Tillamook County

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

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

Building (503) 842-3407
Planning (503) 842-3408
On-Site Sanitation (503) 842-3409
FAX (503) 842-1819
Toll Free 1 (800) 488-8280

Land of Cheese, Trees and Ocean Breeze

ESTUARY DEVELOPMENT PERMIT #851-23-000514-PLNG
ESTHER CREEK – CULVERT/TIDEGATE REPLACEMENT

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

July 12, 2024

Dear Property Owner:

This is to confirm that the Tillamook County Department of Community Development **APPROVED WITH CONDITIONS** the above-cited request on July 12, 2024. A copy of the application, along with a map of the request area and the applicable criteria for review are available for inspection on the Tillamook County Department of Community Development website: https://www.tillamookcounty.gov/commdev/landuseapps. 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 **4:00pm on July 24, 2024.** This decision will become final on July 24, 2024 after 4:00pm unless an appeal is filed in accordance with Tillamook County Land Use Ordinance Article X.

Request:	An Estuary and Floodplain Development Permit for the replacement of an existing culvert and tide gate within Esther Creek, a tributary of Tillamook River.
Location:	Located west of the City of Tillamook, the project is located adjacent to Tomlinson Road, a County road, as depicted on the map in 'Exhibit A'.
Zone:	Estuary Conservation 1 (EC1) Zone
Applicant:	Liz Ransom, 7125 Bewley Creek Road, Tillamook, OR 97141
Property Owner:	Eric Peterson, 140 Bayocean Road, Tillamook, OR 97141

CONDITIONS OF APPROVAL

1. The Applicant/property owner shall obtain all required Federal, State, and Local permits and/or licenses and will comply with applicable rules and regulations.
2. Development shall be as described on the provided plans and descriptions.
3. Development shall comply with the applicable standards of TCLUO Section 3.106, 'Estuary Conservation 1 (EC1)', TCLUO Section 3.510, 'Flood Hazard Overlay (FH) Zone' and TCLUO Section 4.140, 'Requirements for Protection of Water Quality and Streambank Stabilization', and any other applicable standards.
4. The fill shall comply with all Building Code requirements for Construction Materials and Methods for a structure located in the 'AE' flood zones.
5. This approval shall be void on July 12, 2026, unless construction of approved plans has begun, or an extension is requested from, and approved by this Department.

Sincerely,

Tillamook County Department of Community Development

Melissa Jenck, CFM, Land Use Planner II

Sarah Absher, CFM, Director

Enc.: Vicinity, Assessor's and Zoning maps

Tillamook County

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Land of Cheese, Trees and Ocean Breeze

ESTUARY DEVELOPMENT PERMIT REQUEST
851-23-000514-PLNG:
ESTHER CREEK – CULVERT/TIDEGATE REPLACEMENT

ADMINISTRATIVE DECISION & STAFF REPORT

Decision Date: July 12, 2024

Decision: APPROVED WITH CONDITIONS
(This is not Building or Placement Permit Approval)

Report Prepared by: Melissa Jenck, CFM, Senior Planner

I. GENERAL INFORMATION:

Request:	An Estuary and Floodplain Development Permit for the replacement of an existing culvert and tide gate within Esther Creek, a tributary of Tillamook River.
Location:	Located west of the City of Tillamook, the project is located adjacent to Tomlinson Road, a County road, as depicted on the map in 'Exhibit A'.
Zone:	Estuary Conservation 1 (EC1) Zone
Applicant:	Liz Ransom, 7125 Bewley Creek Road, Tillamook, OR 97141
Property Owner:	Eric Peterson, 140 Bayocean Road, Tillamook, OR 97141

Proposal Description: The Applicant is proposing to replace an existing culvert and tide gate, with a new culvert and tide gate within the locations of Esther Creek, with its confluence with Tomlinson Creek (Exhibit B). The replacement includes a culvert sized for ODFW fish passage standards, and the tide gate will be fitted with Muted Tidal Regulator to improve fish passage (Exhibit B). The development will include the installation of fish habitat log structures within Esther Creek (Exhibit B).

The area of proposed construction is depicted on the maps included in the Applicant's submittal, found in 'Exhibit B' of this report. The project area is within Tomlinson Road, a County road, which traverses over Esther Creek. This location is approximately 1.0 mile west of the City of Tillamook limits (Exhibit A).

As indicated on FEMA FIRM #41057C0560F dated September 28, 2018, the subject property is located entirely in an 'AE' Area of Special Flood Hazard of the Tillamook River (Exhibit A).

The application is an Estuary and Floodplain Development Permit approval for the replacement of an existing tide gate and culvert (Exhibit B). The criteria and standards for this review is addressed below in this Staff Report.

II. APPLICABLE ORDINANCE AND COMPREHENSIVE PLAN PROVISIONS:

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

A. TCLUO Section 3.106, 'Estuary Conservation 1 (EC1) Zone'
B. TCLUO Section 3.120, 'Regulated Activities and Impacts Assessments'
C. TCLUO Section 3.140, 'Estuary Development Standards
D. TCLUO Section 3.510, 'Flood Hazard Overlay (FH) Zone'
E. TCLUO Section 3.545, 'Shoreland Overlay'
F. TCLUO Section 4.140, 'Requirements for Protection of Water Quality and Streambank Stabilization'

III. ANALYSIS

The project is located within the regulatory floodplain (AE Zone) and Estuary zone and is subject to a Type II review per TCLUO Article X: Development Approval Procedures. TCLUO Section 10.070 requires notification of Type II applications to be mailed to landowners within 250 feet of the subject properties, to allow at least 14 days for written comment and requires staff to consider comments received in making the decision.

Findings: Notice of the request was mailed to property owners and agencies on March 29, 2024. Staff finds that notification requirements have been met. Comments were received from the Oregon Department of State Lands and the Oregon Department of Fish and Wildlife and are included as "Exhibit C".

A. TCLUO Section 3.106, 'Estuary Conservation 1 (EC1) Zone'

(1) PURPOSE AND AREAS INCLUDED: The purpose of the EC1 zone is to:

(a) Provide for long-term utilization of areas which support, or have the potential to support valuable biological resources.

(b) Provide for long-term maintenance and enhancement of biological productivity.

(c) Provide for the long-term maintenance of the aesthetic values of estuarine areas, in order to promote or enhance the low intensity recreational use of estuarine areas adjacent to rural or agricultural shorelands.

....

ESTUARY ZONES shall be applied to all estuarine waters, intertidal areas, submerged and submersible lands and tidal wetlands up to the line of non-aquatic vegetation or the Mean Higher High Water (MHHW) line, whichever is most landward.

...

(2) USES PERMITTED WITH STANDARDS:

...

(f) Tidegate installation in existing functional dikes adjacent to EC1 zones.

...

(i) Active restoration and estuarine enhancement.

...

(n) Bridge crossings and crossing support structures.

(4) REGULATED ACTIVITIES: The following Regulated Activities are permitted subject to the procedure of Section 3.120 and the standards in Section 3.140.

...

(e) Fill For:

(1) Bridge crossing support structures.

(f) Regulated Activities in conjunction with an approved active restoration or estuarine enhancement project.

Findings: Applicant is proposing to replace the existing culvert located in Esther Creek, and repair the tide gate, which includes placement of two (2) fish habitat log structures within Esther Creek (Exhibit B). A site plan was included in 'Exhibit B', which demonstrates that the proposed siting location is within the EC1 zone (Exhibit B).

Staff finds that the culvert as a crossing support structure, and maintenance of the existing tide gate are outright permitted uses in the Estuary Conservation (EC1) Zone. Dredging for maintenance of the tide gate, fill to support the installation of the culvert, and the placement of the two (2) fish habitat logs are subject to TCLUO Section 3.120 and Section 3.140, discussed below.

B. Section 3.120: Review of Regulated Activities

Findings: The purpose of this section is to provide an assessment process and criteria for local review and comment on State and Federal permit applications which could potentially alter the integrity of the estuarine ecosystem. This project includes regulated activities which are subject to State and Federal permits. Notification of the application was provided to Federal and State agencies in accordance with the provisions outlined in TCLUO Section 3.120(8).

The applicant's submittal includes the OWEB application and an engineer's memo regarding project details and habitat assessment (Exhibit B). Comments were received from Department of State Lands (DSL) that determined the proposed project will require permitting with DSL (Exhibit C). Oregon Department of Fish and Wildlife (ODFW) provided comments stating the proposal will need to work with ODFW for fish passage approval (Exhibit C).

Staff finds that the applicants materials and comments from ODFW and DSL satisfies the development standards that must be addressed as part of the impact assessment outlined in TCLUO Section 3.120.

C. Section 3.140: Estuary Development Standards

Applicable subsections:

- *Section 3.140(7): Fill in Estuarine Waters, Intertidal Areas and Tidal Wetlands*
- *Section 3.140(10): Land Transportation Facilities*
- *Section 3.140(14): Piling/Dolphin Installation*

Findings: The Applicant's narrative addresses the relevant standards and subsections of TCLUO Section 3.140 (Exhibit B). The purpose of the project is to replace an existing culvert and repair a tide gate, along with installation of (2) fish habitat logs within Esther Creek (Exhibit B). Applicant describes the to replace a culvert with improvements a 58-foot long, 72-inch diameter pipe and the tide gate includes a Muted Tidal Regulator (MTR) (Exhibit B). The fish habitat logs are described as approximately 15 to 20-feet in length

and 18 to 24-inches in diameter (Exhibit B). Erosion control measures and timing of construction is addressed in the approved OWEB application (Exhibit B). The proposed culvert is to be positioned for fish passage (Exhibit B). The applicant provided the required evaluation of the impact of proposed project on the area as required in Section 3.140(10)(i) and 3.140(14)(d) (Exhibit B).

Staff concludes these criteria have been met.

D. TCLUO Section 3.510 'Flood Hazard (FH) Overlay'

(5) GENERAL STANDARDS: In all areas of special flood hazards the following standards are required:

...

CONSTRUCTION MATERIALS AND METHODS

(d) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(e) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(f) Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be elevated to prevent water from entering or accumulating within the components during conditions of flooding. In Flood Zones A, A1-A30, AE, V, V1-V30 or VE, such facilities shall be elevated three feet above base flood elevation. In Flood Zone AO, such facilities shall be elevated above the highest grade adjacent to the building, a minimum of one foot above the depth number specified on the FIRM (at least two feet above the highest adjacent grade if no depth number is specified).

...

(14) Development Permit Review Criteria

(1) The fill is not within a Coastal High Hazard Area.
(2) Fill placed within the Regulatory Floodway shall not result in any increase in flood levels during the occurrence of the base flood discharge.
(3) The fill is necessary for an approved use on the property.
(4) The fill is the minimum amount necessary to achieve the approved use.
(5) No feasible alternative upland locations exist on the property.
(6) The fill does not impede or alter drainage or the flow of floodwaters.
(7) If the proposal is for a new critical facility, no feasible alternative site is available.

Findings: Applicant submitted the required information on forms provided by the Community Development Department and as attachments thereto (Exhibit B). The entire property is located in an AE Area of Special Flood Hazard of the Tillamook River and no alternative upland location exists (Exhibits A and B). The project area is tidally influenced and is not located within the regulatory Floodway. The Applicant describes the to replace a culvert with improvements a 58-foot long, 72-inch diameter pipe and the tide gate includes a Muted Tidal Regulator (MTR) (Exhibit B). The fish habitat logs are described as approximately 15 to 20-feet in length and 18 to 24-inches in diameter (Exhibit B).

