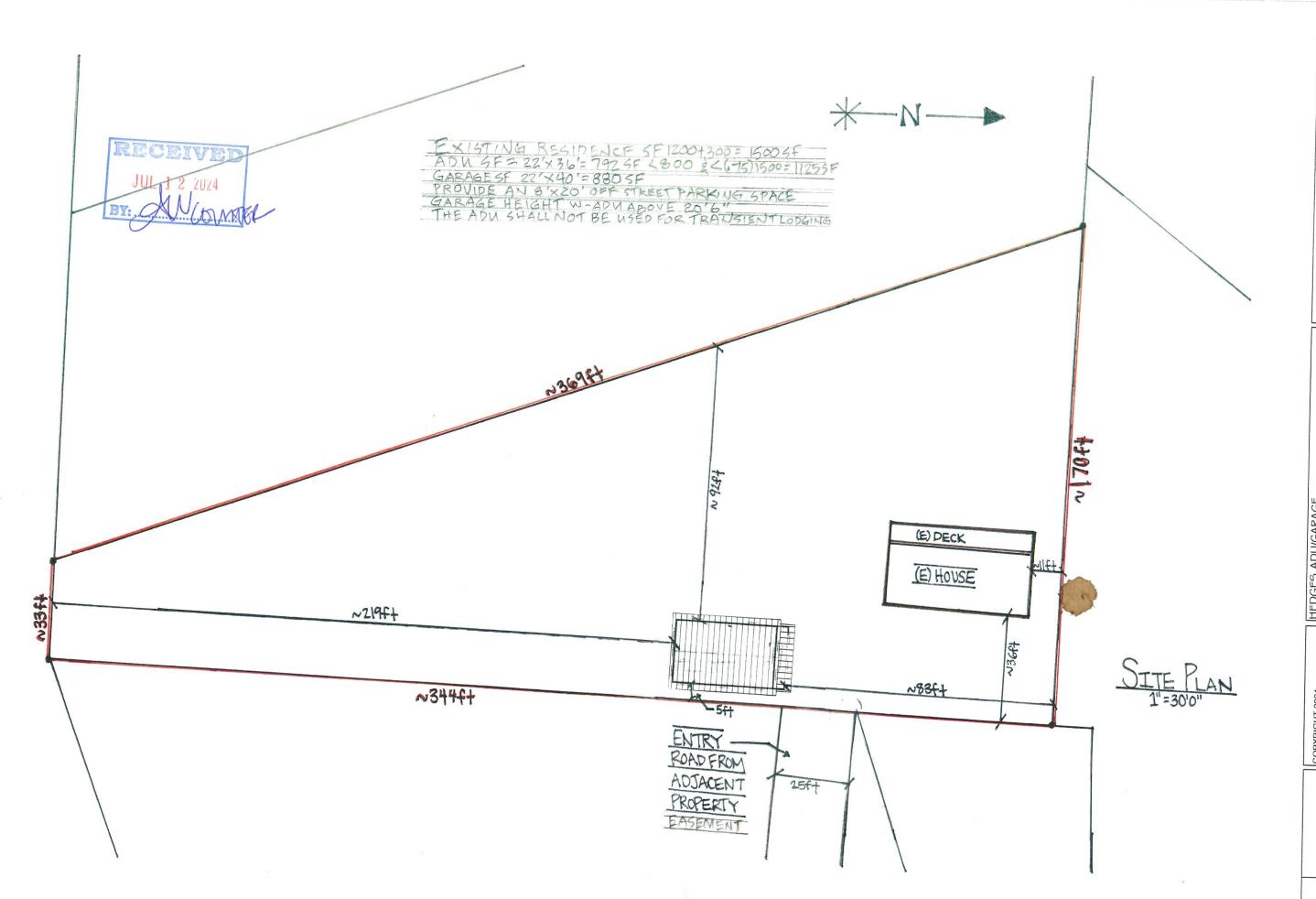
This letter shall not create a liability on the part of Tillamook County, or by an officer, or employee thereof, for

the services described above.

David Hancock, District Operator

Meter to be installed next existing

cc: Property Owner



1419 Washington St, Suite 100 Oregon City, Oregon 97045 Work: 503-657-9800 Cell: 503-449-3080 Andy@jasenginc.com



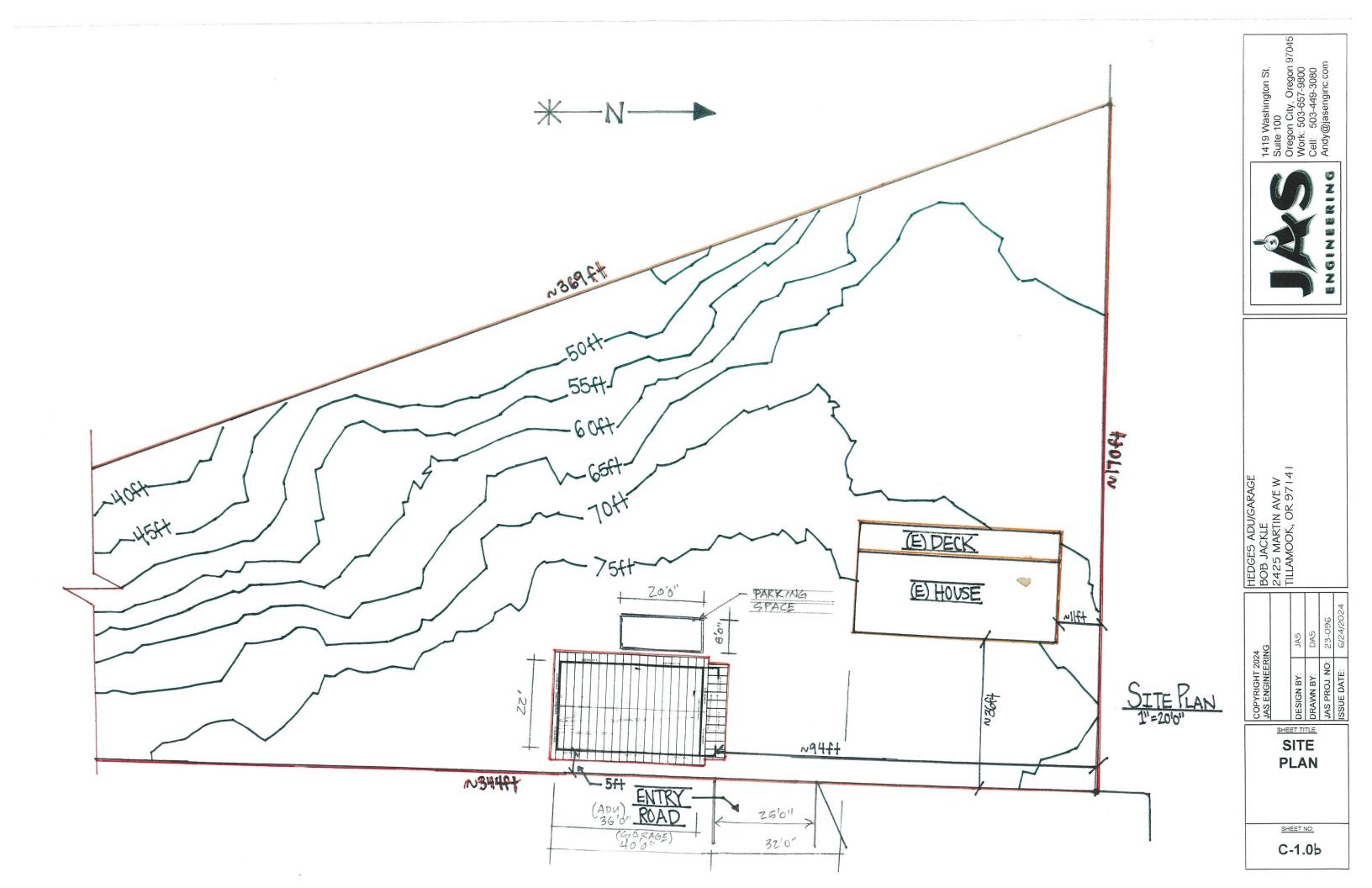
HEDGES ADU/GARAGE BOB JACKLE 2425 MARTIN AVE W TILLAMOOK, OR 97141

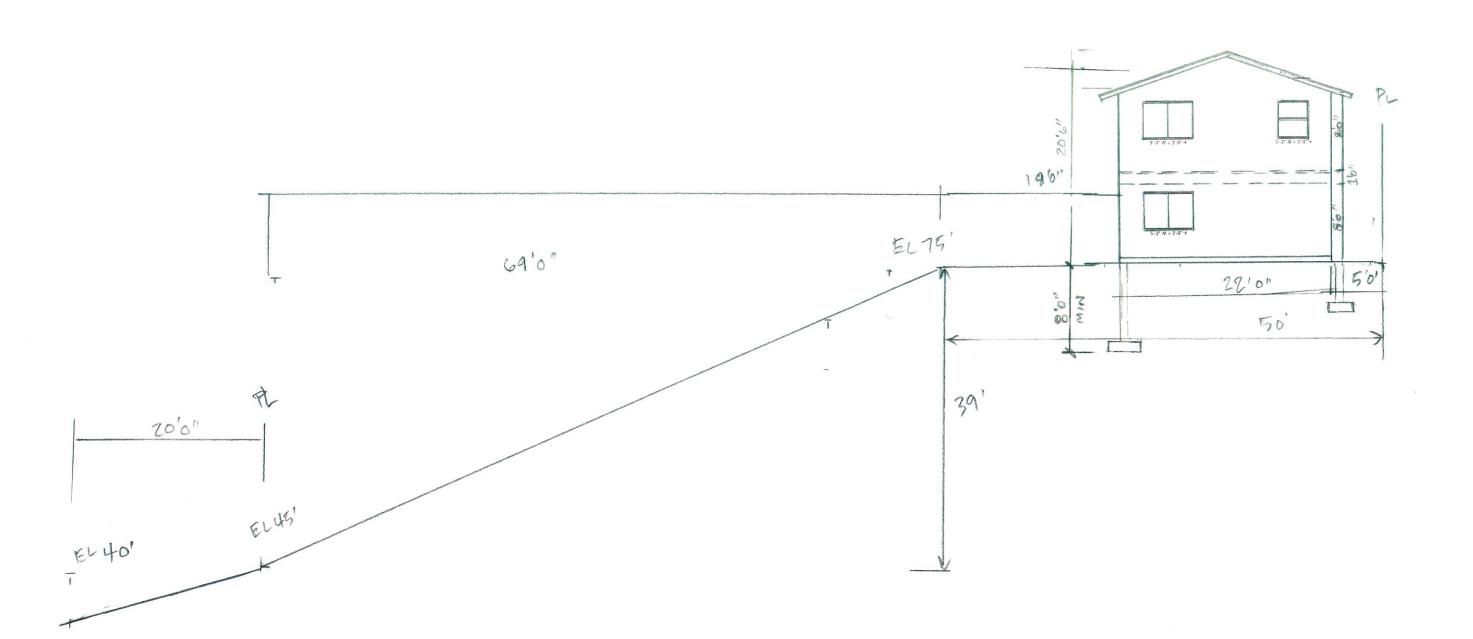
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DRAWN BY:	DAS	
JAS PROJ. NO:	23-096	
ISSUE DATE:	6/24/2024	

SHEET TITLE:
SITE
PLAN

SHEET NO:

C-1.0a





 $\frac{\text{CROSS SECTION}}{\frac{1}{4}\text{"} = 1\text{'-}0\text{"}}$ 

SCALES NOTED ON DRAWINGS ARE FOR 11"X17" SHEET. SCALE ACCORDINGLY FOR DIFFERENT SIZE SHEET.

1419 Washington St, Suite 100 Oregon City, Oregon 97045 Work: 503-657-9800 Cell: 503-449-3080 Andy@jasenginc.com



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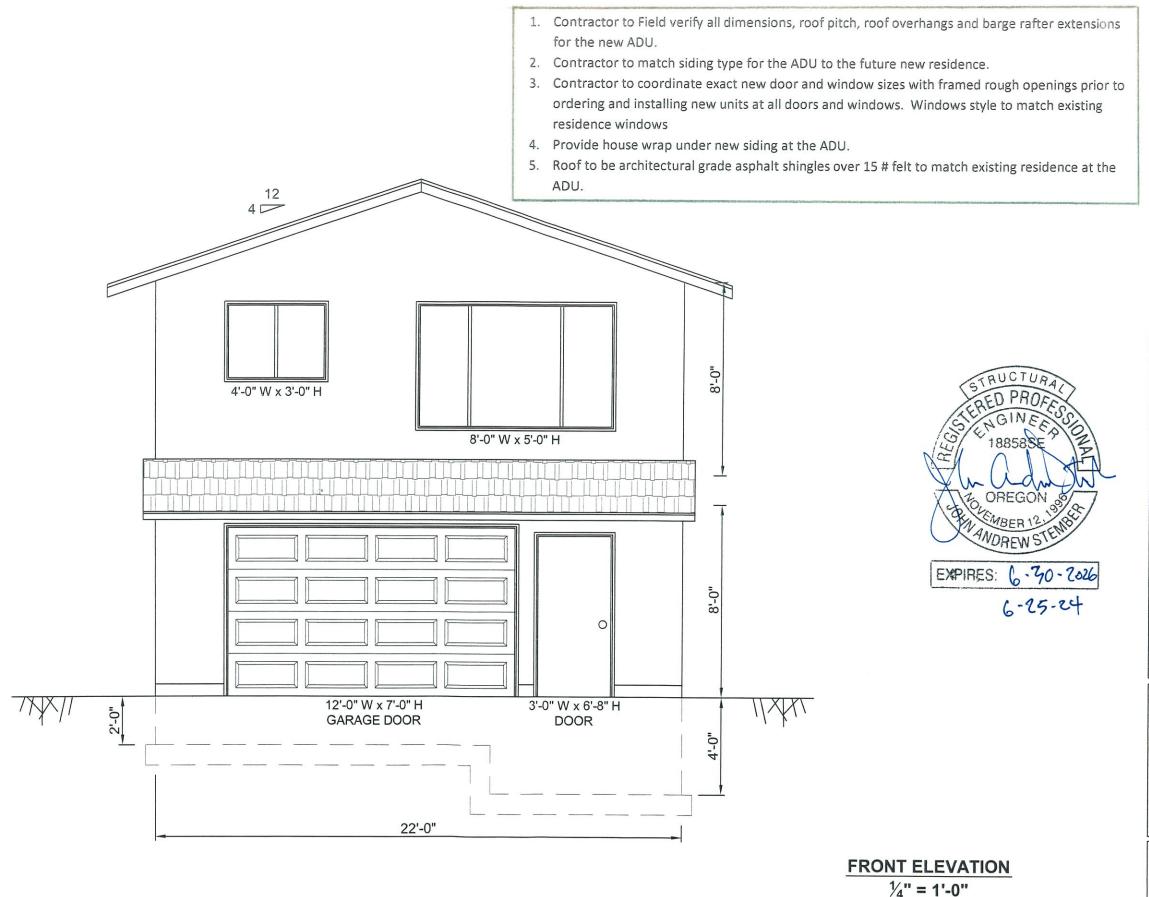
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DESIGN BY:	JAS
DRAWN BY:	DAS
JAS PROJ. NO:	23-096
ISSUE DATE:	6/24/2024