Staff finds that these criteria are met.

E. TCLUO Section 3.545 'Shoreland Overlay'

In the vicinity of the proposed project, the Goal 17 element of the Tillamook County Comprehensive Plan identifies all areas within 1,000 feet of estuaries and 500 feet of coastal lakes as within the Shorelands Boundary which may be subject to the provisions of TCLUO Section 3.545, 'SH Shoreland Overlay'. TCLUO Section 3.545 defines those areas within the Shorelands Boundary included within

the Shoreland Overlay Zone. Relevant to the proposed development, TCLUO Section 3.545(2) identifies areas within 50 feet of estuaries as areas included in the Shorelands Overlay zone.

Findings: Staff finds that portions of the culvert replacement and tide gate repair is located within the Shorelands Boundary as identified in the Goal 17 element of the Tillamook County Comprehensive Plan. Staff has reviewed the proposed development and determined that shoreland areas on the subject property are categorized as 'Rural Shorelands' as described in TCLUO 3.545(3) and are subject to the use limitations identified in TCLUO 3.545(4)(a)(1) and the standards identified in TCLUO 3.545(6). Staff has reviewed the significant shoreland inventory contained in the Goal 17 element of the Comprehensive Plan and has verified that there are no inventoried shorelands near the subject property.

TCLUO Section 3.545(4) USES PERMITTED: Uses authorized by the underlying zone as outright or conditional uses are permitted, except at locations identified in (3) above.
(a) Rural Shorelands in General:
(1) Rural Shorelands uses are limited to:

...

(f) Other uses are allowed only upon a finding by the County that such uses satisfy a need which cannot be accommodated at any alternative upland location, except in the following cases:

...

TCLUO Section 3.545(6) STANDARDS: Uses within the SHORELAND OVERLAY ZONE are subject to the provisions and standards of the underlying zone and of this section. Where the standards of the SHORELANDS OVERLAY ZONE and the underlying zone conflict, the more restrictive provisions shall apply.

(a) Riparian vegetation shall be protected and retained according to the provisions outlined in Section 4.140, REQUIREMENTS FOR PROTECTION OF WATER QUALITY AND STREAMBANK STABILIZATION.

(b) Development in flood hazard areas shall meet the requirements of Section 3.510, FLOOD HAZARD OVERLAY ZONE.

Findings: Staff finds the project is necessary and cannot be accommodated at an upload location and the culvert and tide gate are existing (Exhibit B). The requirements of TCLUO Section 4.140 and 3.510 are addressed in this report.

Staff finds these criteria have been met.

F. TCLUO Section 4.140, 'Requirements for Protection of Water Quality and Streambank Stabilization'

1) The following areas of riparian vegetation are defined:
(a) Fifty (50) feet from lakes and reservoirs of one acre or more, estuaries, and the main stems of the following rivers where the river channel is more than 15 feet in width; Nestucca, Little Nestucca, Three Rivers, Tillamook, Trask, Wilson, Kilchis, Miami, Nehalem and North and South Fork Nehalem River.

...

For estuaries, all measurements are horizontal and perpendicular from the mean high water line or the line of non-aquatic vegetation, whichever is most landward. Setbacks for rivers, streams, and coastal lakes shall be measured horizontal and perpendicular from the ordinary high water line.

(2) All development shall be located outside of areas listed in (1) above, unless:
(a) For a bridge crossing; or

Findings: The proposal is for replacement of an existing culvert and tide gate within Esther Creek, along

with fish habitat log installation (Exhibit B). The Applicant describes measures taken for erosion control timing of construction activities to address the site, along with a vegetation plan for post construction (Exhibit B).

Staff finds that these standards have been met.

V. DECISION: APPROVED WITH CONDITIONS

Based on the findings shown above, Staff concludes that the Applicant has satisfied the review criteria, and can meet all applicable ordinance requirements at the time of application. Therefore, the Department approves Estuary Development Permit 851-23-000514-PLNG subject to the Conditions of Approval in section VI of this report.

Appeal of this decision. This decision may be appealed to the Tillamook County Planning Commission, who will hold a public hearing. The forms and fees must be filed in the office of this Department before **4:00 PM on July 24, 2024.**

VI. CONDITIONS OF APPROVAL:

1. The Applicant/property owner shall obtain all required Federal, State, and Local permits and/or licenses and will comply with applicable rules and regulations.
2. Development shall be as described on the provided plans and descriptions.
3. Development shall comply with the applicable standards of TCLUO Section 3.106, 'Estuary Conservation 1 (EC1)', TCLUO Section 3.510, 'Flood Hazard Overlay (FH) Zone' and TCLUO Section 4.140, 'Requirements for Protection of Water Quality and Streambank Stabilization', and any other applicable standards.
4. The fill shall comply with all Building Code requirements for Construction Materials and Methods for a structure located in the 'AE' flood zones.
5. This approval shall be void on July 12, 2026, unless construction of approved plans has begun, or an extension is requested from, and approved by this Department.

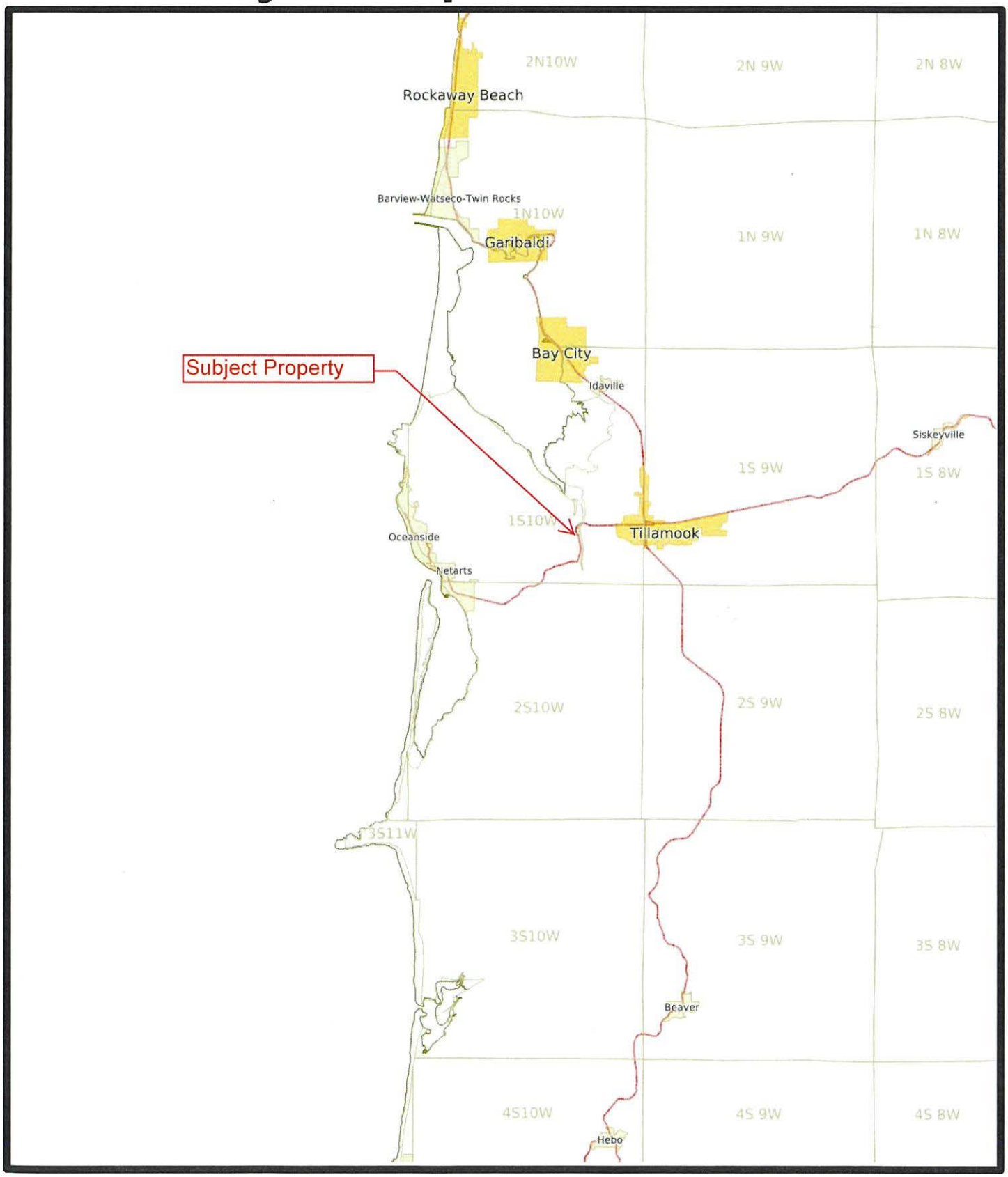
VII. EXHIBITS

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

A. Location map, Assessor map, Zoning map, FEMA FIRM, NWI Wetlands map
B. Applicant's submittal
C. Public Comments

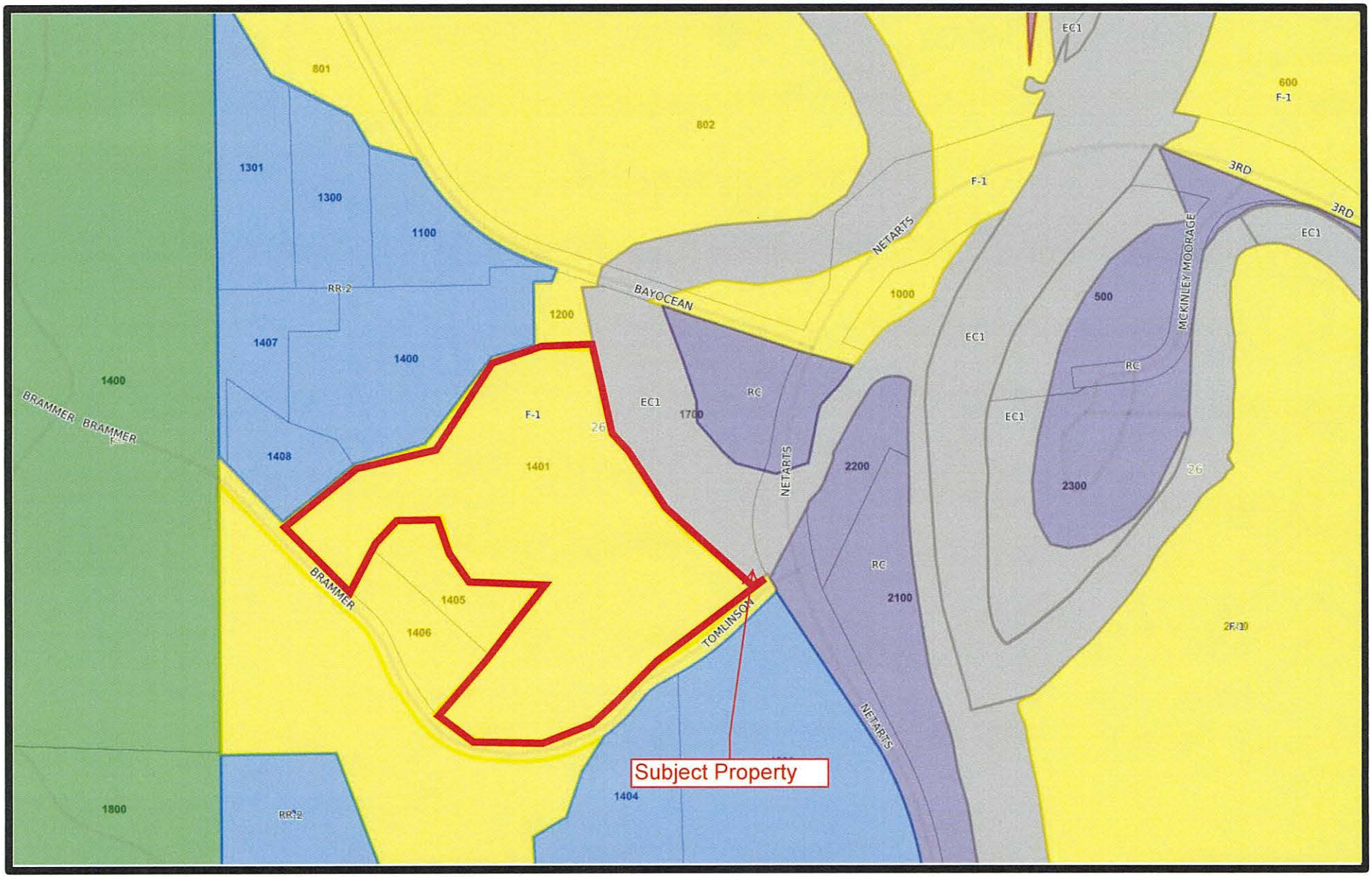
EXHIBIT A

Vicinity Map

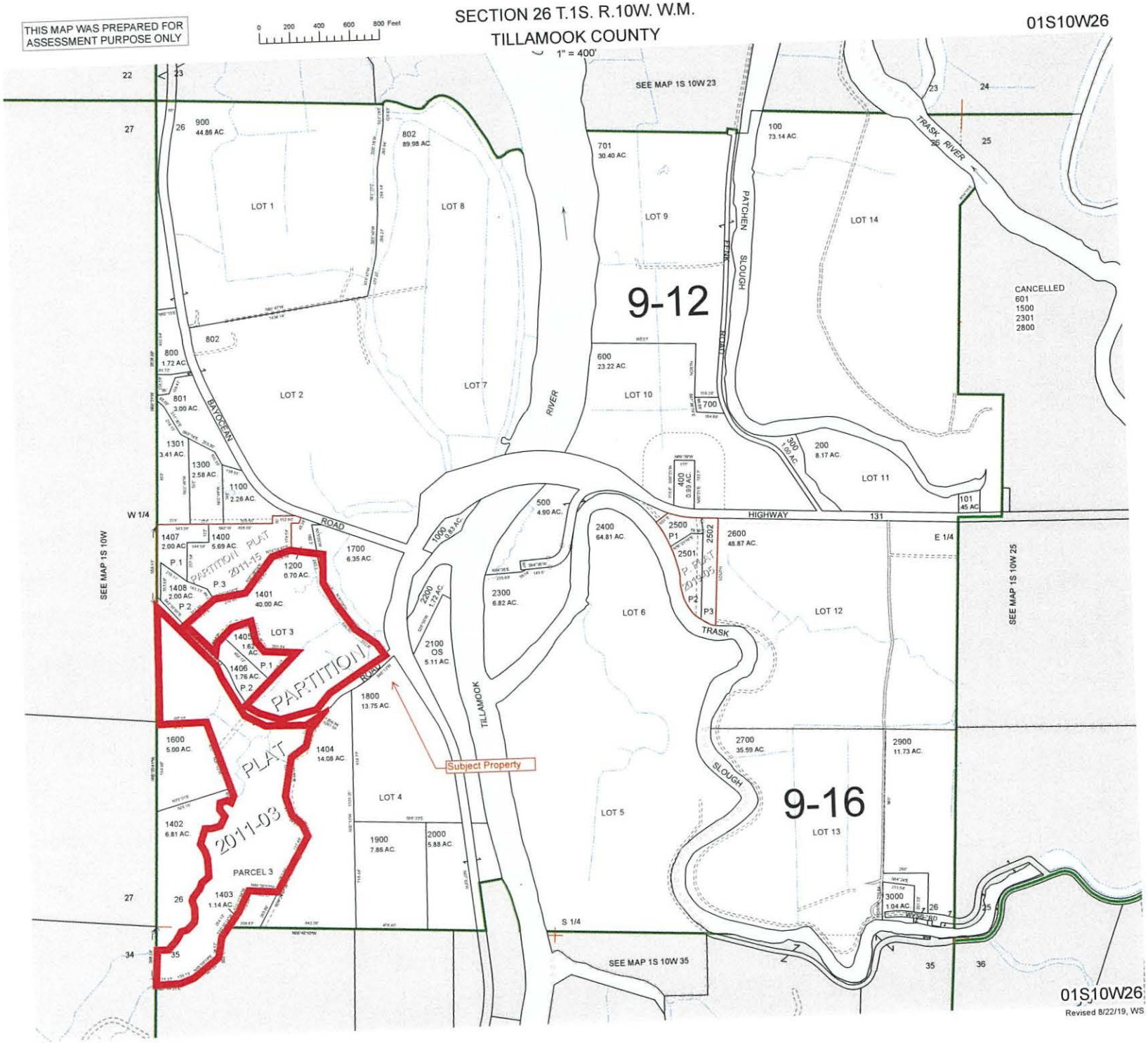


Generated with the GeoMOOSE Printing Utilities

Zoning Map



Generated with the GeoMOOSE Printing Utilities


THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY
0 200 400 600 800 Feet
1" = 400'
SECTION 26 T.1S. R.10W. W.M.
TILLAMOOK COUNTY
01S10W26
SEE MAP 1S 10W 23
SEE MAP 1S 10W
SEE MAP 1S 10W 25
SEE MAP 1S 10W 35
9-12
9-16
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LOT 11
LOT 12
LOT 13
LOT 14
CANCELLED
601
1500
2301
2800
900 44.86 AC.
802 89.98 AC.
701 30.40 AC.
100 73.14 AC.
600 23.22 AC.
700
200 8.17 AC.
300 1.00 AC.
400 0.89 AC.
101 45 AC.
500 4.90 AC.
1000 0.83 AC.
2400 64.81 AC.
2500 P1
2501
2502
P.PLAT 2019-05
P2
P3
2600 48.87 AC.
2300 6.82 AC.
2200 1.72 AC.
2100 OS 5.11 AC.
1800 13.75 AC.
1700 6.35 AC.
1200 0.70 AC.
1401 40.00 AC.
1405 1.62 AC.
1406 1.76 AC.
1404 14.08 AC.
1600 5.00 AC.
1402 6.81 AC.
1403 1.14 AC.
1900 7.86 AC.
2000 5.88 AC.
2700 35.59 AC.
2900 11.73 AC.
3000 1.04 AC.
1407 2.00 AC.
1400 5.69 AC.
1408 2.00 AC.
800 1.72 AC.
801 3.00 AC.
1301 3.41 AC.
1300 2.58 AC.
1100 2.26 AC.
PARTITION PLAT 2011-15
PARTITION PLAT 2011-03
PARCEL 3
Subject Property
PATCHEN SLOUGH ROAD
TRASK RIVER
RIVER
BAYOCEAN ROAD
HIGHWAY 131
TRASK
TILLAMOOK
SLOUGH
W 1/4
E 1/4
S 1/4
01S10W26
Revised 8/22/19, WS

Tillamook County
2023 Real Property Assessment Report
Account 172244

Map	1S10260001401	**Tax Status**	Assessable
Code - Tax ID	0901 - 172244	**Account Status**	Active
		Subtype	NORMAL
Legal Descr	PARTITION PLAT 2011-03		
	Lot - PARCEL 3		
Mailing	PETERSON, ERIC L 140 BAYOCEAN RD TILLAMOOK OR 97141	**Deed Reference #**	2023-539
		Sales Date/Price	02-03-2023 / $0
		Appraiser	ELIZABETH LOFTIS

Property Class	640	**MA**	**SA**	**NH**
RMV Class	500	01	01	500

Site	Situs Address	City
	600 TOMLINSON RD	COUNTY

Value Summary

Code Area		RMV	MAV	AV		RMV Exception	CPR %
0901	Land	38,430			Land	0	
	Impr	0			Impr	0	
Code Area Total		38,430	33,710	6,341		0	
Grand Total		38,430	33,710	6,341		0	

Land Breakdown

Code Area	ID #	RFPD	Ex	Plan Zone	Value Source	Trend %	Size	Land Class	Trended RMV
0901	0			F-1	Designated Forest Land	100	9.00 AC	OB	34,590
	0			F-1	Designated Forest Land	100	1.00 AC	OC	3,840
						Code Area Total	10.00 AC		38,430

Improvement Breakdown

Code Area	ID #	Year Built	Stat Class	Description	Trend %	Total Sqft	Ex%	MS Acct	Trended RMV

Exemptions / Special Assessments / Notations

Notations

- FOREST LAND - POTENTIAL ADDITIONAL TAX LIABILITY 321.362

Code Area 0901

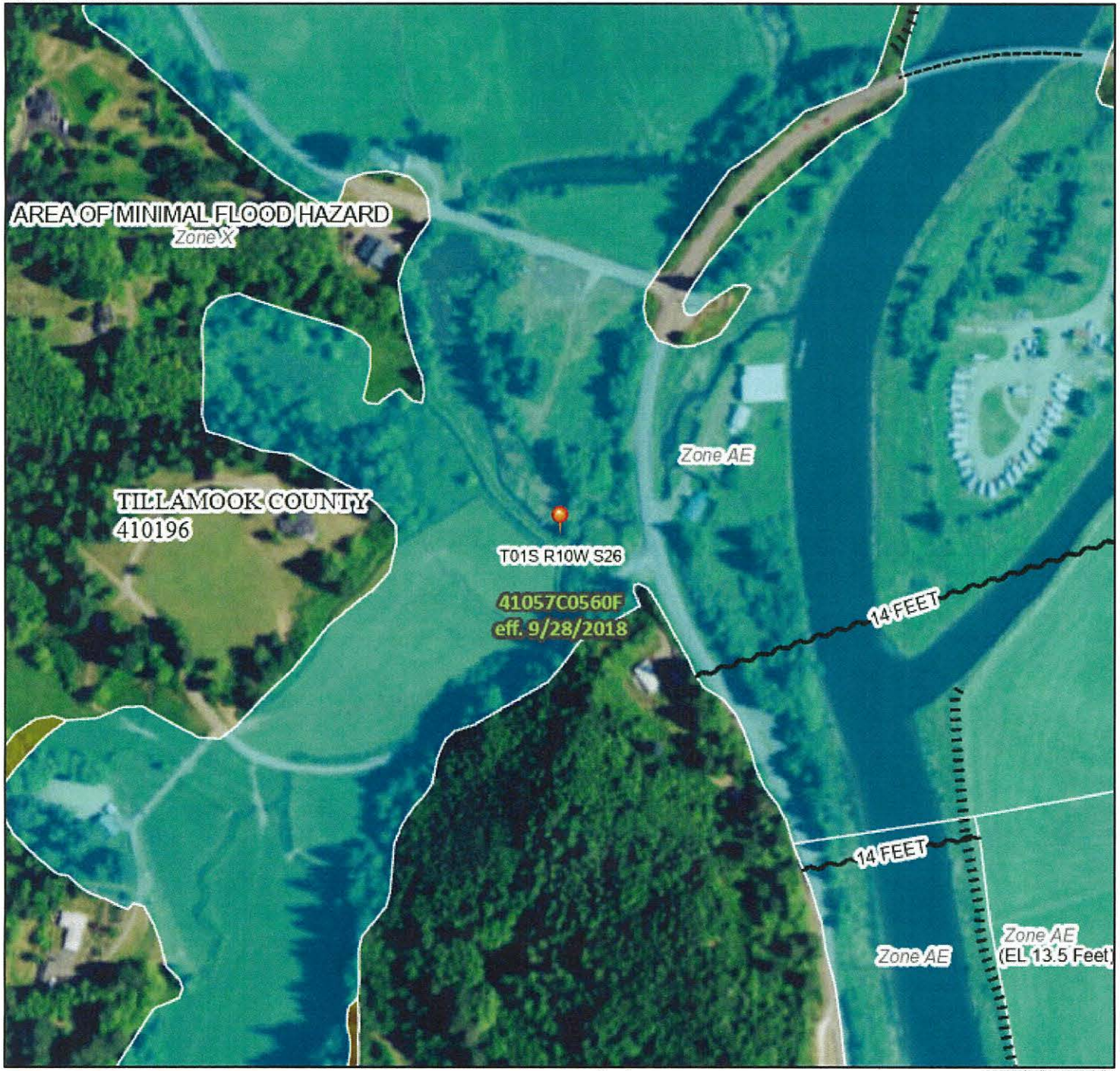
Fire Patrol	Amount	Acres	Year
■ FIRE PATROL SURCHARGE	47.50		2023
■ FIRE PATROL NORTHWEST	18.75	10.00	2023

Comments 3/27/12 Brought land to market after 2011 Partition Plat that involved S1 account. Applied exception. EJ.