SHEET TITLE:
CROSS

**SECTION** 

SHEET NO:

C-1.1



SCALES NOTED ON DRAWINGS ARE FOR 11"X17" SHEET. SCALE ACCORDINGLY FOR DIFFERENT SIZE SHEET. 1419 Washington St, Suite 100 Oregon City, Oregon 97 Work: 503-657-9800 Cell: 503-449-3080 Andy@jasenginc.com

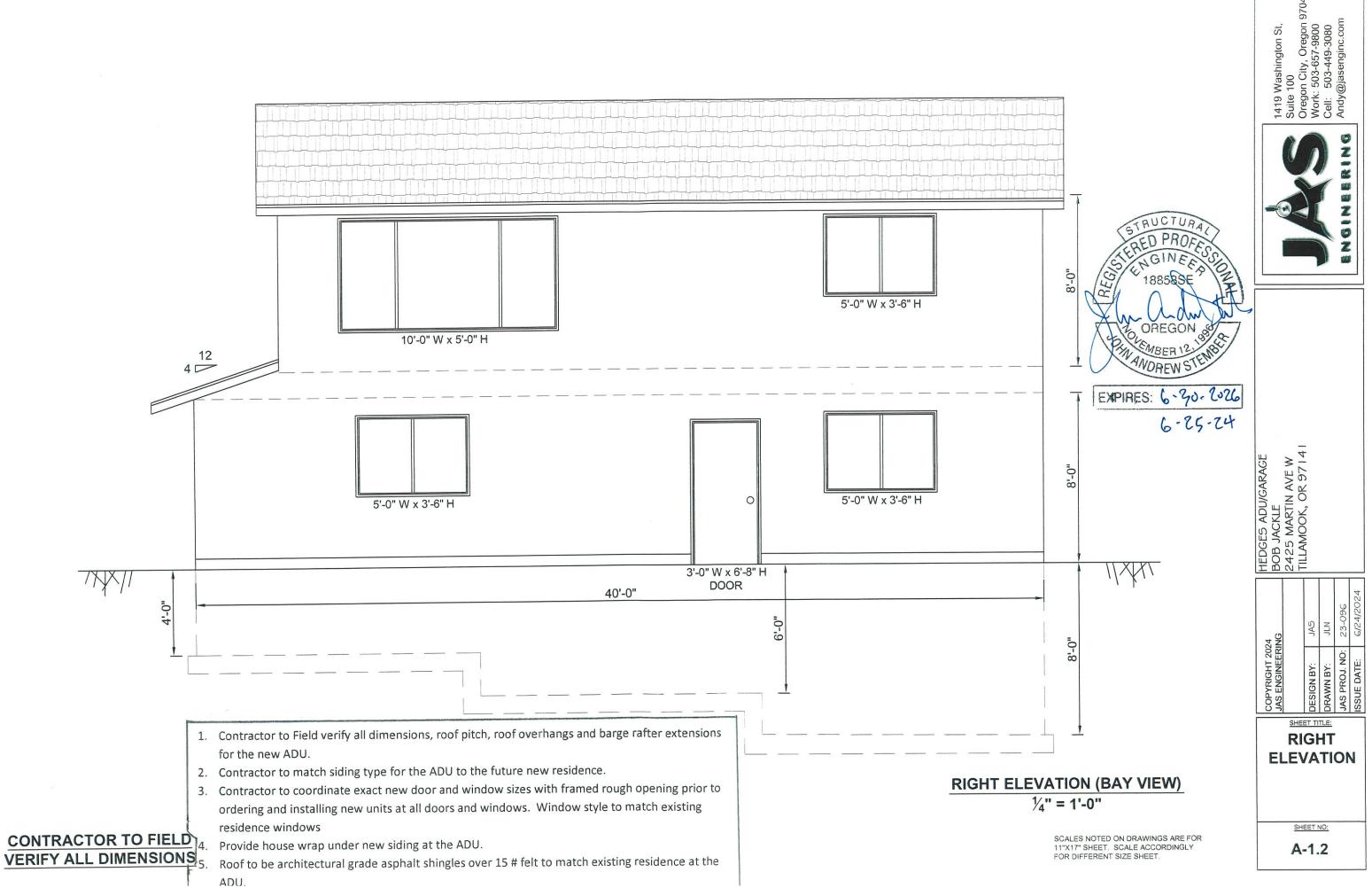


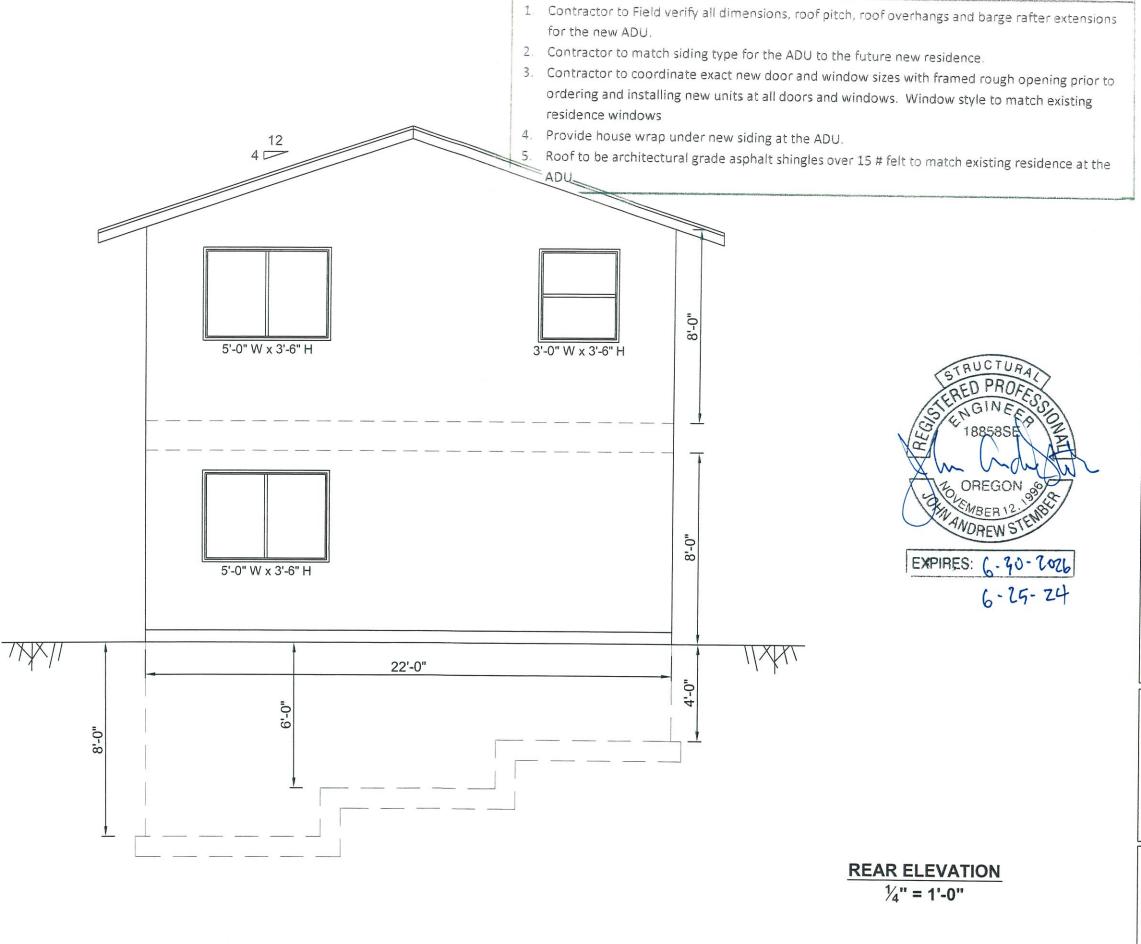
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FRONT ELEVATION

SHEET NO:

A-1.1





1419 Washington St, Suite 100 Oregon City, Oregon 97045 Work: 503-657-9800 Cell: 503-449-3080 Andy@jasenginc.com



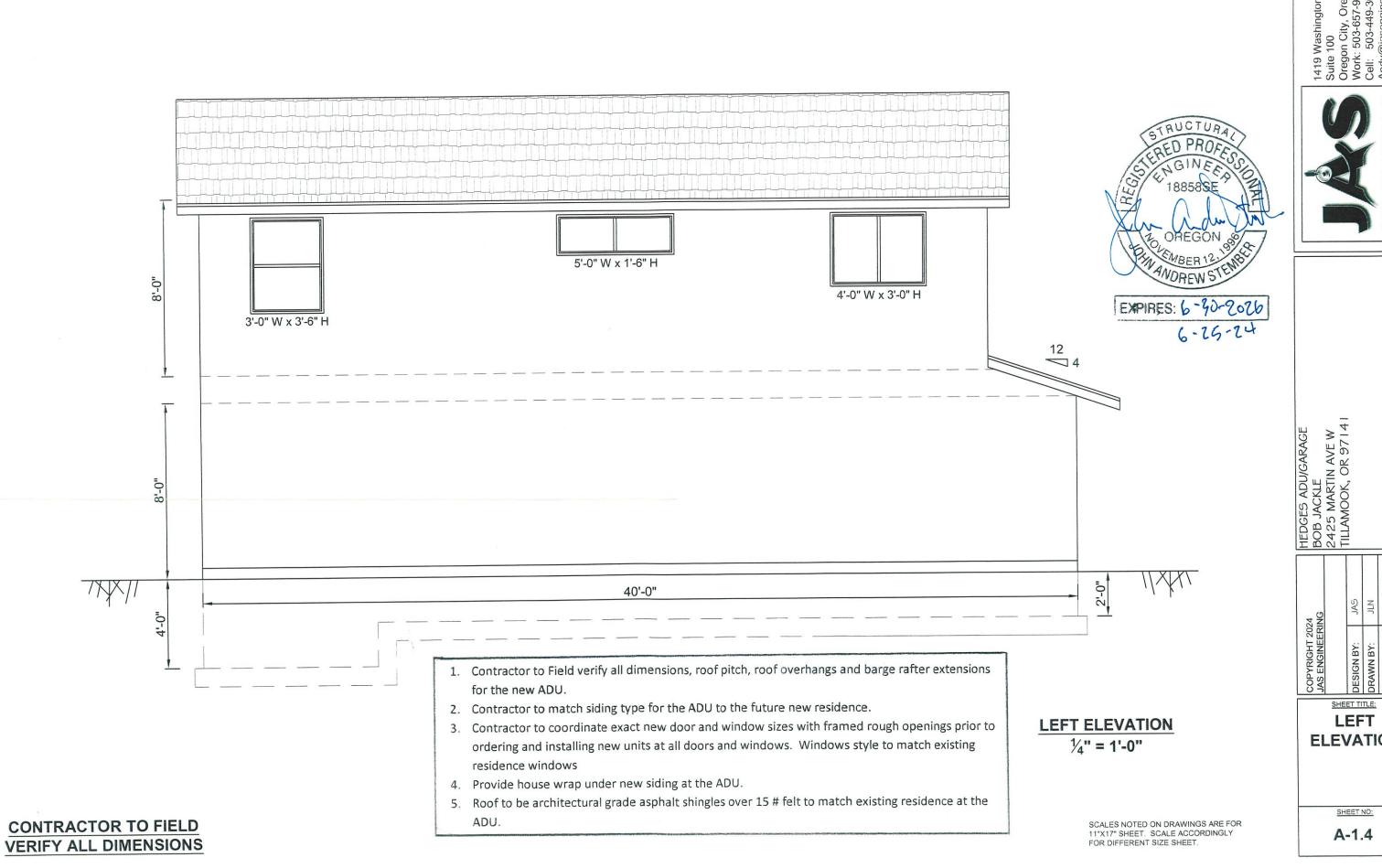
nedges add/garage Bob Jackle 2425 Martin ave w Tillamook, or 97141

SHEET TITLE:

REAR ELEVATION

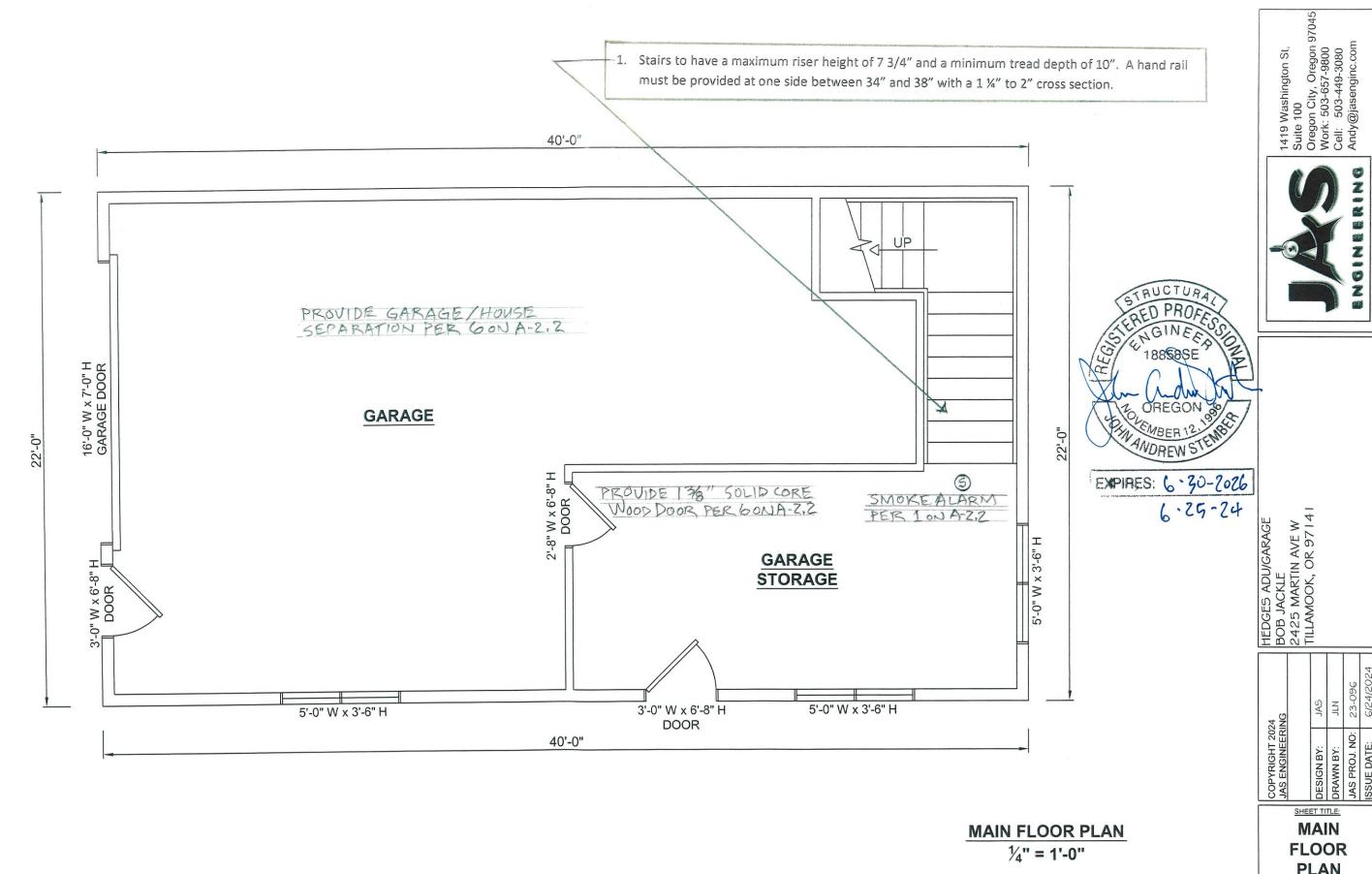
SHEET NO:

A-1.3





**ELEVATION** 



**CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS** 

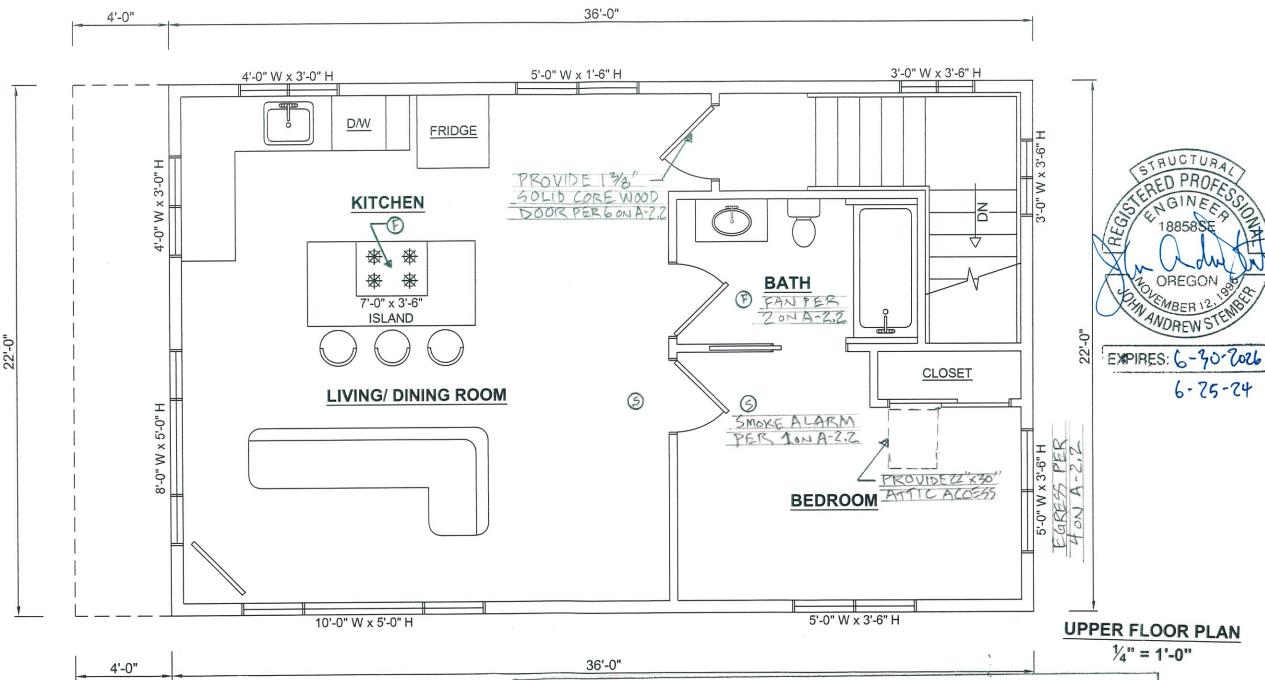
SCALES NOTED ON DRAWINGS ARE FOR 11"X17" SHEET. SCALE ACCORDINGLY FOR DIFFERENT SIZE SHEET.

**PLAN** 

SHEET NO:

A-2.1

PROVIDE THEULATION & ENERGY MEASURES RNOTEZON A-2.2 ADDITIONAL MEASURES ARE NOTED IN FON A-ZIZ



- 31. Smoke/carbon monoxide detectors are required in each sleeping room and outside each sleeping room and on each level. They must be interconnected with battery backup.
- (2) Vent fans exhausting to the outside are required at each bathroom and for the kitchen hood.
  - 3. Provide R-23 in (N) 2x6 walls, R-30 in the floor and R-49 in NEW ceiling areas in the new ADU. Doors to be U=0.20 and windows to be U=0.28 for all doors and windows.
  - Egress Windows in each sleeping room to be 5.7 sqft with minimum 24" height, 20" width and clear opening maximum 44" above finished floor at any bedroom windows.
- 5. Safety glazing is required in doors and all glazing with in 24" of either edge of the door in a closed position. Safety glazing is also required in windows adjacent to bathtubs and showers.
- 6. Garages shall be separated from the residence by not less than 5/8" type-X gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated by not less than 5/8" type-X gypsum board on the floor ceiling assembly. Doors shall be not less than 1 3/8" solid core wood door or a 20-minute rated fire door. Ducts shall be 26 gage sheet steel with no openings into the garage.
- 7. Additional Measure per Table N1101.1(2) are (1) High efficiency HVAC (b) Air Source Heat Pump HSPF 10/14 SEER Cooling.

**CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS** 

SCALES NOTED ON DRAWINGS ARE FOR 11"X17" SHEET. SCALE ACCORDINGLY FOR DIFFERENT SIZE SHEET.

1419 Washington St, Suite 100 Oregon City, Oregon 9 Work: 503-657-9800 Cell: 503-449-3080 Andy@jasenginc.com HEDGES ADU/GARAGE BOB JACKLE 2425 MARTIN AVE W TILLAMOOK, OR 97141

**UPPER FLOOR PLAN** 

SHEET NO:

A-2.2

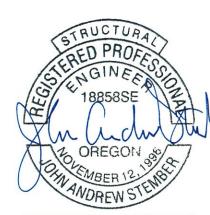
### STRUCTURAL NOTES

### GENERAL STRUCTURAL NOTES

- THESE NOTES ARE GENERAL IN NATURE AND ARE INTENDED TO SET MINIMUM STANDARDS FOR CONSTRUCTION.
- 2. ALL WORK SHALL BE IN STRICT CONFORMANCE WITH THE 2021 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE STATE OF OREGON (2022 OSSC). ALL BUILDING ELEMENTS AND COMPONENTS AND COMPONENTS NOT SPECIFICALLY DETAILED IN THESE STRUCTURAL CONSTRUCTION DOCUMENTS SHALL BE FABRICATED AND CONSTRUCTED IN ACCORDANCE WITH THE MINIMUM STANDARDS CONTAINED IN SECTION 2308 -CONVENTIONAL LIGHT FRAME CONSTRUCTION OF THE IBC AS AMENDED BY THE STATE OF
- 3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS BEFORE CONSTRUCTION. THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
- THE CONTRACT STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. METHODS, PROCEDURES, AND SEQUENCE OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF
- 5. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN LIVE LOAD FOR THE STRUCTURE. PROVIDE SHORING AND/OR BRACING WHERE LOADS EXCEED DESIGN CAPACITY AND WHERE STRUCTURES HAVE NOT ATTAINED DESIGN STRENGTH.

### DESIGN LOADS

FLOOR LOADS: 15 PSF DL 40 PSF
ROOF LOADS:         15 PSF           ROOF DL         25 PSF
SNOW LOADS:         25 PSF           GROUND SNOW LOAD         25 PSF, USE 25PSF MIN
SNOW EXPOSURE FACTOR, Ce
WIND DESIGN CRITERIA: BASIC WIND SPEED (ULTIMATE WIND SPEED)
EARTHQUAKE DESIGN CRITERIA:  SEISMIC IMPORTANCE FACTOR, Ie



### SPECIAL INSPECTIONS

AN INDEPENDENT TESTING LABORATORY CHOSEN BY THE OWNER SHALL PROVIDE SPECIAL INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE FOR THE FOLLOWING AREAS OF WORK.

CONCRETE: CYLINDER TESTS, SLUMP TESTS, AIR CONTENT DURING PLACEMENT OF REINFORCING STEEL & ANCHOR BOLTS DURING PLACEMENT OF CAST-IN-PLACE CONCRETE (CIP) (CONCRETE SPECIAL INSPECTION IS NOT REQUIRED FOR CONCRETE STRENGTHS LESS THAN 2500 PSI WHEN AN APPROVED MIX DESIGN IS SUBMITTED FOR REVIEW BY THE ENGINEER)

2. ALL EPOXY ANCHORAGE (BOLTS AND REINFORCING)

THE FOLLOWING COMPANIES HAVE BEEN PRE-APPROVED FOR SPECIAL INSPECTION, ALTERNATIVES SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER PRIOR TO USE:

CARLESON TESTING, INC 8430 SW HUNZIKER ROAD TIGARD, OREGON 97281 (503) 684-3460

MAYS TESTING ENGINEERS, INC. 7911 NE 33RD DRIVE, SUITE 190 PORTI AND, OREGON 97211 (503) 281-7579

PROFESSIONAL SERVICES IND. (PSI) 6302 N. CUTTER CIRCLE, SUITE 480 PORTLAND, OREGON 97217 (503) 289-1778

CLAIR COMPANY 525 NW 2ND STREET CORVALLIS, OREGON 97330 (541) 758-1302

DATED

### **FOUNDATIONS**

- 1. REFER TO THE GEOTECHNICAL REPORT PREPARED BY SUBSURFACE CONDITIONS AND FOUNDATION RECOMMENDATIONS. 2. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 1,500
- 3. EARTH RETAINING WALLS HAVE BEEN DESIGNED FOR A LATERAL PRESSURE OF 35 PCF
- (ACTIVE).
- 4. SLIDING RESISTANCE HAS BEEN DESIGNED USING AN ALLOWABLE PASSIVE EARTH PRESSURE OF 250 PCF AND A COEFFICIENT OF FRICTION OD 0.30.
- 5. GRANULAR FILL: 3/4" OR 1 1/2" MINUS CRUSHED AGGREGATE BASE AS INDICATED OF UNIFORM GRADATION FROM COARSE TO FINE IN ACCORDANCE WITH SECTION 02630 OF THE STATE OF OREGON, DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION". GRANULAR FILL SHALL BE PLACED IN LIFTS NOT TO EXCEED 8" LOOSE MEASURE AND COMPACTED TO NOT LESS THAN 95% RELATIVE COMPACTION AT OPTIMUM MOISTURE CONTENT +/- 2% AS DETERMINED BY ASTM D1557.
- 6. FOOTINGS SHALL BE CARRIED INTO FIRM, NATURAL, UNDISTURBED, STABLE, NATIVE SOIL THAT IS FREE OF ORGANIC AND OTHER OBJECTIONABLE MATERIALS OR SHALL BE PLACED ON COMPACTED GRANULAR FILL.
- 7. NO BACKFILL SHALL BE PLACED BEHIND CANTILEVERED WALLS UNTIL THE CONCRETE HAS ATTAINED 100% OF ITS SPECIFIED COMPRESSIVE STRENGTH.
- 8. COMPACTION TESTING SHALL BE IN ACCORDANCE WITH ASTM D2922.