National Flood Hazard Layer FIRMette

FEMA

123°53'10"W 45°27'26"N



Feet
0 250 500 1,000 1,500 2,000

1:6,000

123°52'32"W 45°27'1"N

Legend

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

- SPECIAL FLOOD HAZARD AREAS
  - Without Base Flood Elevation (BFE) *Zone A, V, A99*
  - With BFE or Depth *Zone AE, AO, AH, VE, AR*
  - Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD
  - 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainag areas of less than one square mile *Zone X*
  - Future Conditions 1% Annual Chance Flood Hazard *Zone X*
  - Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
  - Area with Flood Risk due to Levee *Zone D*
- OTHER AREAS
  - NO SCREEN Area of Minimal Flood Hazard *Zone X*
  - Effective LOMRs
  - Area of Undetermined Flood Hazard *Zone*
- GENERAL STRUCTURES
  - Channel, Culvert, or Storm Sewer
  - Levee, Dike, or Floodwall
- OTHER FEATURES
  - 20.2 / B / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
  - Coastal Transect
  - Base Flood Elevation Line (BFE)
  - Limit of Study
  - Jurisdiction Boundary
  - Coastal Transect Baseline
  - Profile Baseline
  - Hydrographic Feature
- MAP PANELS
  - Digital Data Available
  - No Digital Data Available
  - Unmapped

N

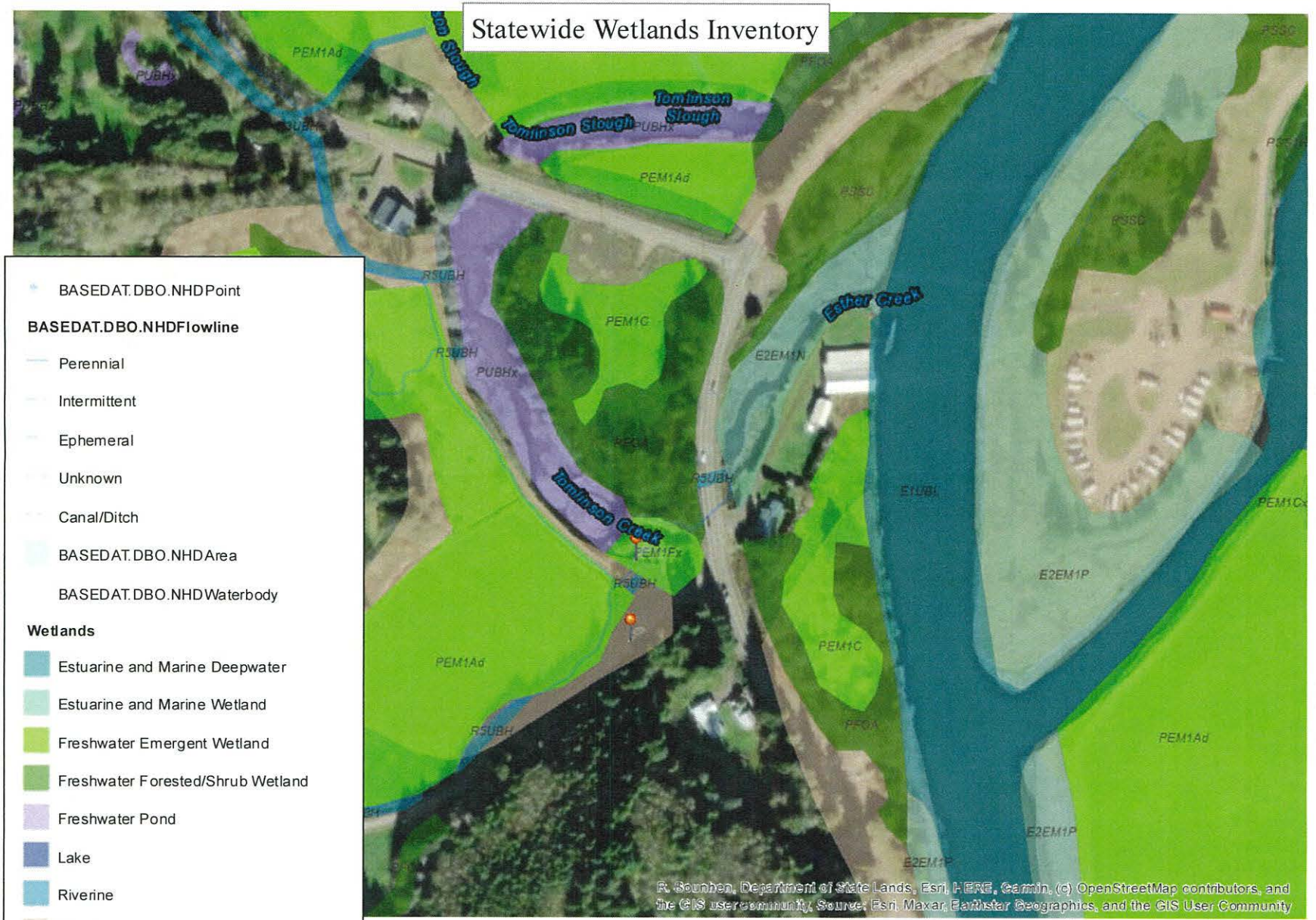
The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/28/2024 at 5:39 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Statewide Wetlands Inventory



BASEDAT.DBO.NHDPoint

BASEDAT.DBO.NHDFlowline

- Perennial
- Intermittent
- Ephemeral
- Unknown
- Canal/Ditch

BASEDAT.DBO.NHDArea

BASEDAT.DBO.NHDWaterbody

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine
- SWI Predominantly Hydric Soil Map Units
- SWI Agate-Winlo Soils

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

1 inch = 0.07 miles

0 0.0275 0.055 0.11 0.165 0.22 mi

The Statewide Wetlands 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 wetlands and waters (such as creeks and ponds). An onsite investigation by a wetland professional can verify actual field conditions.

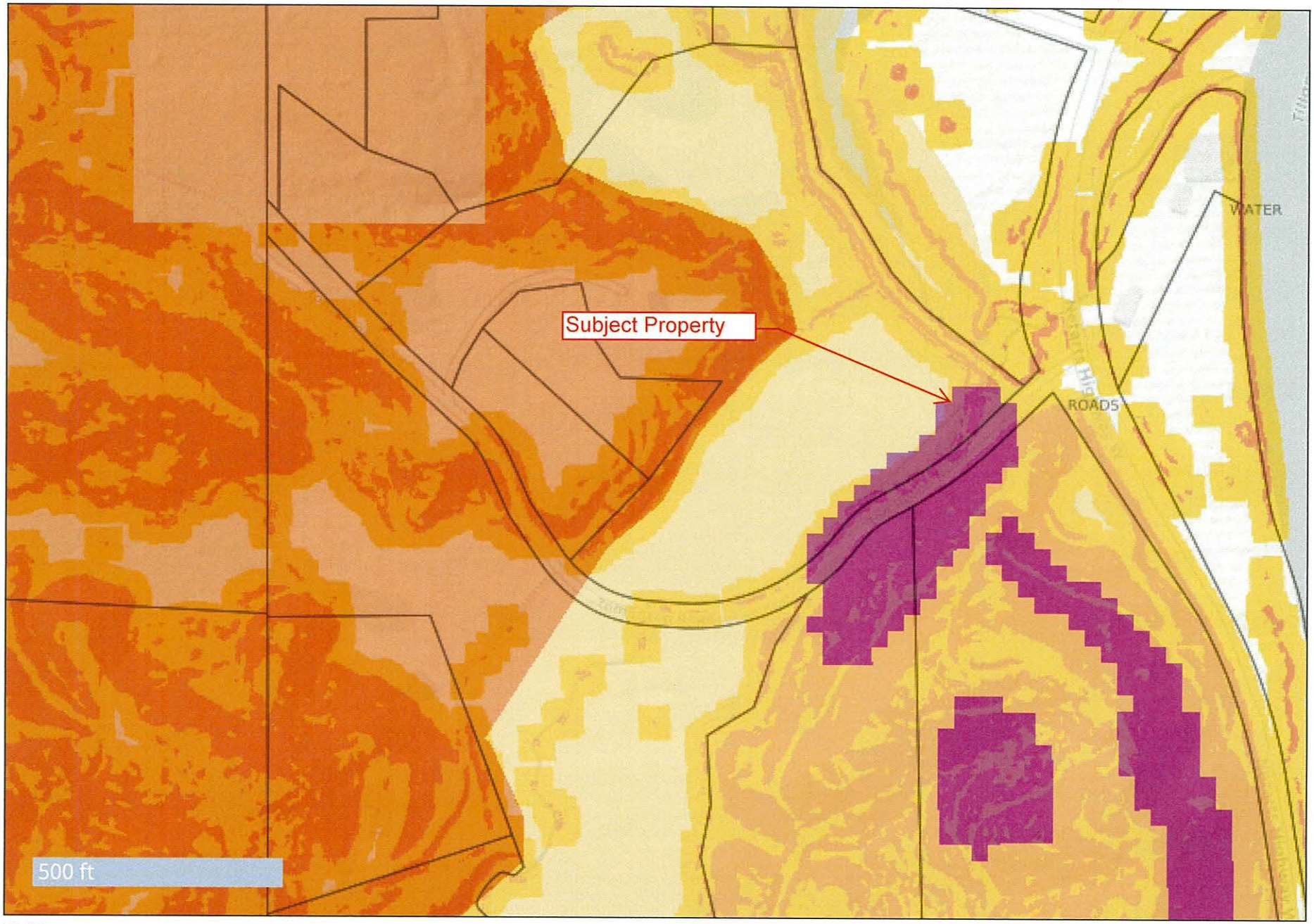
N

Date: 3/28/2024

State of Oregon
Department of State Lands
775 Summer Street, NE, Ste 100
Salem, OR. 97301-1279
(503) 986-5200

Hazard Map

Oregon Coastal Atlas



Printed 3 / 29 / 2024

EXHIBIT B

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

DEVELOPMENT PERMIT

OFFICE USE ONLY
Date Stamp: RECEIVED NOV 08 2023 BY: [illegible]

☐Approved ☐Denied
Received by: SS
Receipt #: 134693
Fees: 1680.-
Permit No: 851-23-000514-PLNG

Applicant ☐ *(Check Box if Same as Property Owner)*
Name: Liz Ransom Phone: 541-691-9233
Address: 7125 Bewely Creek Road
City: Tillamook State: OR Zip: 97141
Email: Liz.Ransom@TU.org

Property Owner
Name: Eric Peterson Phone: 503-809-9866
Address: ~~105~~ Bayocean Rd 140
City: Tillamook State: OR Zip: 97141
Email:

Description of Work: The Project involves removing and replacing an antiquated, failing tide gate that is coupled with a deteriorating culvert located on Esther Creek, a tributary to the Tillamook River. The replacement culvert and tide gate will be appropriately sized to meet ODFW fish passage standards and the tide gate will be fitted with a Muted Tidal Regulator to further improve fish passage and flood control.

Location:
Site Address: 2 Tomlinson Rd, Tillamook, OR 97141 *Latitude °N: 45.2707 *Longitude °W: -123.5299

Map Number:	01S	10W	26	1401
	Township	Range	Section	Tax Lot(s)

Complete all applicable fields:

Regulatory Floodway: ☐	Estuary: ☑	Floodplain: ☐	
New: ☐	Addition: ☑	Replacement: ☐	Remodel: ☐ Demolish: ☐
Dwelling:		Accessory Structure:	
Culvert Diameter: 5'D, 25'L Length:		Bridge Length: Width:	
Fence Height:		Retaining Wall Height:	
Streambank Stabilization: Dike		Other:	
Fill/Removal/Grading: 568 Fill / 2473 Cut CY		Vegetation Removal:	CY

Structure/Damage $:	5 Year Construction $:
Substantial improvement/damage threshold 50% cost vs. value	

Flood Insurance Rate Map (FIRM) Panel Info

Tillamook County	Panel Number: 41057C _____
Effective Date:	Property Flood Zone(s):
Floodway: Y N	Project Flood Zone(s):
Stream/Waterbody Name:	

Elevation Data (NAVD 88)

Base Flood Elevation:	First Habitable Floor:
Lowest Floor/Horizontal Member:	
Enclosed Area:	Flood Vent Area:

Other Required Permits

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.

Eric Peterson 9-3-23
Property Owner Signature (Required) Date

Applicant Signature Date

WATERWAYS CONSULTING, INC.

Ecological Restoration Design ~ Civil Engineering ~ Natural Resource Management

REGISTERED PROFESSIONAL ENGINEER
90206PE
OREGON
OCTOBER 11, 2019
ANNIKA MARIE SULLIVAN
EXPIRES: 6/30/2024

Annika Sullivan 9/7/23
DATE

TECHNICAL MEMORANDUM

To: Tillamook County Planning Department

From: Annika Sullivan, P.E., Waterways Consulting, Inc.

Date: September 7, 2023

Re: Esther Creek Tide Gate Replacement Project – Flood Hazard Area Impact Summary

Introduction

Waterways Consulting, Inc. (Waterways) has been retained by Trout Unlimited (TU) to provide professional design services for the replacement of a tide gate across an earthen levee to facilitate fish passage on Esther Creek, a tributary of the Tillamook River, in unincorporated Tillamook County. This project is located near the intersection of Highway 131 and Tomlinson Road. The tax lots affected by this project include the following:

- 1S1026000-1700
- 1S1026000-1401

The entire project area is located within the Federal Emergency Management Agency (FEMA) mapped Special Flood Hazard Area (SFHA) for Esther Creek and the Tillamook River and is designated as Zone AE (see attached Flood Insurance Rate Map 41057C0560F, effective 9/28/2018). Because of this designation, the extents of the SFHA are approximate, with the determination of a single base flood elevation and no designated floodway. Per Section 3.510(9)(e) of the Tillamook County Land Use Ordinance "In areas where a regulatory floodway has not been designated, no new construction [...] shall occur [...] unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community." The purpose of this technical memorandum is to detail the various elements of the proposed design and provide certification that these improvements will not results in any changes to the water surfaces on Esther Creek or the Tillamook River for the base flood discharge in the SFHA.

Project Description

Esther Creek is a small tributary providing approximately 3.1 linear miles of stream habitat suitable for migratory fish use. This project seeks to replace an existing tide gate just downstream of the confluence of Esther Creek and Tomlinson Creek with a large culvert with tide gate and muted regulator that will meet fish passage standards. The culvert is located on an earthen levee that connects Tomlinson Road to Ocean Bay Road and protects upstream farmland from saltwater intrusion due to tidal exchange. After passing through the tide gate, Esther Creek continues to flow under Highway 131 and empties into the Tillamook River near the entrance to Tillamook Bay. Project specific elements include:

- Replace existing tide gated corrugated metal pipe culvert with a new circular HDPE culvert outfitted with a side mounted tide gate and muted tidal regulator to automatically open and close the gate based on water levels in the floodplain and creek.

- Realign Esther Creek and Tomlinson Creek upstream of the new culvert and line bed with Engineered Streambed Material to improve sediment transfer and fish passage conditions.
- Grade wetland bench on left side (looking downstream) of Tomlinson Creek.
- Install 2 habitat log structures to provide cover for fish downstream of culvert.
- Thin spread excess excavated material in the floodplain (existing disturbed ground to be used as staging and storage) to a maximum depth of 3 inches.

Note that the proposed project does not include increasing the existing levee height. Construction of the proposed improvements is anticipated to occur during the summer in-water work windows of 2024.

Flood Hazard Area Impacts

For existing conditions, during the 100-year flood event, the Tillamook River backwaters overtopping Highway 131 and local earthen levees used for farming. In addition, Esther Creek floods adjacent farmlands, its floodwaters comingling with the Tillamook River. The FIRM shows a single mapped water surface elevation of 13.5 feet within the project area, which is more than 3 feet higher than the existing earthen levee within the project area. In hydraulic modeling, this single designated water surface elevation within a flood area is referred to as an ineffective flow area. These ineffective flow areas do not contribute to the conveyance capacity of the river, so minor changes in the topography within these areas do not have an effect on either the base flood water surface elevation or the corresponding extents of the flooding. All of the work proposed on this project will occur in ineffective flow areas of Esther Creek and the Tillamook River SFHA.

Conclusion

Based on this understanding of river hydraulics, this memorandum provides certification that this project, if constructed per design, will not have any effect on the existing base flood water surface elevation in the SFHA.

References

Tillamook County, 2018. Tillamook County Land Use Ordinance 3.510(FH). Accessed at: Land Use Ordinance (LUO) (Zoning Ordinance) | Tillamook County OR

National Flood Hazard Layer FIRMette

FEMA

123°53'9"W 45°27'25"N

123°52'32"W 45°27'N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

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

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/1/2022 at 1:58 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Application Name: Esther Creek Priority Fish Passage

Application Number: 223-1001-22536

By: Trout Unlimited Inc

Offering Type: Open Solicitation

Application Type: Restoration

OWEB Region: North Coast
County: Tillamook
Coordinates: 45.4535198497569,-123.880643473337

Applicant:
Chrysten Rivard
1777 N Kent St Ste 100
Arlington VA 22209
(541) 273-2189
chrysten.rivard@tu.org

Payee:
Darien Gibson
1777 N Kent St Ste 100
Arlington VA 22209
(541) 273-2189
darien.gibson@tu.org

Project Manager:
Liz Ransom
7125 BEWLEY CREEK RD
TILLAMOOK OR 97141
(541)619-9233
liz.ransom@tu.org

Budget Summary:
OWEB Amount Requested: $289,093
Total Project Amount: $689,593

Administrative Information

Abstract

Provide an abstract statement for the project. Include the following information: 1) Identify the project location; 2) Briefly state the project need; 3) Describe the proposed work; 4) Identify project partners.

Esther Creek Tide Gate is part of a privately owned dike creating pastureland for the landowner. The project is located near Tillamook on private farmland. Esther Creek is a tributary to the Tillamook River, providing approximately 0.38 linear miles of spawning and rearing habitat for ESA listed coho salmon, chum salmon, steelhead, cutthroat trout, and resident brook and/or Pacific lamprey. Esther Creek drains an area of just over 1.28 square miles from headwaters in privet timber lands. A new tide gate at this site will increase fish passage, maintain water levels for landowner agricultural needs, and prevent a catastophic failure of the current deteriorated culvert. The current tide gate is a Nehalem Marine NSG5-5mo (aluminum top hinge w/ Mitigator) with a circular corrugated metal pipe, 60 feet long and 5 feet in diameter. In the summer of 2022 Waterways determined the active channel width of Esther Creek to be 12 feet. Under certain tidal conditions the current tide gate creates a passage barrier for adult and juvenile salmon to one of the three most productive subbasins on the western side of the Tillamook Basin for coho salmon.

We are proposing to replace this with a tide gate including a Muted Tidal Regulator (MTR), and a pipe sized appropriatly for fish passage standards. Along with the designs a management plan coordinated with the landowner will improve fish passage. In addition, the inclusion of habitat logs downstream from the structure will improve overall habitat.

Project partners include: Trout Unlimited (TU), US Forest Service (USFS), Oregon Department of Fish and Wildlife (ODFW) and landowners. Bridge designs, hydraulic and tidal analysis, and geotechnical report were provided by a private engineering firm in cooperation and consultation with Trout Unlimited. The USFS is covering Section 106/ SHPO cultural consultation. Trout Unlimited will submit the joint permit application, ODFW fish passage approval, fish salvage permit, and County permits.

Location Information

Current Location:

What is the ownership of the project site(s)?

❑ *Public land (any lands owned by the Federal government, the State of Oregon, a city, county, district or municipal or public corporation in Oregon)*

❑ *Tribal lands (any lands owned/managed by a Tribal government)*

✓ *Private (land owned by non-governmental entities)*

Please select one of the following Landowner Contact Certification statements:

● I certify that I have informed all participating private landowners involved in the project of the existence of the application, and I have advised all of them that all monitoring information obtained on their property is public record.

○ I certify that contact with all participating private landowners was not possible at the time of application for the following reasons: Furthermore, I understand that should this project be awarded, I will be required by the terms of the OWEB grant agreement to secure cooperative landowner agreements with all participating private landowners prior to expending Board funds on a property.

Please include a complete list of participating private landowners

Eric & Loretta Peterson - Own the land the culvert and tide gate will be placed on.

Perry & Sharron Reeder - Own the land just downstream from tidegate where some stream channel and habitat work will occur.

❑ *Not applicable to this project*

❑ *This grant will take place in more than one county.*

Permits

Other than the land-use form, do you need a permit, license or other regulatory approval of any of the proposed project activities?

● Yes
○ No

For Details Go to Permit Page

I acknowledge that I am responsible for verifying applicable permits, licenses, and General Authorizations required for the project, and can update information at grant agreement execution.

✓ *Yes*

Racial and Ethnic Impact Statement

Racial and Ethnic Impact Statement

○ The proposed grant project policies or programs could have a disproportionate or unique POSITIVE impact on the following minority persons. (indicate all that apply)

○ The proposed grant project policies or programs could have a disproportionate or unique NEGATIVE impact on the following minority persons. (indicate all that apply)

● The proposed grant project policies or programs WILL HAVE NO disproportionate or unique impact on minority persons.