### STRUCTURAL STEEL (NOT USED)

- STRUCTURAL STEEL SHALL CONFORM TO ASTM A53, GRADE B FOR PIPE SECTIONS, 1. STRUCTURAL STEEL SHALL CONFORM TO ASIM ASJ, GRADE B FOR FIFE SECTIONS, ASTM ASDO, GRADE B FOR TUBE SECTIONS AND ASTM AS72, GRADE 50 FOR OTHER STRUCTURAL SHAPES. EXCEPT AS NOTED ALL STRUCTURAL STEEL IS TO BE PAINTED AFTER FABRICATION. ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN CONFORMANCE WITH THE AISC MANUAL OF STEEL CONSTRUCTION, CURRENT EDITION. NO HOLES OTHER THAN THOSE SPECIFICALLY DETAILED SHALL BE ALLOWED THROUGH STRUCTURAL STEEL MEMBERS. NO CUTTING OR BURNING OF STRUCTURAL STEEL WILL BE PERMITTED WITHOUT PERMISSION OF THE ENGINEER.
- HIGH STRENGTH BOLTING SHALL BE BOLTS CONFORMING TO ASTM A325 HIGH STRENGTH STEEL UNLESS OTHERWISE SHOWN. ALL JOINT CONTACT SURFACES SHALL BE CLEAN AND FREE FROM OIL DIRT AND PAINT. USE TURN-OF-THE-NUT METHOD OR LOAD NDICATION WASHERS
- 3. STRUCTURAL STEEL WELDING SHALL BE DONE BY AWS CERTIFIED WELDERS AND SHALL CONFORM TO AWS D1.1 LATEST EDITION. ALL BUT WELDS ARE COMPLETE PENETRATION UNLESS NOTED OTHERWISE. WELD FILLER METAL SHALL BE AWS A5.1 OF A5.5 E70XX
- SPECIAL INSPECTIONS (OWNER FURNISHED) IS REQUIRED IN ACCORDANCE WITH THE IBC ON THE FOLLOWING PORTIONS OF THE WORK.
- ALL STRUCTURAL STEEL WELDING NOT PERFORMED IN AN APPROVED SHOP
- ALL STRUCTURAL FIELD WELDING - ALL HIGH STRENGTH BOLTING
- EPOXY AND EXPANSION ANCHORS INSTALLED IN CONCRETE

### SHOP DRAWING SUBMITTALS

- STRUCTURAL STEEL
- MATERIAL CERTIFICATIONS FOR STRUCTURAL STEEL, WELDING RODS AND BOLTS
- MASONRY AND CONCRETE REINFORCEMENT
- MATERIAL CERTIFICATIONS FOR MASONRY BLOCKS, GROUTING AND STEEL REINFORCEMENT
- MANUFACTURED WOOD TRUSSES

### REINFORCED CONCRETE

- 1. CEMENT: ASTM C150 TYPE I OR II.
- 2. AGGREGATE: ASTM C33, 1-1/2" MINUS AT FOOTINGS AND 3/4" MINUS AT WALLS.
- 3. WATER: IN CONFORMANCE WITH ASTM C94.
- 4. WATER REDUCING ADMIXTURE: ASTM C490 TYPE A, OR F MID RANGE TYPE.
- AIR-ENTRAINING ADMIXTURE: ASTM C260.
- STRUCTURAL CONCRETE: f'c = 3,000 PSI @ 28 DAYS. SLUMP SHALL BE 4" +/- 1". SLUMPS MAY BE INCREASED TO 8" MAXIMUM USING A MID-RANGE WATER REDUCER. AIR ENTRAINMENT SHALL BE 5% +/-11% AT EXPOSED EXTERIOR CONCRETE. CONCRETE SHALL CONTAIN A WATER REDUCER. MAXIMUM WATER CEMENT RATIO SHALL BE .58 FOR 3,000 PSI CONCRETE. CONCRETE MATERIALS AND QUALITY SHALL BE IN ACCORDANCE WITH CHAPTERS 3 AND 5 RESPECTIVELY OF ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
- TRANSPORTING OF READY-MIX CONCRETE SHALL BE IN ACCORDANCE WITH ASTM C94 "SPECIFICATION FOR READY-MIXED CONCRETE" AND CONCRETE PLACEMENT, CONSOLIDATION AND CURING SHALL BE IN ACCORDANCE WITH SECTION 5 OF ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE".
- 8. HOT-WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305 "HOT WEATHER CONCRETING". COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306 ACI 306 "COLD WEATHER CONCRETING" AND ACI 306.1 "STANDARD SPECIFICATION FOR COLD WEATHER CONCRETING".
- STRENGTH TESTING OF CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 1.6 OF ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE". CONCRETE TESTS SHALL BE MADE FOR EACH 100 CU. YDS. OF CONCRETE PLACED.

### REINFORCING STEEL

- 1. REINFORCING STEEL: ASTM A 615 GRADE 60 DEFORMED BARS.
- 2. FABRICATION AND PLACEMENT SHALL BE IN ACCORDANCE WITH CRSI MSP-1 "MANUAL OF STANDARD PRACTICE" AND SECTION 3 OF ACI 301 "SPECIFICATIONS FOR STRUCTURAL
- 3. REINFORCING STEEL LAP SPLICES NOT OTHERWISE INDICATED SHALL BE ACI STANDARD CLASS B IF SPLICED AT THE SAME LOCATION OR CLASS A IF SPLICES ARE STAGGERED BETWEEN ADJACENT BARS ONE LAP LENGTH MINIMUM.
- 4. UNLESS OTHERWISE INDICATED, MINIMUM CLEARANCE FOR REINFORCING STEEL SHALL BE 3" FOR CONCRETE CAST AGAINST EARTH; FOR CONCRETE EXPOSED TO EARTH OR WEATHER, 1 1/2" FOR #5 AND SMALLER BARS AND 2" FOR #6 AND LARGER BARS. INSTALL WITH PROPER BAR SUPPORTS PRIOR TO CONCRETE PLACEMENT.
- PROVIDE CORNER BARS OF THE SAME SIZE AND SPACING AS THE HORIZONTAL REINFORCEMENT.

### FORM WORK

- 1. CONSTRUCTION, SHORING AND BRACING OF FORMWORK SHALL BE IN ACCORDANCE WITH SECTION 2 OF ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE".
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN, CONSTRUCTION, SEQUENCING AND SAFETY OF ALL FORMWORK AND SHORING.

### CONCRETE ACCESSORIES

- 1. PREMOLDED JOINT FILLER: ASTM D1751 ASPHAULT-SATURATED FIBER TYPE.
- 2. SMOOTH DOWELS: ASTM A36 ROUND BARS. PROVIDE WITH SLEEVES AT ONE SIDE OF THE JOINT.

### POST-INSTALLED ANCHORAGE

- ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT TIME OF ANCHOR INSTALLATION.
- 2. THE REMOVAL AND RESETTING OF POST-INSTALLED MECHANICAL ANCHORS IS PROHIBITED.

### SUBMITTALS

- THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER PRIOR TO FABRICATION/INSTALLATION ALL SHOP DRAWINGS, PRODUCT DATA, ETC. NECESSARY FOR PERFORMANCE OF THE WORK IN THE SHOP AND AT THE SITE.
- REINFORCING STEEL SHOP/PLACEMENT DRAWINGS
- CONCRETE MIX DESIGNS

Suite 100 Oregon City, Oregon & Work: 503-657-9800 Cell: 503-449-3080 Andy@jasenginc.com

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HEDGES ADU/GARAGE BOB JACKLE 2425 MARTIN AVE W TILLAMOOK, OR 97141

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JAS ENGINEERING	NG	_
		NF
DESIGN BY:	JAS	
DRAWN BY:	DAS	_
JAS PROJ. NO:	23-096	
ISSUE DATE	612412024	

SHEET TITLE:

STRUCTURAL NOTES

SHEET NO:

S-1.0a

SCALES NOTED ON DRAWINGS ARE FOR 11"X17" SHEET. SCALE ACCORDINGLY FOR DIFFERENT SIZE SHEET.

SHEARV	VALL SCHEDULE						
MARK	SHEATHING	FASTENERS	@ EDGE	@ FIELD	ANCHOR BOLTS	SOLE PLATE	NOTES
A	15/32" CDX 260#/FT.	COMMON NAILS	8d @ 6" O.C.	8d @ 12" O.C.	5/8" DIA. @ 48" O.C.	3-16d @ 16" O.C.	w/ 3x3x1/4 PLATE WASHERS @ A.B.
В	15/32" CDX 380#/FT.	COMMON NAILS	8d @ 4" O.C.	8d @ 12" O.C.	5/8" DIA. @ 18" O.C.	3-16d 9 16" O.C.	w/ 3x3x1/4 PLATE WASHERS @ A.B.
С	15/32" CDX 490#/FT.	COMMON NAILS	8d @ 3" O.C.	8d @ 12" O.C.	5/8" DIA. @ 24" O.C.	4-20d @ 16" O.C.	w/ 3x3x1/4 PLATE WASHERS @ A.B. IN 2x SILL PLATE
D	15/32" CDX 640#/FT.	COMMON NAILS	8d @ 2" O.C.	8d @ 12" O.C.	5/8" DIA. @ 18" O.C.	3-20d @ 8" O.C.	w/ 3x3x1/4 PLATE WASHERS @ A.B. IN 2x SILL PLATE

(USE 2x ANCHOR BOLTS FOR SW EACH SIDE) (USE 2x NAILING REQUIRED FOR SW EACH SIDE)

NOTES: USE 5/8" DIA. ANCHOR BOLTS WITH SIMPSON SET 3G ADHESIVE. EMBED 7" MIN. AT NOTED SPACING IN EXISTING CONCRETE WALL.

### $\triangle$

### DESIGNATES TYPICAL HOLDOWN TYPE

MARK	HOLDOWN	NOTES
1	MST 37	w/ MIN. DOUBLE STUDS 1,725#
2	HDU2 - SDS2.5 SSTB 16 13" EMBED	w/ MIN. DOUBLE STUDS 3,075#
3	MST 48	w/ MIN. 4x POSTS 3,215#
4	HDU4 - SDS2.5 SB 1224 18" EMBED	w/ MIN. 4x POSTS 4,565#
5	HDU5 - SDS2.5 SB X24 18" EMBED	w/ MIN. 4x POSTS 5,645#
6	MST 60	w/ MIN. 4x POSTS 4,600#
8	HDU8 - SDS2.5 SSTB 36 29" EMBED	w/ MIN. 6x POSTS 7,870#
11	HDU11 - SDS2.5 SB1X30 24" EMBED	w/ MIN. 5x POSTS 9,535#
12	(2) MSTI72 (ONE EACH SIDE)	w/ MIN. 6x POSTS 10,160# DFIR POSTS
14	HDU 14-SDS2.5 SB1X30 24" EMBED	w/ MIN. 6x POSTS 14,445#

NOTES: FOR HDU2 & HDU5 USE 5/8" DIA. ANCHOR W/ SIMPSON SET 3G ADHESIVE EMBED 10" MIN. FOR HDU8 & HDU11 USE 7/8" DIA. ANCHOR W/ SIMPSON SET 3G ADHESIVE EMBED 15" MIN.

### PREMANUFACTURED CONNECTION HARDWARE

- 1. CONNECTION HARDWARE IS BY THE SIMPSON COMPANY OF SAN LEANDRO, CA. ALL STEEL CONNECTORS SHALL BE GALVANIZED OR BY SOME METHOD BE MADE CORROSION RESISTANT, UNLESS OTHERWISE INDICATED.
- 2. PROVIDE BOLTED OR NAILED CONNECTIONS FOR THE MAXIMUM CAPACITY UNLESS OTHERWISE NOTED.
- 3. CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE EITHER POST HOT DIPPED GALVANIZED OR STAINLESS STEEL.

### SHEATHIN

- CONSTRUCTION PANELS SHALL BE IDENTIFIED WITH THE APPROPRIATE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION (APA), AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE U.S. PRODUCT STANDARD PS1 OR APA PERFORMANCE STANDARDS PRP-108.
- 2. MINIMUM PANEL THICKNESS SHALL BE 15/32" C-D EXTERIOR GLUE OR AS INDICATED ON THE PLANS. PARTICLE BOARD IS NOT PERMITTED.
- 3. MINIMUM NAILING IS 8d @ 6" AT PANEL EDGES AND 8d @ 12" IN THE FIELD. ALL NAILS ARE GALVANIZED COMMON OR BOX NAILS. BLOCKING IS REQUIRED AT PANEL EDGES WHERE NOTED ON THE PLANS.

### MANUFACTURED ROOF TRUSSES

- 1. MANUFACTURED ROOF TRUSSES SHALL BE AT 24" CENTERS AND SHALL HAVE A MINIMUM OF 2X4 TOP CHORDS AND BOTTOM CHORDS FOR WOOD TRUSSES.
- 2. TRUSSES SHALL BE DESIGNED FOR SPECIFIED ROOF LOADS. STRUCTURAL CALCULATIONS SHALL BE SEALED BY AN OREGON LICENSED PROFESSIONAL ENGINEER AND SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL THEN THE BUILDING DEPARTMENT PRIOR TO FABRICATION AND INSTALLATION.
- 3. MANUFACTURER SHALL PROVIDE BRACING, BLOCKING, HANGERS, HOLDOWNS AND ALL ACCESSORIES REQUIRED FOR PROPER INSTALLATION.
- 4. SHOP DRAWINGS SHALL PROVIDE PLACING AND ERECTION DIRECTION TO THE INSTALLER. CALCULATIONS AND SHOP DRAWINGS SHALL INCLUDE COMMON IDENTIFYING MARKS TO FACILITATE SHOP DRAWING REVIEW.