Insurance Information

If applicable, select all the activities that are part of your project - These require a risk assessment tool unless otherwise noted (check all that apply).

❑ *Working with hazardous materials (not including materials used in the normal operation of equipment such as hydraulic fluid)*

❑ *Earth moving work around the footprint of a drinking water well*

✓ *Removal or alteration of structures that hold back water on land or instream including dams, levees, dikes, tidegates and other water control devices (this does not include temporary diversion dams used solely to divert water for irrigation)*

❑ *Applicant's staff or volunteers are working with kids related to this project (DAS Risk assessment tool not required, additional insurance is required)*

❑ *Applicant's staff are applying herbicides or pesticides (DAS Risk assessment tool not required, additional insurance is required)*

❑ *Insurance not applicable to this project*

Additional Information

❑ *This project affects Sage-Grouse.*

Problem Statement

Describe the watershed problem(s) that this restoration project seeks to address.

Esther Creek is a small tributary providing approximately 2.5 linear miles of stream habitat suitable for migratory fish use. It drains an area of just over 1.28 square miles. Esther Creek's headwaters are in private timber lands and flow into agricultural lands. The tide gate is located just past the confluence of Esther and Tomlinson Creek on a privately owned earthen dike structure at Esther Creek stream mile 0.2. After passing through the tide gate, Esther Creek continues to flow under Highway 131 and empties into the Tillamook River near the entrance to Tillamook Bay. Esther Creek tide gate is part of a privately owned dike creating pastureland for the landowner. The project is located near the small city of Tillamook on private farmland, in a low gradient reach with converted historic tidal floodplain.

A new tide gate at this site will increase fish passage, provide agricultural drainage, flood protection, and prevent a failure of the current deteriorated culvert. The current tide gate is a Nehalem Marine NSG5-5mo (aluminum top hinge w/ mitigator) with a circular corrugated metal pipe, 25 feet in length and 5 feet in diameter. The tide gate is only semi functional, and the pipe is corroded and failing. We are proposing to replace this with a tide gate including a Muted Tidal Regulator (MTR) and a pipe 58 feet long and 72 inches in diameter (see attached 30% plans). The new pipe and MTR, along with a managemnet plan coordinated with the landowner will reduce velocities in the pipe and improve fish passage, increasing accessibility to productive salmon winter rearing habitat. In addition, we will add habitat logs downstream from the structure to improve the overall habitat.

Because this is an estuarine environment, during a bankfull event the tide gate will be closed, and water levels elevated. The culvert is sized to be large enough, so velocities are low enough for fish to pass at least 51% of the time. 6-ft is the minimum size culvert that allows for fish passage at least 51% of the time (required by ODFW in tidal areas).

In the summer of 2022 Waterways determined the active channel width of Esther Creek to be 12 feet. Under certain tidal conditions the current tide gate creates a passage barrier for adult and juvenile salmon. Stream gradient in proximity to the crossing is about zero. There is one other crossing downstream of the tide gate, where HWY 131 crosses Esther Creek. This crossing is also undersized, and on ODOTs list for replacement, it is not a full barrier for fish passage.

Anadromous salmonid fish species occurring in the Tillamook Watershed and utilizing Esther Creek habitat include coho, and chum salmon, summer and winter steelhead, and sea-run cutthroat trout. Resident cutthroat trout are also present. Resident brook and/or Pacific lamprey do occur in the watershed, they were found during a fish salvage for a completed fish passage project on Tomlinson creek, about 0.4 river miles upstream from Esther Creek tide gate.

The Tillamook Rapid Bioassessment (2007) indicated that Esther Creek was one of the top five producers of age 0 coho in the basin. This makes Esther Creek one of the three most productive subbasins on the western side of the Tillamook Basin for coho salmon. A new tide gate would improve fish passage increasing accessibility to productive salmon winter rearing habitat, provide agricultural drainage and flood protection, as well as eliminate the risk for a catastrophic failure at this site, avoiding a large discharge of sediment and the resultant adverse effects on aquatic organisms.

The tide gate project is in conjunction with another culvert replacement upstream of the tide gate where County owned Tomlinson Road crosses Esther Creek. That project, which will replace the current undersized, degraded culvert with an AOP culvert, is in design, is fully funded, and is planned for implementation in 2023.

Together, the two Esther projects will restore access up to 2.5 miles of habitat.

These Esther Creek projects build upon a previous successful project upstream of the tide gate on Tomlinson Creek, completed in 2020, which resulted in replacement of one failing barrier culvert with a bridge, and removal of

a second failing barrier culvert.

Above the county culvert on Tomlinson Road there is one more undersized culvert on the main stem Esther Creek and two culverts on tributaries to Esther Creek. They are all undersized but are not full barriers. Salmon SuperHwy partners are in discussion with the landowners about upgrading these crossings at a later date.

As part of the design process, Trout Unlimited and Waterways Consulting are currently working with the landowner to develop a water management, operations, and maintenance plan for the new tide gate that will maximize fish passage compatible with agricultural land use.

How have past or current land management practices contributed to the problem?

In the mid-1900's, design standards for pipes passing water, including pipes attached to tide gates, considered the volume of water that would flow through the pipe and how to prevent tidal water's impact on agricultural practices, but failed to consider how hydraulic modification of streams associated with tide gates could change stream velocities and impact aquatic organism passage. In addition, the aluminum top hinge w/ mitigator is older technology that does not support the amount of fish passage current design of a Muted Tidal Regulator (MTR) can.

As a result, the tide gates installed during this period have older technology, including the one in this proposal, and are impeding more fish passage then currently necessary for the land use needs of the landowner. In addition, the attached pipes are undersized for the streams in which they were installed. Resulting in the problems we intend to solve through this project – impeded fish passage to important habitat and the potential for a catastrophic washout. Due to their age, the tide gates and pipes are extremely corroded and no longer structurally sound.

Current design standards, regulations and construction best management practices are producing tide gates with adjoining culverts that are vastly improved over the historical structures. Engineers model stream flows, evaluate scour and bed load, perform geotechnical explorations, and consider seismic potential and many other factors during the design process. In Oregon, these replacement structures are subject to state and federal review to assess their ability to pass aquatic organisms. As a result, today's tide gate structures are better designed to accommodate aquatic organism passage and hydrological changes due to climate change.

Agricultural land use and riparian degradation have resulted in water quality issues, including water temperatures that negatively affect fish. Working with landowner to meet their needs as well as restoring much improved passage at tide gates allows fish to access habitat that can serve as cold water refugia from high summer temperatures in the Tillamook River. Leaving these old tide gates to fail will only degrade and block passage for fish to essential rearing and cold-water refuge.

Project History

Continuation - Are you requesting funds to continue work on a project previously funded by OWEB where that work did not result in a completed project?

○ Yes
● No

Resubmit - Have you submitted, but were not awarded an OWEB application for this project before?

○ Yes
● No

Phased - Is proposed work in this application a phase of a comprehensive watershed restoration plan or project?

○ Yes
● No

Plans

Salmon

Will this project benefit salmon or steelhead?

● Yes
○ No

✓Oregon Coast - Steelhead
✓Pacific Coast - Chum Salmon
✓Oregon Coast - Coho Salmon

How will the resulting restoration project benefit salmon or steelhead or their habitat?

This project will replace an undersized, deteriorated tide gate and culvert that impedes adult and juvenile fish passage. When constructed, the project will restore access to 0.38 miles of spawning and rearing habitat on Esther Creek, in the Tillamook River watershed. When done in conjunction with the Tomlinson Road crossing (planned for 2023) both projects together will restore access to 2.5 miles.

Anadromous salmonid fish species occurring in the Tillamook Watershed include coho salmon, chum salmon, summer and winter steelhead, and sea-run cutthroat trout. Resident cutthroat trout also occupy most of the streams. Resident brook and/or Pacific lamprey do occur in the watershed, they were found during a fish salvage for a completed fish passage project on Tomlinson creek, about 0.4 river miles upstream from Esther Creek tide gate. Because Esther Creek is a smaller stream it is not preferred habitat for adult spawning Chinook Salmon, however according to ODFW, juvenile Chinook (both Spring and Fall) will utilize the tidally influenced portion of Esther Creek for rearing and foraging should the passage be provided at the tide gate.

The Esther Creek Tide Gate is a partial barrier to both adult and juveniles depending on tides and flows. The Tillamook Rapid Bioassessment (2007) indicated that Esther Creek was one of the top five producers of age 0+ coho in the basin. This makes Esther Creek one of the three most productive subbasins on the western side of the Tillamook Basin for coho salmon. A new tide gate would improve fish passage, increasing what is already highly productive coho rearing habitat.

In addition, this project plans to add large woody debris to the stream. Woody debris has been shown to help connect the stream channel to its floodplain, helping to mitigate flooding, deposit nutrients, and provide velocity refuge during large winter storms. Wood also creates more diverse aquatic habitat. Upstream of wood the slower velocities tend to deposit finer substrate which can be valuable spawning habitat for fish. Wood can also provide shelter and grow algae providing additional food sources for fish.

Does the project address a restoration action identified in a regional assessment or recovery plan?

● Yes
○ No

Regional Assessments or Recovery Plans
Recovery Plan for Oregon Coast Coho Salmon Evolutionarily Significant Unit
Comprehensive Conservation and Management Plan for Tillamook Bay, Oregon
Oregon Coast Coho Conservation Plan for the State of Oregon

For each plan chosen above, describe how your project is consistent with specific recovery/restoration actions cited in that plan.

• The 2016 NMFS/NOAA Oregon Coast Coho Recovery Plan identifies blocked/impaired fish passage as one of several primary, habitat-related limiting factors affecting recovery of this Evolutionarily Significant Unit (ESU). The document identifies removal or modification of barrier culverts as one of several management actions to protect and restore watershed processes and facilitate species recovery.
• The 2019 Tillamook Estuaries Partnership Comprehensive Conservation and Management Plan lists improving habitat connectivity through strategic, prioritized barrier removal as a priority action.
• The 2007 Oregon Coast Coho Conservation Plan for the State of Oregon indicates that stream complexity and water quality are the primary limiting factors for Oregon Coast coho in the Tillamook and Nestucca basins and that "habitat management and improvement is key to protecting and enhancing" the ESU. It identifies passage barrier replacement as one type of project that can improve habitat conditions for the species.

Does the project address a restoration action identified in a regional assessment or recovery plan not associated with an ESA-listed salmon or steelhead in Oregon?

● Yes
○ No

Provide name of the plan (i.e. regional assessment, recovery plan, watershed assessment, or other locally relevant document).

• Koopman, E.M. 2018. Climate Change Preparedness Strategy for Tillamook Estuaries Partnership.
This plan details how the Tillamook Estuary will be changing with climate change and what changes will need to be made. A large portion of this plan is updating infrastructure, including culverts, tide gates and bridges to accommodate for a rising sea level and changes in weather patterns.

Does this project address one or both of the following:

✓ *Habitat needs for one or more Endangered Species Act-listed species and/or species of concern*
☐ *Concerns identified on 303(d) listed streams*
☐ *No*

Proposed Solution

Goal, Objectives, and Activities

State your project goal. A goal statement should articulate desired outcomes (the vision for desired future conditions) and the watershed benefit.

Significantly improve fish passage to 0.38 miles of important aquatic spawning and proven quality coho rearing habitat on Esther Creek by constructing a new tide gate with a muted tidal regulator (MTR) and culvert to fish passage standards. Replacing an undersized, partially functioning tide gate with a failing culvert and preventing a potential catastrophic washout, where a privately owned dike crosses Esther Creek.

List specific and measurable objectives. Objectives support and refine the goal by breaking it down into steps for achieving the goal. (NOTE: If you quantify your objectives, ensure all numbers match the metrics listed in your selected habitat types.) Provide up to 7 objectives.

Objective #1

Objective

Manage project partners and communication to ensure the project is delivered on-time and on-budget.

Describe the project activities. Activities explain how the objective will be implemented.

Trout Unlimited will be the project manager and provide the following:

- Establish a Memorandum of Understanding between Trout Unlimited and the landowner to outline roles, responsibilities and how grant funds will be distributed.
- Facilitate monthly communication between partners.
- Track project expenses, review invoices, submit payments for processing, document in-kind contributions, prepare and submit all project reports and required documentation.
- Establish project photo points and take before, after and monitoring photos.
- Prepare and submit the projects' state, county, and federal permits.

Objective #2

Objective

Produce bid ready designs, secure local, state, and federal permits as well as construction services to replace a privately owned, failing tide gate and culvert.

Describe the project activities. Activities explain how the objective will be implemented.

Trout Unlimited will ensure all permit applications and environmental compliance is addressed including:
- Working with the US Forest Service to provide Section 106 cultural resource coordination
- Secure ESA compliance under the TARP programmatic
- Work with the contracted engineering design firm, Waterways, to submit the ODFW Fish Passage Approval form
- Submit the LUCS form to Tillamook County
- Work with the engineering design firm, Waterways, to submit the Tillamook County Development Permit (if needed).
- Submit CWA Section 401 Water Quality Certification to DEQ.

Trout Unlimited will secure and manage a contract for the construction work including:
- Engineering contractor, Waterways, with Trout Unlimited's support, will prepare the project's bidbook including engineering designs and technical specifications.
- Organize and host a pre-bid walk-thru with partners for potential construction contractors to see the project sites.
- Provide the contract document and advertise the project to potential contractors with assistance from the County.
- Review bids for construction and select a preferred bidder.
- Contract with a qualified construction contractor to implement the project.

Objective #3

Objective

Implement project construction activities to replace a privately owned, failing tide gate and culvert with a tide gate and muted tide gate regulator (MTR) and appropriately sized culvert to restore fish passage to 0.38 miles on Esther Creek.

Describe the project activities. Activities explain how the objective will be implemented.

- Project construction will occur during the in-water work period of July 1st through September 15th.
- Trout Unlimited will coordinate fish salvage with assistance from ODFW and other partners.
- The contractor will remove the existing tide gate and culvert. Material will be stockpiled and reused to backfill the site to the extent possible. The old tide gate and culvert will be removed and recycled or taken away for disposal. Unusable excavated materials will be removed from the project site in their entirety.
- The contractor will start by installing the new tide gate with a muted tide gate regulator (MTR) and culvert next to the old to keep that one in use for water and fish passage.
- Next, the contractor will create the stream channel flowing through the new tide gate with a muted tide gate regulator (MTR) and culvert while placing large woody debris just downstream of the work area for additional aquatic organism habitat.
- Finally, rewatering the new channel, tide gate with a muted tide gate regulator (MTR), and culvert.
- Temporary erosion control measures will be installed including spreading weed-free straw and a sterile, grass seed to protect any areas of bare soil. Native riparian plantings will be installed during the winter months following project construction.

Objective #4

Objective

Share success by providing community outreach, as well as sharing projects success with watershed partners.

Describe the project activities. Activities explain how the objective will be implemented.

Trout Unlimited will provide the following:

- Update Salmon SuperHwy website with completed project background information and before/after photos.
- Develop a fact sheet.
- Provide progress and project completion updates on social media, including Instagram and Facebook.
- Include project success in Salmon SuperHwy Annual report.
- Schedule field visits to the completed project with partners, landowners, and elected officials for future potential projects and funding support.

List the major project activities and time schedule for each, including post project implementation.

Element	Description	Start Date	End Date
Project Communication	On-going communication with project implementation team and partners including Waterways, landowners, and permiters.	3/2022	12/2023
Submit and Secure Permits	Trout Unlimited will secure federal, local, and state permits.	10/2022	4/2023
Project Updates to Affected Landowners	Trout Unlimited will provide project implementation updates to affected landowners.	3/2022	10/2023
Finalize Project engineering design and prepare project bidbook	Project engineering design will be completed by Waterways engineering team and reviewed by our technical team.	4/2022	12/2022
Release Call for Bids (CFB) for project construction	Trout Unlimited will advertise the project's construction CFB and solicit proposals. Project partners will participate with proposal review and provide comments and feedback.	1/2023	2/2023
Construction contract	Trout Unlimited will contract with the selected construction contractor. Trout Unlimited will secure all insurance documentation.	1/2023	3/2023
Coordinate fish salvage with ODFW	Trout Unlimited will coordinate with ODFW for conducting fish salvage.	7/2023	7/2023
Construction	Project implementation will take place during the ODFW approved in-water work window.	7/2023	9/2023
Construction Inspection	Project inspection will occur as project is implemented during project milestones as well as upon completion. Trout Unlimited and Waterways will provide inspection.	7/2023	10/2023
Prepare and submit final reports	Trout Unlimited will prepare and submit all permit and grant reports.	11/2023	12/2023
Monitoring	Trout Unlimited and landowners will visually inspect the tide gate following winter storm events to ensure it is functioning as designed. Trout Unlimited will take photos and submit project status reports.	12/2023	12/2024

Element	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Project Communication												
Submit and Secure Permits												
Project Updates to Affected Landowners												
Finalize Project engineering design and prepare project bidbook												
Release Call for Bids (CFB) for project construction												
Construction contract												
Coordinate fish salvage with ODFW												
Construction												
Construction Inspection												
Prepare and submit final reports												
Monitoring												

Habitat Types

In which habitat type(s) are you proposing to work?

❑*Instream Habitat: below the ordinary high water mark (includes in-channel habitat restoration, bank stabilization, flow, fish screening, and fish passage)*

❑*Riparian Habitat: above the ordinary high-water mark of the stream and within the stream's floodplain.*

❑*Upland Habitat: above the floodplain and improves native habitat and watershed function.*

❑*Wetland Habitat: land or areas covered, often intermittently, with shallow water or have soil saturated with moisture.*

✓*Estuarine Habitat: tidally influenced areas. -- Details will follow.*

Estuarine Habitat

Select all applicable Estuarine categories.

❑**Create a new estuarine habitat**

❑**Estuarine road activities**

❑**Channel modification including creation**

❑**Vegetation establishment or management**

❑**Fencing and other materials for habitat protection**

✓**Structure removal/modification/installation**

Select all the actions you propose to implement to address the problem.

❑*Dike, Levee, or berm modification including removal*

✓*Tidegate modification/removal*

Number of tidegates removed
0

Number of tidegates modified
1

Number of acres of habitat made available
0.12

❑*Estuarine culvert modification/removal*

❑*Installation of structures to control water level/elevation*

❑*Tile removal*

✓*Large wood*

Number of structures
2

Average logs per structure
1

Average length of logs per structure (feet)
20

Average diameter of logs per structure (feet)
1.25

❑**Nonstructural removal and placement protection**

Total estuarine acres to be treated:
0.12

Wrap-Up

Watershed Benefit

Describe the watershed or ecosystem function(s) that the project will address through the proposed restoration actions and the resulting benefits to water quality, native fish and wildlife habitat, and/or watershed health. Explain why the project is a priority for investment at this time.

The Salmon SuperHwy (SSH) is a collaboration with over a dozen partners in the Tillamook, Nestucca, Sand Lake, and Neskowin watersheds. The partnership's goal is to restore full access to 95% of historic Pacific anadromous fish habitats in this geography by addressing a strategically prioritized list of anthropogenic, in-stream barriers including undersized culverts, small dams, weirs, and tide gates. These barriers inhibit natural stream processes and impede fish migration for ESA listed threatened Oregon Coast coho, Chinook, and chum salmon, steelhead and cutthroat trout, and several lamprey species. These structures also contribute to chronic flooding, harmful erosion, road washouts, and other economic and safety problems for people. Since 2014, the SSH partnership has addressed 47 priority barriers, restoring access to over 124 miles of habitat. When finished, our work will result in sub-basin wide reconnection of historical habitats for anadromous fish, with more climate resilient watersheds and transportation infrastructure.

This project will replace an undersized, deteriorated tide gate and culvert, located at Esther Creek river mile 0.2, that impedes adult and juvenile fish passage. When constructed, the project will restore access to 0.38 miles of spawning and rearing habitat on Esther Creek, in the Tillamook River watershed. Another 1.2 miles of unimpeded spawning and rearing habitat will open when a culvert just upstream, which is currently a partial barrier, is replaced. This culvert, along County owned Tomlinson Road and crossing Esther creek at stream mile 0.58, is scheduled to be replaced in 2023. Both projects together will restore access to 2.5 miles.

Fish species include coho salmon, chum salmon, summer and winter steelhead, and sea-run cutthroat trout. Resident cutthroat trout also occupy most of the streams. Resident brook and/or Pacific lamprey do occur in the watershed, they were found during a fish salvage for a completed fish passage project on Tomlinson creek, about 0.4 river miles upstream from Esther Creek tide gate.

The Esther Creek Tide Gate is a partial barrier to both adult and juveniles depending on tides and flows. The Tillamook Rapid Bioassessment (2007) indicated that Esther Creek was one of the top five producers of age 0+ coho in the basin. This makes Esther Creek one of the three most productive subbasins on the western side of the Tillamook Basin for coho salmon. This project would increase what is already highly productive coho rearing habitat.

In addition, this project plans to add large woody debris to the stream. Woody debris has been shown to help connect the stream channel to its floodplain, helping to mitigate flooding, deposit nutrients, and provide velocity refuge during large winter storms. Wood also creates more diverse aquatic habitat. Upstream of wood, the slower velocities deposit finer substrate which can be valuable spawning habitat for fish. Wood can also provide shelter and grow algae providing additional food sources for fish.

Just upstream from the project site Esther Creek has native shrubs along the banks providing shelter, lowering water temperature, and diversifying habitat for rearing fish. Within the foot print of this project, we will be removing problem invasive species including blackberry. We will be planting the area with native vegetation to enhance the riparian habitat along Esther Creek.

For the landowner this tide gate will provide agricultural drainage and flood protection, as well as eliminate the risk for a catastrophic failure at this site, avoiding a large discharge of sediment and the resultant adverse effects on aquatic organisms.

Esther Creek tide gate is on the Salmon SuperHwy priority list and is a current priority due to the current semi-functioning tide gate and the poor condition of the culvert. Aiming for 2023 construction if full funding and all permits can be secured, but 2024 construction may be more likely.

Public Awareness

Does this proposed project include public awareness activities?

● Yes
○ No

Describe these activities, as well as any related products, and explain how the proposed activities relate to the project's objectives.

Community education and outreach for this project will include the following actions and audiences:

- The project will be promoted on the Salmon SuperHwy website.
- Progress and project completion updates will be posted on Trout Unlimited's social media, including Instagram and Facebook.
- Field trips will be conducted to the completed project with partners and landowners.

Design

Were design alternatives considered?