### STRUCTURAL PANEL NOTES

- THE LOCATION OF REQUIRED STRUCTURAL PANELS HAVE BEEN NOTED FOR CLARITY.
- ALL EXTERIOR WALLS SHALL BE OF TYPE A CONSTRUCTION EXCEPT AS NOTED
- 3. SWA SHALL HAVE 2-INCH NOMINAL FRAMING AND SWB, SWC & SWD SHALL BE BACKED WITH 3-INCH NOMINAL OR WIDER FRAMING AT ALL PANEL EDGES. PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY, UNLESS OTHERWISE NOTED. PANELS SHALL BE INSTALLED ON STUDS SPACED A MAXIMUM 16" ON CENTER.
- 4. HOLDOWNS OCCUR AT ENDS OF STRUCTURAL PANELS AND SHALL FASTEN TO A MIN. OF (2) STIDS UNILESS OTHERWISE NOTED. CONNECTION HARDWARE IS BY THE SIMPSON COMPANY OF SAN LEANDRO, CA. ALL STEEL CONNECTORS SHALL BE GALVANIZED OR BY SOME METHOD MADE CORROSION RESISTANT, UNLESS OTHERWISE INDICATED. PROVIDE BOLIED OR NAILED CONNECTIONS FOR THE MAXIMUM CAPACITY UNLESS NOTED OTHERWISE. CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE EITHER POST HOT-DIP GALVANIZED OR STAINLESS STEEL.
- 5. WOOD STRUCTURAL PANELS SHALL BE 15/32" C-D INTERIOR-TYPE BONDED WITH EXTERIOR GLUE (CDX) CONFORMING TO APA REQUIREMENTS FOR WALL SHEATHING OR AS INDICATED IN THESE PLANS. PARTICLEBOARD AND OSB ARE NOT PERMITTED. MINIMUM NAILING IS 8d 6" O.C. AT PANEL EDGES AND 8d 12" O.C. IN THE FIELD. ALL NAILS ARE COMMON OR GALVANIZED BOX NAILS. BLOCKING IS REQUIRED AT PANEL JOINTS UNLESS OTHERWISE NOTED.
- 6. CONNECT RIM JOIST / BLOCKING TO WALL TOP PLATE AS FOLLOWS: SWA SIMPSON A35 16" O.C.; SWB SIMPSON A35 12" O.C.; SWC (2) SIMPSON A 35 16" O.C.; SWD (2) SIMPSON A 35 12" O.C.
- 7. SPECIAL INSPECTION (OWNER FURNISHED) IS REQUIRED IN ACCORDANCE WITH THE IBC ON THE FOLLOWING PORTIONS OF WORK.
- -ALL SHEAR WALLS AND FLOOR DIAPHRAGMS WITH EDGE NAILING LESS THAN 4" OC.



EXPIRES: 6-80-2026

### MANUFACTURED WOOD BEAMS & JOISTS

- 1. ROOF AND FLOOR FRAMING DESIGNATED TJI, LVL, TJH, PSL AND MICROLAM SHALL BE MANUFACTURED BY THE TRUSS JOIST CORPORATION.
- 2. ALTERNATE MANUFACTURER MUST BE APPROVED BY THE ENGINEER. PROVIDE SHOP DRAWINGS AND ENGINEERING BEARING THE STAMP OF A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OREGON.
- 3. MANUFACTURER SHALL SUPPLY JOISTS, BRIDGING, HANGERS, BLOCKING, NOTCHED PLATES AND ALL OTHER ACCESSORIES NECESSARY FOR THE PROPER ERECTION AND PERFORMANCE OF THE PRODUCT.
- 4. THE PRODUCT SHALL BE ERECTED AND BRIDGED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS. THE MANUFACTURER SHALL INSPECT INSTALLED ITEMS FOR PROPER INSTALLATION.
- 5. MICROLAM BEAMS, MINIMUM DESIGN VALUES Fb = 2,600 PSI; Fv = 285 PSI; Fc $^\perp$  = 750 PSI; E = 2,000 KSI
- 6. PARALLAM BEAMS, MINIMUM DESIGN VALUES Fb = 2,900 PSI; Fv = 290 PSI; Fc $^{\perp}$  = 750 PSI; E = 2,200 KSI

### GLUED LAMINATED BEAMS (GLB)

- GLULAM BEAMS ARE TO BE MANUFACTURED, TRANSPORTED, AND INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AITC.
- 2. SPECIFY ARCHITECTURAL GRADE FINISH AND EXTERIOR ADHESIVE UNLESS NOTED OTHERWISE. USE 24F-V4 FOR SIMPLE SPANS AND 24F-V8 FOR CONTINUOUS SPANS AND CANTILEVER CONDITIONS.
- 3. MINIMUM DESIGN VALUES: 24F-V4: Fb=2,400 PSI; Fv=265 PSI; Fc=1650 PSI; E=1,700 KSI 24F-V8: Fb=2,400 PSI; Fv=265 PSI; Fc=1650 PSI; E=1,700 KSI

### SOLID SAWN LUMBER

- 1. STRUCTURAL LUMBER SHALL BE DOUGLAS FIR CONFORMING TO WWPA GRADING RULES.
- 2. MINIMUM GRADES ARE, EXCEPT AS NOTED OTHERWISE:

STRUCTURAL JOISTS AND PLANKS - #2 BEAMS AND STRINGERS - #1 POSTS AND TIMBERS - #1 STUDS - #2

- 3. DOUBLE JOISTS BELOW ALL PARALLEL WALLS AND/OR PARTITIONS.
- 4. NOTCHING IS NOT PERMITTED IN JOISTS, RAFTERS, BEAMS, LINTELS, COLUMNS, TRUSSES AND BRACING MEMBERS.
- 5. PRESSURE TREATED LUMBER SHALL CONFORM TO THE AWPA. ALL LUMBER IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED WITH ACZA TO A MINIMUM RETENTION OF 0.25 POUNDS PER CUBIC FOOT BY ASSAY.
- 6. NAILING SHALL BE WITH COMMON NAILS IN CONFORMANCE WITH TABLE 2304.9., 2018 IBC UNLESS NOTED OTHERWISE.
- 7. PROVIDE STANDARD 3"X 3" X 0.229" STEEL PLATE WASHERS UNDER ALL INTERMEDIATE ANCHOR BOLT HEADS AND NUTS AT THE SILL PLATE. USE STANDARD WASHERS FOR ALL OTHER BOLT HEADS AND NUTS IN CONTACT WITH WOOD.

1419 Washington St, Suite 100 Oregon City, Oregon 97045 Work: 503-657-9800 Cell: 503-449-3080 Andy@jasenginc.com



HEDGES ADU/GARAGE BOB JACKLE 2425 MARTIN AVE W TILLAMOOK, OR 97141

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DRAWN BY:	DAS
JAS PROJ. NO:	23-096
ISSUE DATE:	6/24/2024

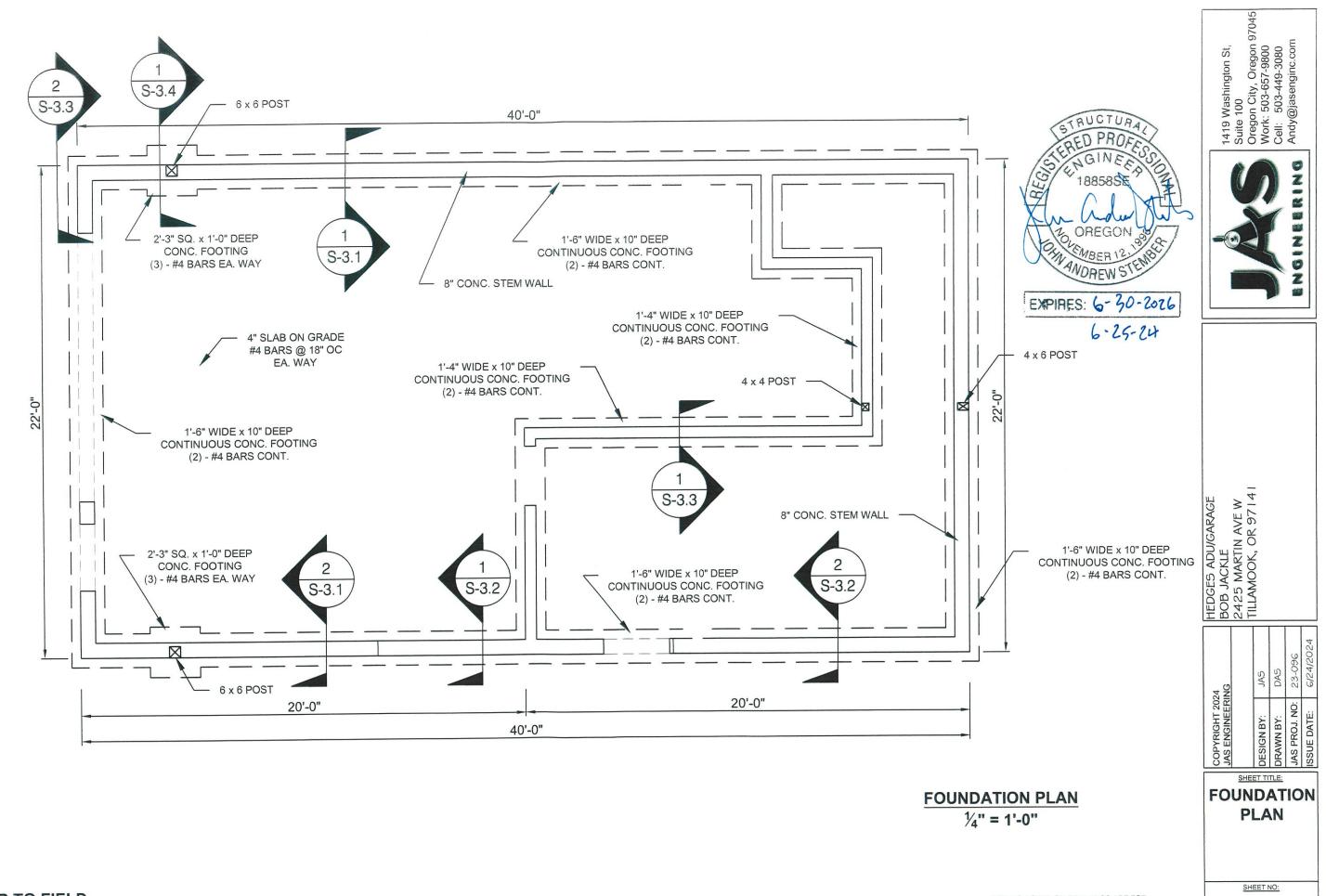
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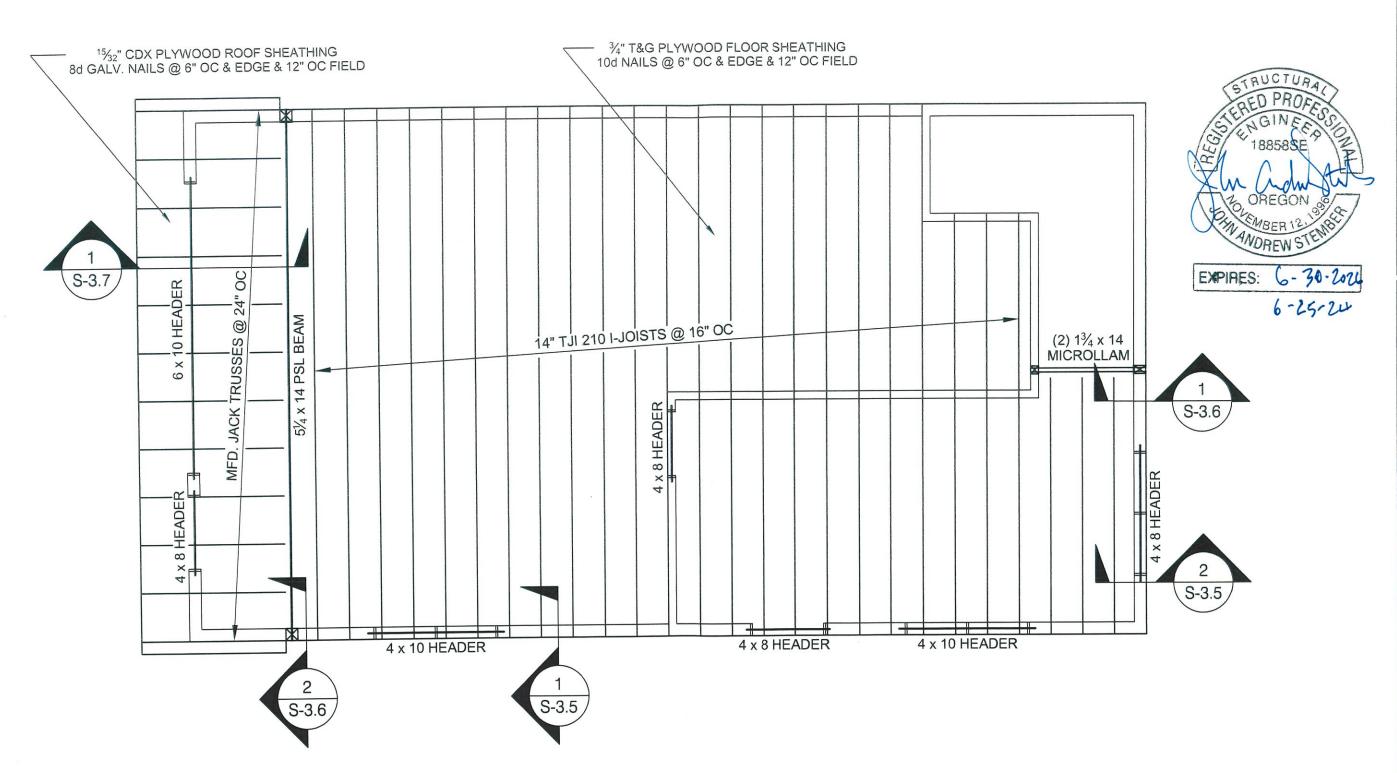
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SCALES NOTED ON DRAWINGS ARE FOR 11"X17" SHEET. SCALE ACCORDINGLY FOR DIFFERENT SIZE SHEET.



CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS

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FLOOR FRAMING PLAN

1/4" = 1'-0"

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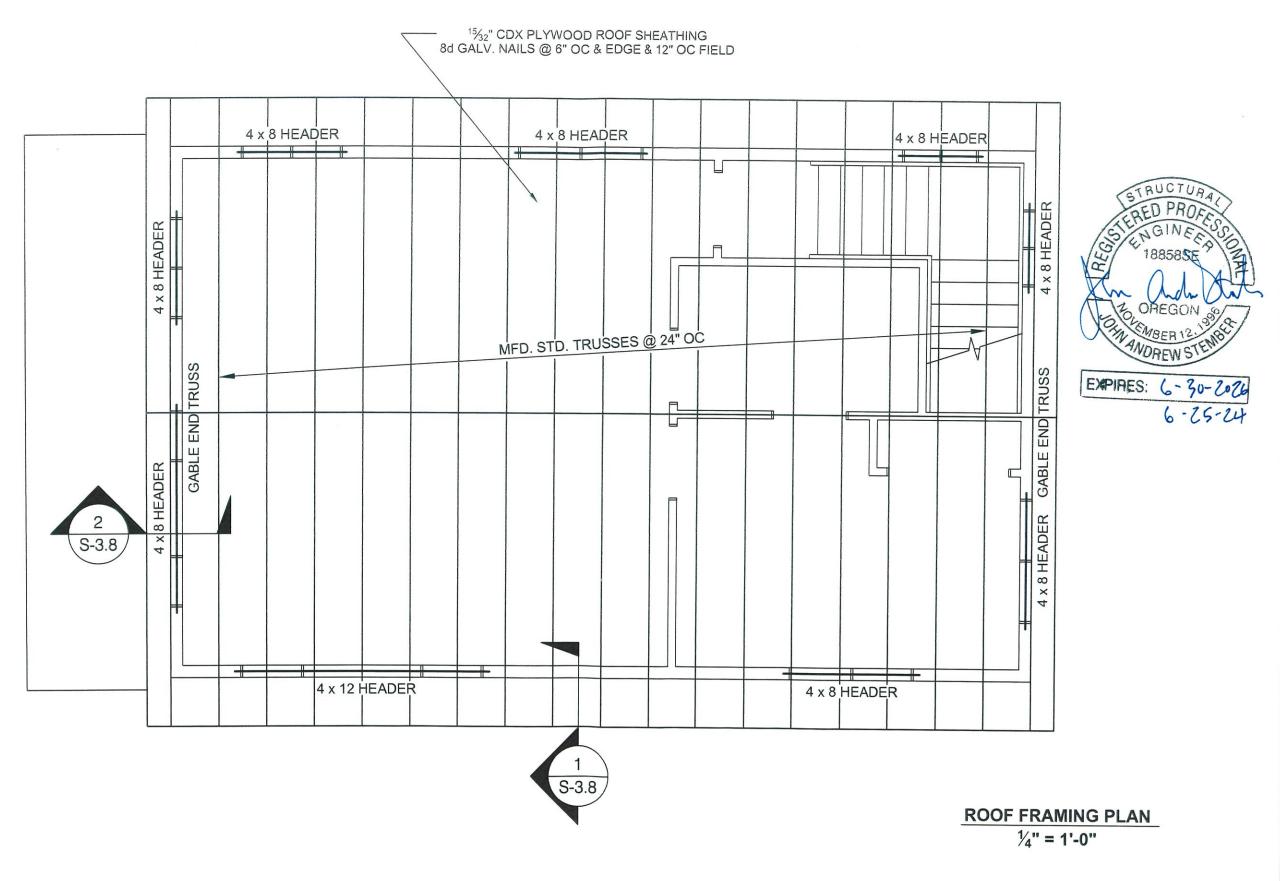


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FLOOR FRAMING PLAN

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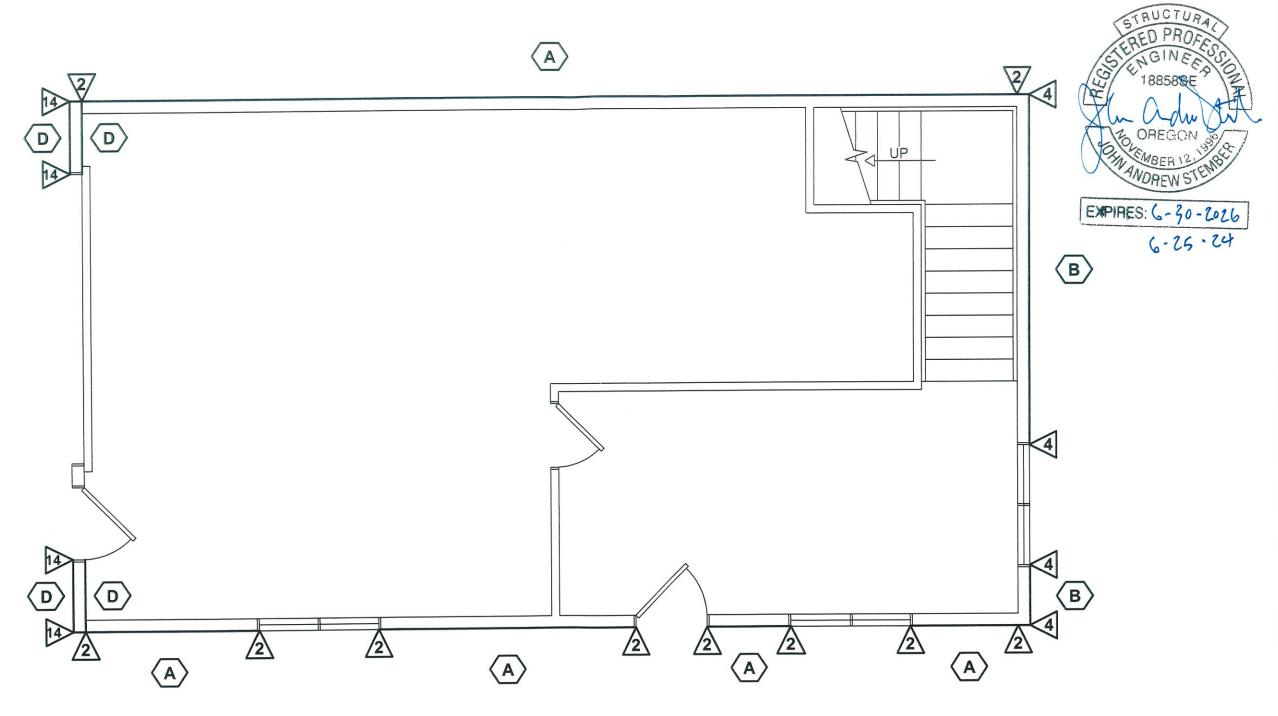
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ROOF FRAMING PLAN

SHEET NO:



MAIN LEVEL SHEAR WALL PLAN

1/4" = 1'-0"

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SHEAR WALLS PER SCHED. S-1.0b

HOLD DOWNS PER SCHED. S-1.0b

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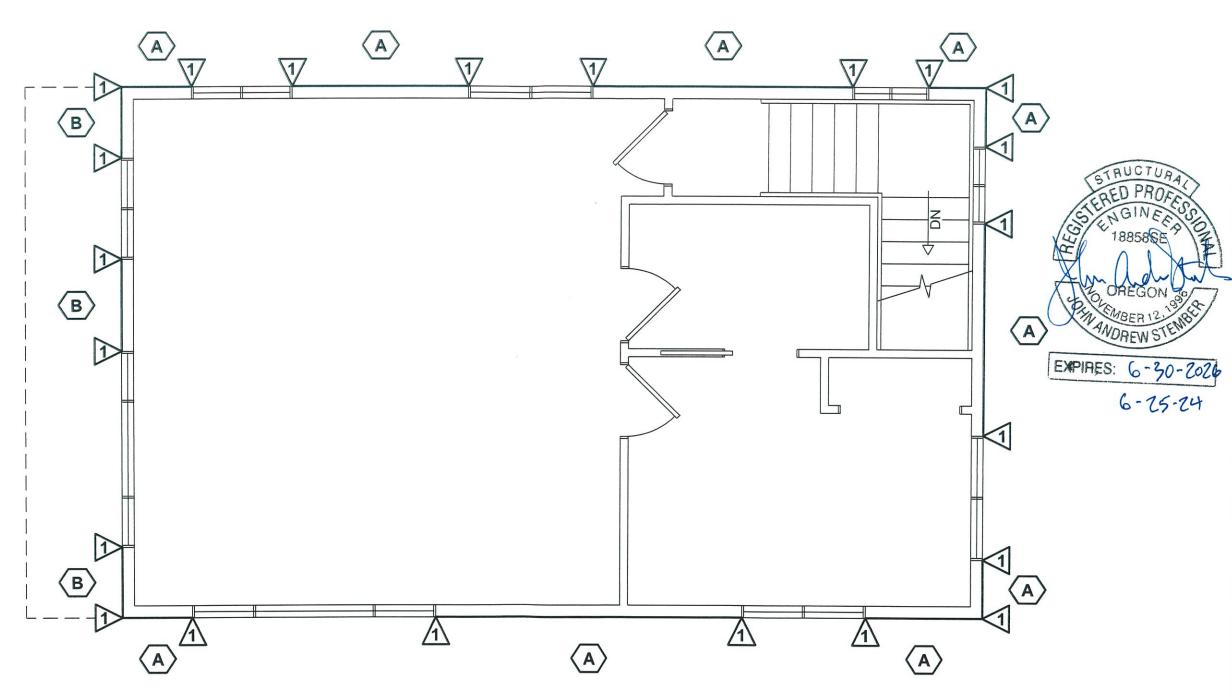
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JAS PROJ. NO: 23-096

ISSUITE DATE: C124/2024

MAIN LEVEL
SHEAR
WALL
PLAN

SHEET NO:



UPPER SHEAR WALL PLAN

1/4" = 1'-0"

 $\Diamond$ 

SHEAR WALLS PER SCHED. S-1.0b

HOLD DOWNS PER SCHED. S-1.0b

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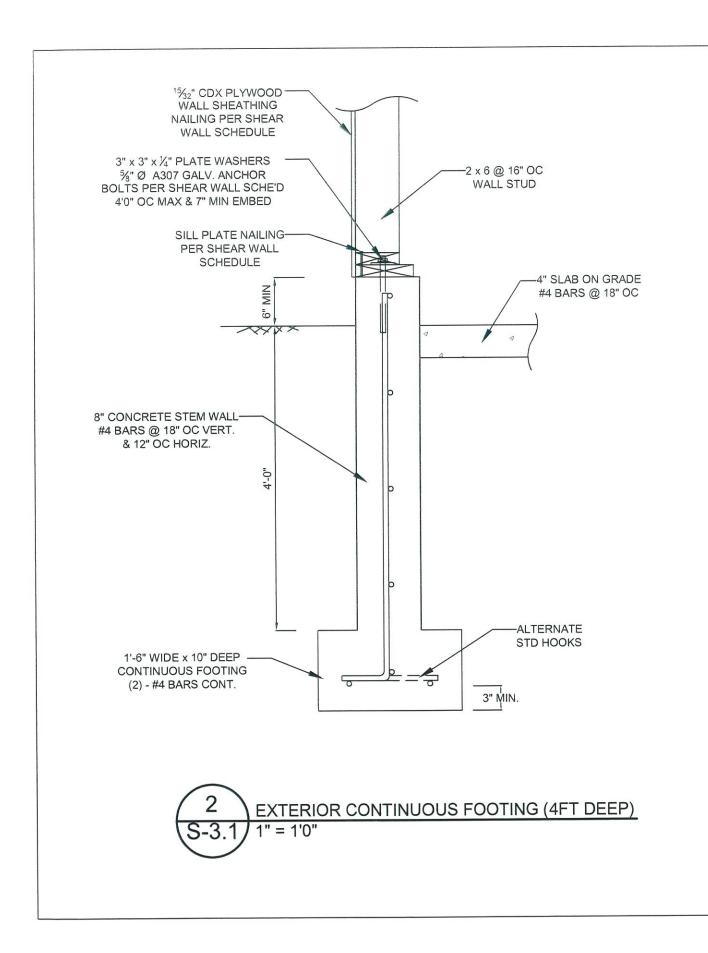


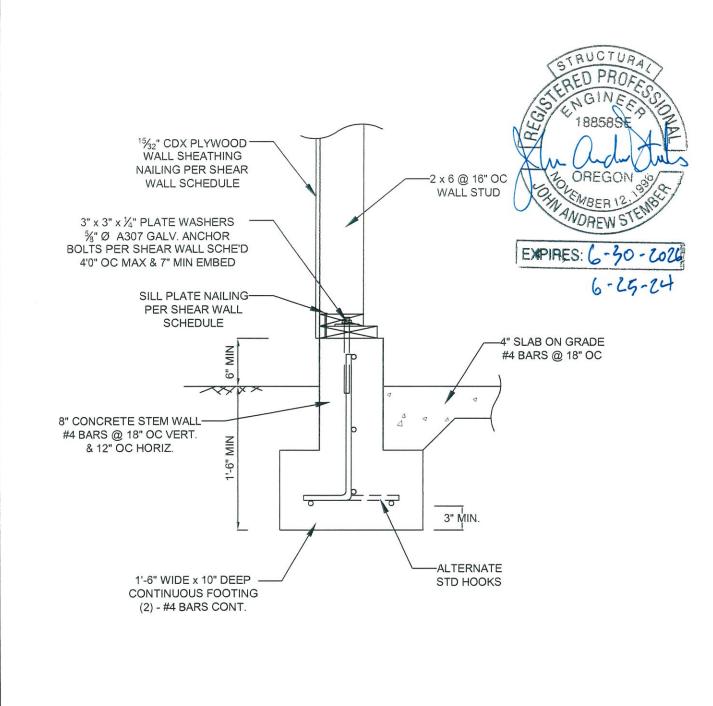
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SHEET TITLE:
UPPER
SHEAR
WALL
PLAN

SHEET NO:





1 EXTERIOR WALL TO CONTINUOUS FOOTING
S-3.1 1" = 1'0"

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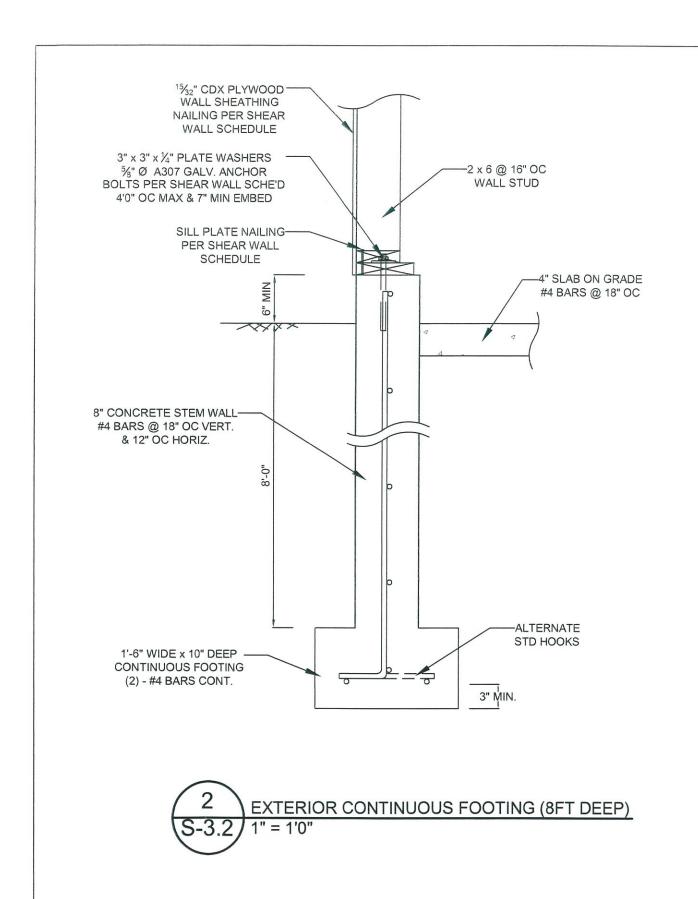
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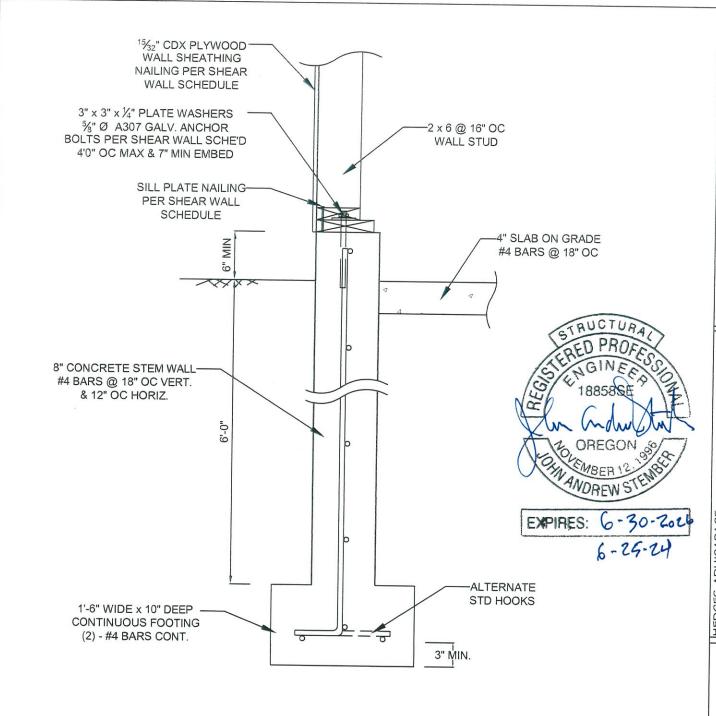
SHEET TITLE

FOUNDATION DETAILS

SHEET NO:

S-3.1





1 EXTERIOR CONTINUOUS FOOTING (6FT DEEP)
S-3.2 1" = 1'0"

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EDGES ADU/GAKAGE OB JACKLE 425 MARTIN AVE W ILLAMOOK, OR 97 I 4 I

JAS ENGINEERING

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DESIGN BY: JAS

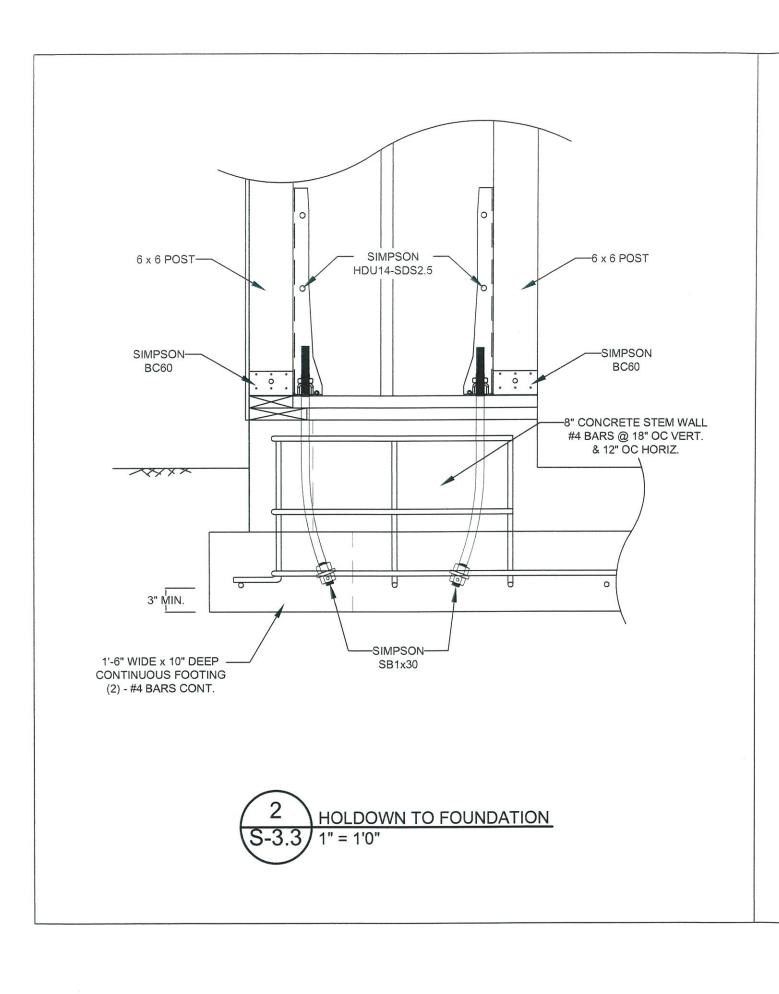
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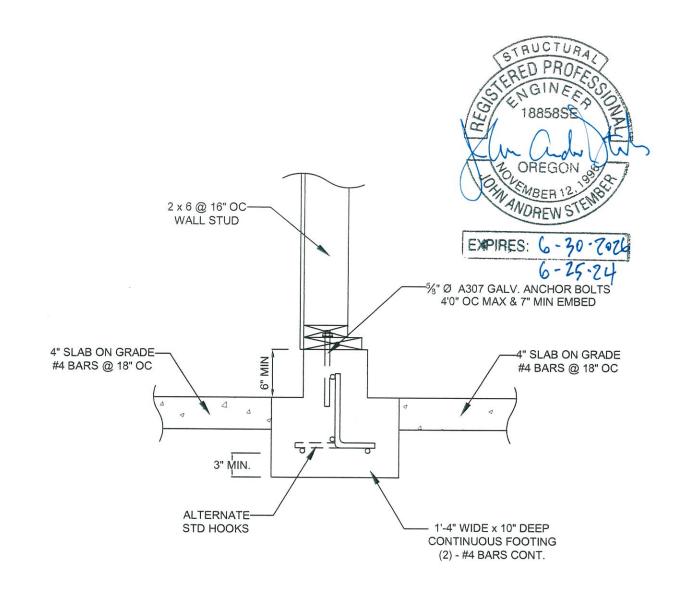
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FOUNDATION DETAILS

SHEET NO:

S-3.2





1 INTERIOR WALL TO CONTINUOUS FOOTING
S-3.3 1" = 1'0"

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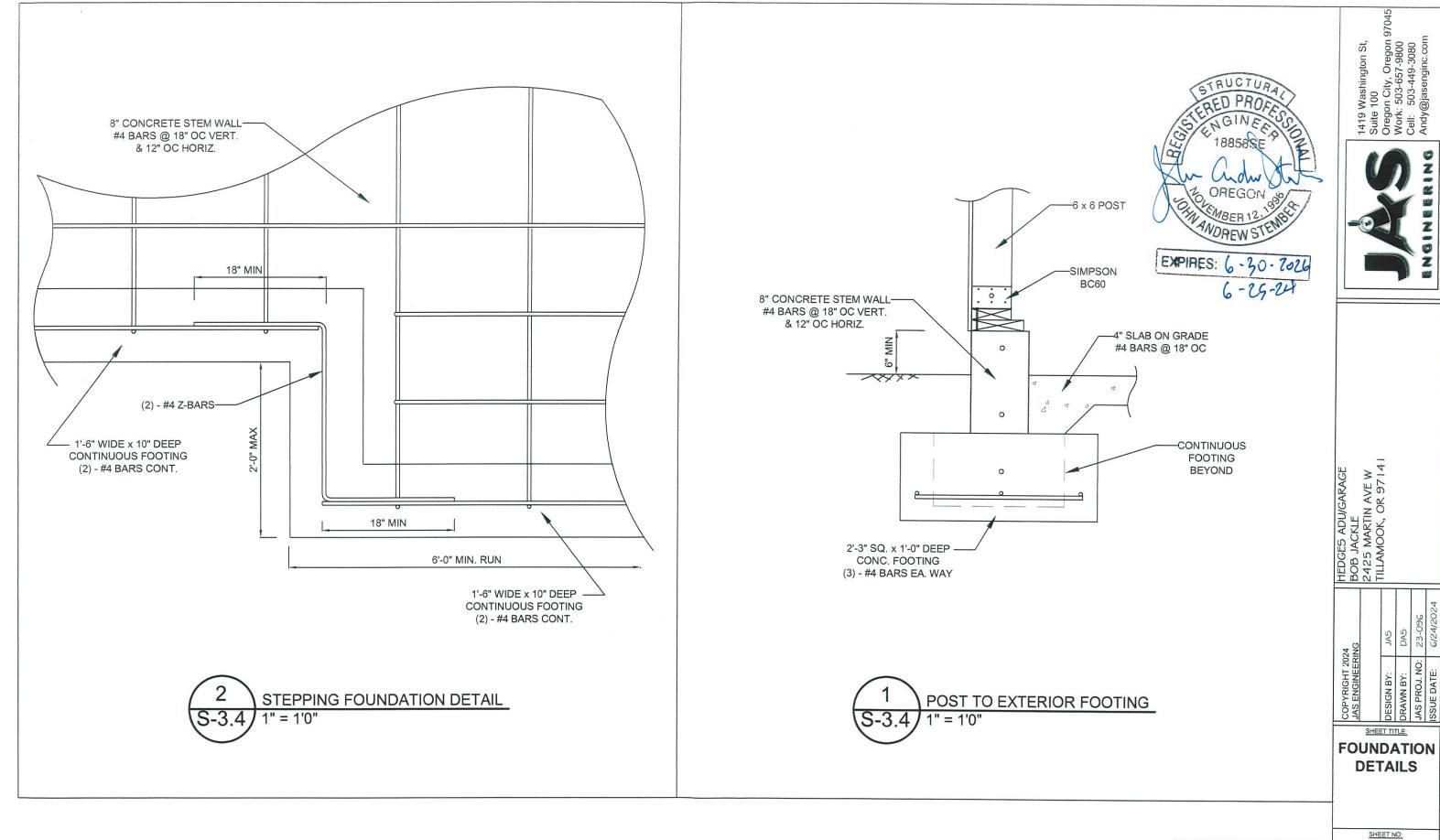
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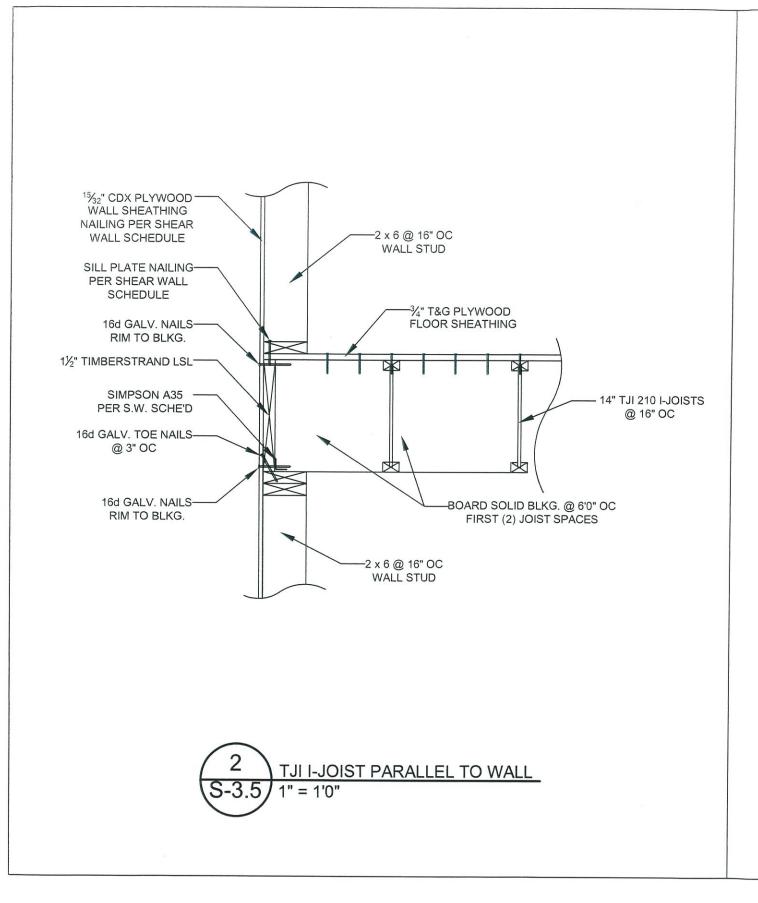
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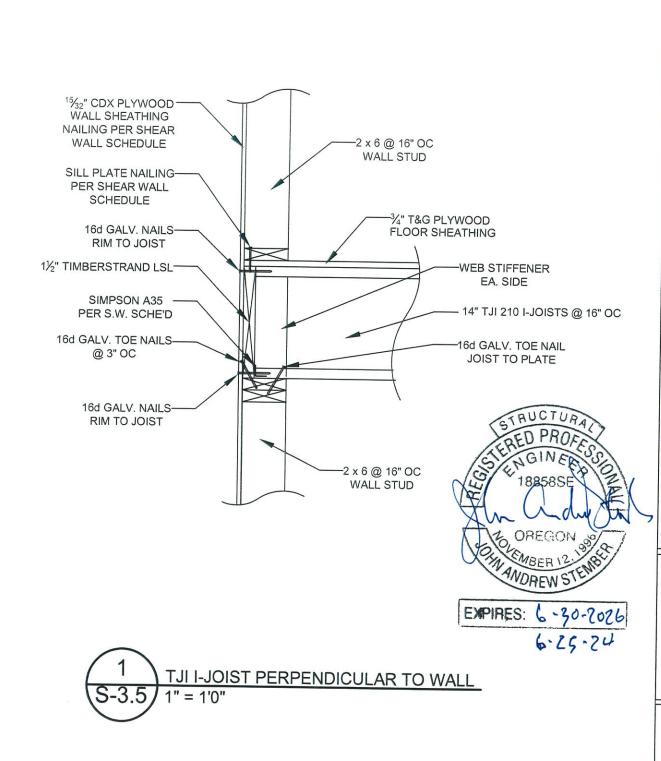
S-3.3

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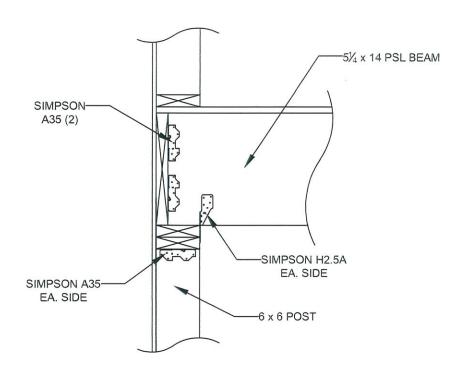
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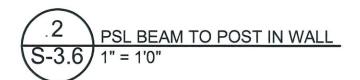
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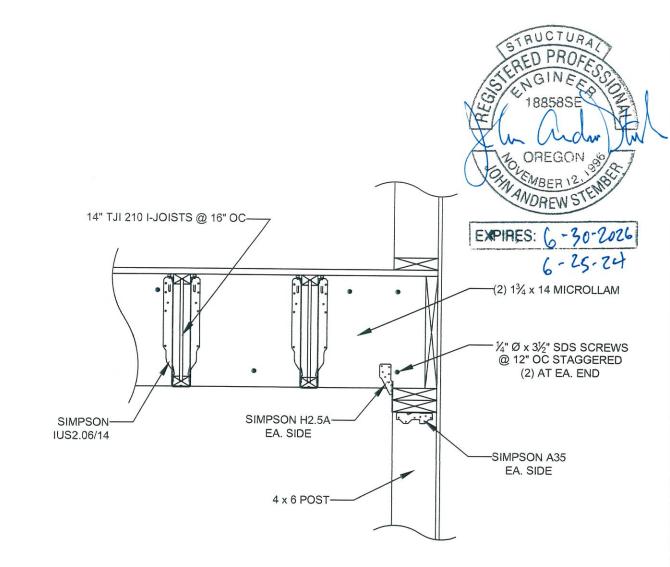
DESIGN DRAW

FLOOR DETAILS

S-3.5







1 I-JOIST TO MICROLLAM & MICROLLAM TO POST S-3.6 1" = 1'0"

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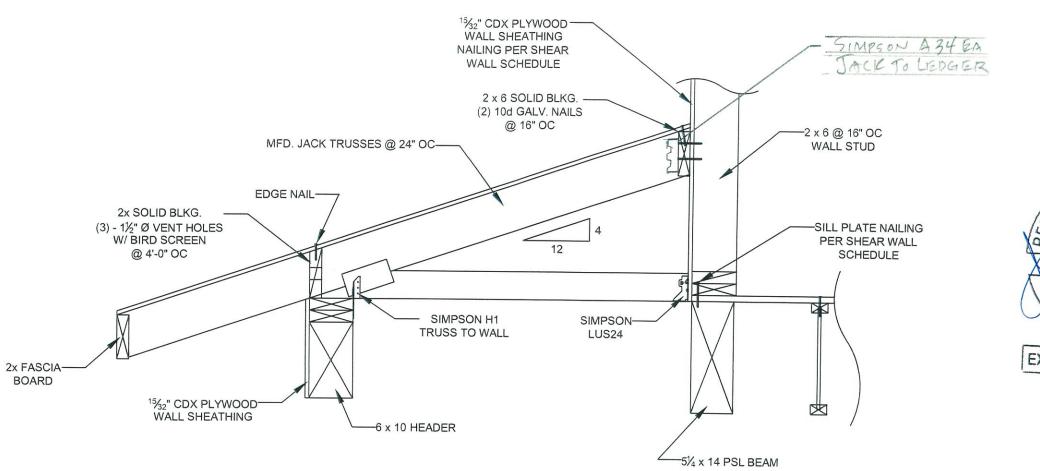
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FLOOR

DETAILS

ARE FOR DINGLY S-3.6

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EXPIRES: 6-30-2026 6-25-24

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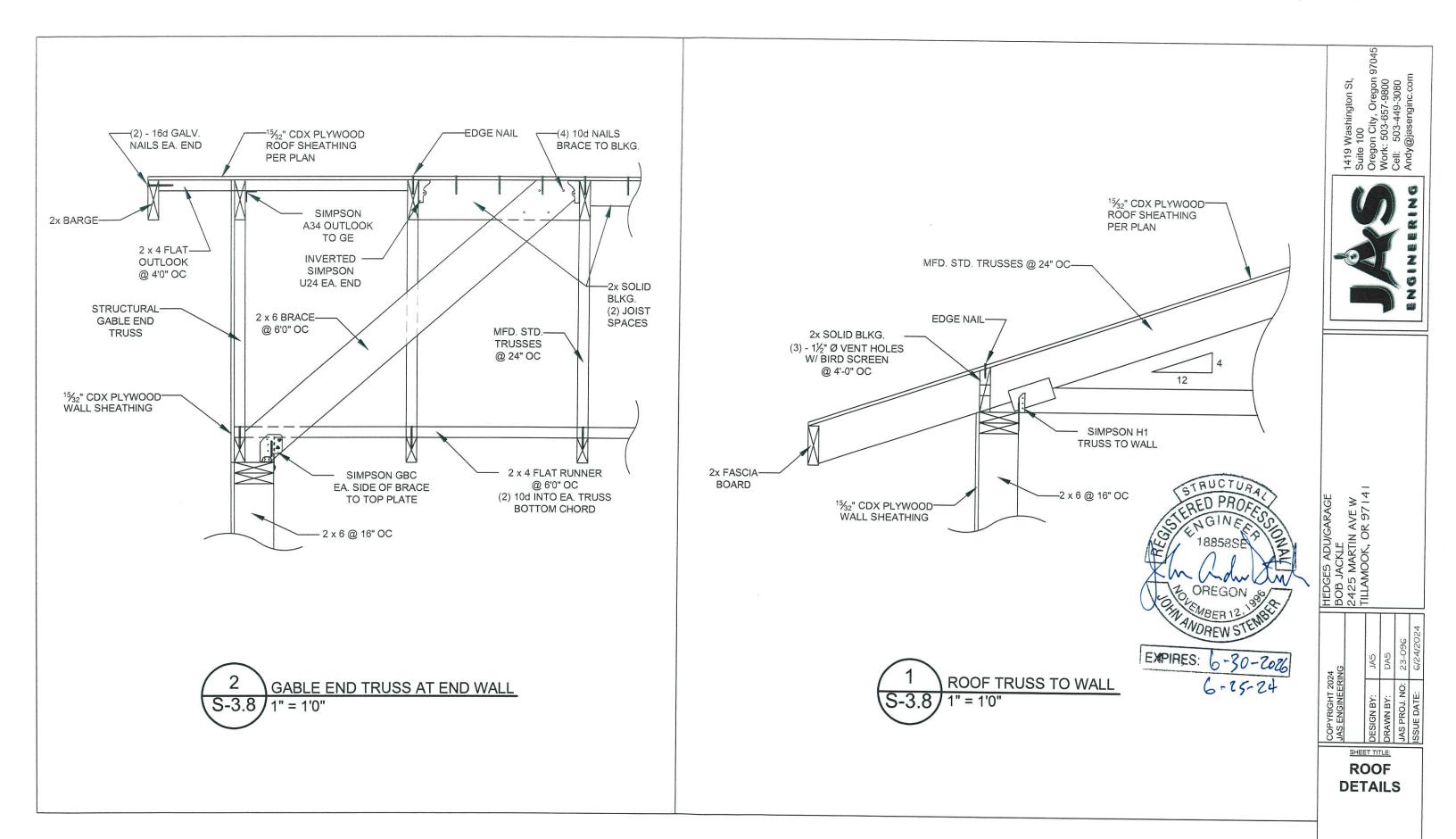
SHEET TITLE: **ROOF** 

**DETAILS** 

SHEET NO:

S-3.7

MFD. JACK TRUSSES TO PSL BEAM 1" = 1'0"



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# EXHIBIT C

### **Wetland Land Use Notice Response**

### Response Page

Department of State Lands (DSL) WN#\*

WN2024-0711

### Responsible Jurisdiction

**Staff Contact** 

Jurisdiction Type

Municipality

Melissa Jenck

County

Tillamook

Local case file #

851-24-000399-PLNG

County

Tillamook

### **Activity Location**

Township

Range

Section

QQ section

Tax Lot(s)

028

10W

05

DB

8001

Street Address

2425 Martin Ave W

Address Line 2

City

State / Province / Region

Tillamook

Postal / Zip Code

97141

OR

Country

Tillamook

Latitude

45.423988

Longitude

-123.937140

### Wetland/Waterway/Other Water Features



It is unlikely that there are jurisdictional wetlands or waterways on the property based upon a review of wetland maps, the county soil survey and other available information.

### **Your Activity**



It appears that the proposed project may impact Essential Salmonid Habitat and, therefore, may require a State permit.

### 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**

Based upon the submitted information, there aren't any potential wetlands mapped on this parcel from the Statewide Wetland Inventory.

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.

### **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.

### **Response Date**

11/7/2024

Response by:

Response Phone:

**Daniel Evans** 

503-428-8188

### Melissa Jenck

From:

Brian Olle

Sent:

Monday, October 14, 2024 10:51 AM

To:

Chris Laity; Melissa Jenck Sarah Thompson; Jasper Lind

Cc: Subject:

RE: 851-24-000399-PLNG: Hedges Variance

Good Point Chris. I agree there does not seem to be any resulting stormwater issues here.

Melissa, I will note the property has no road approach on file and should obtain one through this process. Since this property does not have direct access to Martin Ave, an approach will need to be filled out from the neighboring property/Taxlot 2S10050000609, including documentation of an existing access easement to the applicant's property/ 2S1005DB08001.

Let me know if you have any questions.

Brian Olle, P.E. | Engineering Project Manager TILLAMOOK COUNTY | Public Works

Cell: (503)812-6569

From: Chris Laity < Chris.Laity@tillamookcounty.gov>

Sent: Monday, October 14, 2024 9:35 AM

To: Brian Olle <bri>Srian.olle@tillamookcounty.gov>; Jasper Lind <Jasper.Lind@tillamookcounty.gov>

Cc: Sarah Thompson <sarah.thompson@tillamookcounty.gov>; Melissa Jenck <Melissa.Jenck@tillamookcounty.gov>

Subject: RE: 851-24-000399-PLNG: Hedges Variance

Note that as we review these, check to see if we have a drainage line down the side of the property. Also see if they build into the variance area if it will alter the storm drain pattern.

This one looks good.

Chris Laity, P.E. | Director
TILLAMOOK COUNTY | Public Works
Phone (503) 842-3419
Chris.Laity@tillamookcounty.gov

From: Melissa Jenck < Melissa. Jenck@tillamookcounty.gov>

Sent: Monday, October 14, 2024 8:31 AM

**To:** Melissa Jenck < <u>Melissa.Jenck@tillamookcounty.gov</u>> **Cc:** Sarah Thompson < <u>sarah.thompson@tillamookcounty.gov</u>>

Subject: 851-24-000399-PLNG: Hedges Variance

Good morning,

Please see the linked Notice of Application for 851-24-000399-PLNG for Curtis Hedges Variance request.

https://www.tillamookcounty.gov/commdev/project/851-24-000399-plng

### Sincerely,

\*\*\* Please note that the Tillamook County domain has changed, and my email address is now Melissa.Jenck@tillamookcounty.gov Please update your contact information as needed. Thank you. \*\*\*



Melissa Jenck (she/her) | Senior Planner
TILLAMOOK COUNTY | Community Development
1510-B Third Street
Tillamook, OR 97141
Phone (503) 842-3408 x 3301
Melissa.Jenck@tillamookcounty.gov

## My working hours are 7:00am to 5:30pm, Tuesday thru Friday.

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Any opinion or advice provided herein is informational only and is based on any information specifically provided or reasonably available, as well as any applicable regulations in effect on the date the research was conducted. Any opinion or advice provided herein may be revised, particularly where new or contrary information becomes available, or in response to changes to state law or administrative rule, future legislative amendments of Tillamook County's Land Use Ordinance, Land Division Ordinance and Comprehensive Plan, decisions of courts or administrative tribunals, or quasi-judicial land use decisions.

This is not a land use decision as defined by Oregon Revised Statutes 197.015(10).

The Department is excited to announce that we are OPEN to the public by appointment. To review the list of services provided and to schedule an appointment with us, please visit <a href="https://www.tillamookcounty.gov/commdev">https://www.tillamookcounty.gov/commdev</a> to access the appointment scheduler portal.

# EXHIBIT D

### Sincerely,

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# EXHIBIT D