● Yes
○ No

Describe the design alternatives that were considered and why the preferred alternative was selected.

We first sat down with the landowners to evaluate the function and purpose of the tide gate and the option of removing it all together. It was determined that replacement was necessary. When salt from tidal waters move onto fields the fields are no longer able to grow grass. This landowner uses the fields for grazing dairy cattle and cannot afford to lose his grazing abilities. The best course of action was to replace the tide gate, to prevent full failure at the site, with a tide gate allowing for maximum fish passage and preventing tidal water from inundating the field.

When investigating tide gates that would allow for all state, county, and federal fish passage requirements a Muted Tidal Regulator working with a side hinge tide gate was the only option.

Select the appropriate level of design for your project.

○ No design is required.
○ 10-30%: Conceptual design (evaluation of alternatives, concept-level plans, design criteria for project elements, rough cost estimates).
● 30-85%: Preliminary design (selection of the preferred alternative, draft plans, draft design report, preliminary cost estimates).
○ 85-100%: Final design (final design report, plans, and specifications, contracting and bidding documents, monitoring plan, final cost estimate).

If work remains on the project's design, describe the work that remains to be done and when you expect to have it completed. If no design is required put "N/A"

The project's design is at 30% which includes: determination of type of structure to be installed (culvert with a Muted Tidal Regulator and side hinge gate), size of structure to be installed (58ft long culvert with 1.1-degree slope) and location within the dike/stream crossing has been finalized.

The work that remains on the tide gate and culvert design is to update the preliminary construction plans to the level of construction ready designs including: final determination of removal/fill quantities, dewatering requirements,

construction notes and technical specifications. No utility coordination is needed for this site.

The project's stream design surrounding the project is at 30% completion. Work that remains for the stream simulation design includes: final design on exact location where streambed simulation will be installed, final placement of design features (such as habitat logs) / design location call outs, final drafting of design sheets, updates to material call outs as needed, final quantity calculations, internal review, site visit to verify all design elements before final contract and final edits.

Additional work remaining includes a partner and engineer 60% design review meeting, and then final engineering to 90% designs with review, then 100% bid ready designs, specifications, and bid packet. Trout Unlimited will continue to coordinate with the landowners as engineering plans are finalized.

Describe the steps you will take to minimize adverse impacts to the site and adjacent lands during and after project implementation.

Project designs will comply with all local, state, and federal natural resource permit requirements.

The project will be implemented during the ODFW in-water work window (July 1 - September 15) to minimize potential impacts to ESA listed fish species. Working during this window during the driest months of the year also minimizes bank and channel impacts from equipment tracking across drier soils than would be encountered during other months.

Work area isolation and fish salvage will be conducted at the site as follows:
1. Block nets will be installed at upstream and downstream locations and maintained in a secured position to exclude fish from entering the project area.
2. Block nets will be secured to the stream channel bed and banks until fish capture and transport activities are complete. Block nets may be left in place for the duration of the project to exclude fish.
3. The nets will be monitored at least daily to ensure they are secured to the banks and free of organic accumulation.
4. Nets will be monitored hourly anytime there is instream disturbance.
5. Remove as many fish as possible prior to dewatering.
6. During dewatering, any remaining fish will be collected by hand or dip nets.
7. Seines with a mesh size to ensure capture of the residing ESA-listed fish will be used.
8. The time fish are in a transport bucket will be limited and will be released as quickly as possible.
9. Aerators for buckets will be used or the bucket water will be frequently changed with cold clear water at 15 minute or more frequent intervals.

All heavy equipment used at the site will be power-washed and free of debris and weed seed prior to entering the work site. Bank excavation and disturbance will occur, but work will be confined to the specific dimensions of the structure and all excavated material will be re-used in implementation of the project to the extent practicable. Standard construction practices will be used to ensure exposed soils experience minimal erosion (including use of silt fences, straw waddles and other erosion control measures).

All disturbed areas will be seeded with a native seed mix and covered with sterile straw. The contractor will provide seed mix constituents to project engineer for approval.

Project Management

List the key individuals, their roles, and qualifications relevant to project and post project implementation. At a minimum include the following: project management, project design, project implementation, and project inspection.

Role	Name	Affiliation	Qualifications	Email	Phone
Project Management	Liz Ransom	Trout Unlimited	Restoration Project Manager with Trout Unlimited for 2 years. Worked seasonally with the Forest Service for 4 years assisting with Aquatic Organism Passage projects. 3 years conducting habitat and fish surveys for ODFW.	liz.ransom@tu.org	(541) 619-9233
Project Design, Project Implementation	Annika Sullivan	Waterways Consulting, Inc.	A senior restoration engineer with 8 years experience designing &managing restoration, habitat enhancement, fish passage &flood projects in the PNW. She has extensive experience building complex 2D hydraulic models for tidal & estuarine environments.	Annika@waterways.com	(503) 227-5979
Project Design, Project Implementation	Jake Hofeld	Waterway Consulting, Inc.	A Registered Professional Engineer, a Certified Water Rights Examiner, and a LEED Accredited Professional with over 15 years of experience. He has designed projects with Muted Tidal Regulators (MTRs) in Coos County using Nehalem Marine Manufacturing	jakeh@waterways.com	(503) 528-4816
Project Implementation	TBD	TBD	Contractor with tide gate and in-water work experience, experience with North Coast streams, erosion control, care and diversion of water, meeting state and local requirements.	TBD	

Climate Considerations

OWEB is working with state agencies to comply with and implement Governor Brown's 2020 Executive Order on Climate Action (20-04). In addition, the OWEB board has indicated its intent to more directly account for climate adaptation, mitigation, and co-benefits in grant-making. To support these efforts, OWEB is beginning to gather information about climate impacts and proposed projects at the application stage, and is providing a new Technical Resources document to assist applicants.

Your responses to these climate questions will be used for informational purposes only, not for project evaluation and ranking. OWEB will use the information to understand how project activities are already contributing to the state's climate goals, and to continue to develop technical resources for applicants. In the future, OWEB may refine and expand climate related questions and, after any necessary administrative rulemaking, use climate information as part of its grant evaluation process.

-

Briefly describe your understanding of how the characteristics and functions of the watershed where the proposed project will occur are anticipated to change due to climate impacts in the future. In particular, describe how species, habitat, and/or water quality or water quantity variables relevant to the project site location are expected to be affected. Refer to Technical Resources now available on this webpage, if needed: https://www.oregon.gov/oweb/resources/Pages/Field-Tech-Guidance.aspx

Currently, the Esther Creek tide gate and culvert prevents the movement and migration of many aquatic organism populations, such as, ESA listed coho salmon, chum salmon, steelhead, cutthroat trout and lamprey. The culvert is also at risk of failure (and this risk will increase with time if the problem is left untreated). Future climate scenarios predict increased likelihood of extreme precipitation and floods, as well as warmer summers and winters with longer summer low-flow periods. These conditions will exacerbate potential for catastrophic failures and increase the importance of access to thermal and hydraulic refugia for the long-term viability of aquatic organism populations in the Tillamook's Watershed.

How have you accounted for these climate-impact considerations in your project planning, design or implementation? Please describe briefly.

Salmon SuperHwys focus is providing long-term, aquatic organism passage that will accommodate increased flows projected to occur with global climate change. The Esther Creek tide gate and culvert was designed with catastrophic events and future climate scenarios, such as increased flow, in mind. The tide gate and culvert have an expected service life of many decades and will increase system-wide resilience and connectivity. Replacing this barrier will provide access to a range of aquatic habitats and facilitate the life history variations and adaptive strategies inherent in healthy target species populations. Including prolific rearing habitat for ESA listed coho salmon. This tide gate and culvert were designed using robust passage structure sizing criteria to ensure that our structures will perform well for aquatic organism passage and remain durable despite increased peak flow projections and expected large seismic events.

Are there any constraints on your ability to incorporate climate considerations into project planning? For example: Lack of information about climate impacts at the project planning scale; Gaps in understanding what nursery or seed stock to use given potential climate impacts; Gaps in accessing these stocks; Lack of methods to quantify climate benefits; Uncertainty about how to define a baseline for assessing potential change; Metrics for understanding climate resilience are not well-defined.

○ Yes
● No

Climate benefits from OWEB project activities can broadly be categorized into three types: (1) Carbon sequestration benefits (2) Mitigation benefits and (3) Adaptation benefits. Project activities may offer multiple climate benefits. Please review these categories below, select all the apply, and provide specific

examples where possible:

✓ *Carbon sequestration (Capturing, securing and storing carbon dioxide from the atmosphere), including:*

Sequestration benefits from habitats: Project activities that avoid natural habitat conversion, or increase plant biomass within the habitat area, may contribute sequestration benefits. Select any that apply:

❑ *Upland forest*

✓ *Riparian*

❑ *Grassland*

❑ *Wetland*

❑ *Estuary*

❑ *Other habitat*

❑ *Sequestration benefit through fire management/fuels reduction. Activities that help manage fire frequency and severity will help provide sequestration benefits, because catastrophic wildfires reduce the sequestration potential of upland habitats.*

✓ *Other sequestration benefit*

Please describe:

Replanting riparian habitat and introducing habitat logs to the environment creates the ideal habitat for riparian areas and natural stream ecosystems to flourish.

✓ *Mitigation through reduced emissions*

If yes, please describe climate mitigation benefit:

✓ *Adaptation Benefits. Project activities may offer multiple climate adaptation benefits for species, habitats and communities, and there may be some overlap in the terminology used to describe these benefits. Check all that apply below, and provide additional and more specific description if possible.*

✓ *Fish passage*

Optional description:

This tide gate is a full and partial velocity barrier to all fish and has semi-functioning tide gate. Replacing this structure will reduce velocities and allow for more open fish passage during crucial times of year for fish migration.

❑ *Instream flow*

❑ *Irrigation efficiency*

❑ *Wildfire risk reduction*

❑ *Forest-health treatments*

❑ *Wildlife habitat connectivity*

✓ *Wetland/floodplain reconnection*

Optional description:

The addition of large woody debris to the system will redisperse the water in connection with its natural flood plain. Reduced velocities through the culvert with also contribute to this process.

❑ *Water temperature mitigation through shading, removal of inline ponds or other action*

✓ *Protection or creation of cold-water refugia for aquatic species*

Optional description:

Replacing this structure with a fish friendly tide gate and culvert will reduce velocities and allow for greater access to thermal and hydraulic refugia located in higher reaches of the watershed.

❑ *Aquifer recharge*

❑ *Drinking water security*

❑ *Food system resilience, including activities that maintain abundance of tribal first foods*

❑ *Other Benefit*

The State of Oregon is committed to identifying ways it can reduce impacts from harmful emissions. While the overall outcomes of OWEB funded projects may have many climate benefits, some necessary activities that occur during projects will result in increased emissions. To help us understand the current situation, please check all of the following that might apply to your project:

✓ *Driving gas-powered automobiles, including trucks and All Terrain Vehicles (ATVs)*

❑ *Operating gas-powered machinery other than automobiles (for example, chainsaws or other hand-held equipment)*

✓ *Operating gas-powered machinery larger than automobiles (for example, excavators)*

❑ *Boats*

❑ *Other*

❑ *Not applicable to project activities*

Are you considering alternative approaches that could reduce emissions (e.g., use of electric chainsaws or motors)?

-

○ Yes

● No

Optional Monitoring

OPTIONAL: Restoration Project Monitoring

Indicate which, if any, of the following types of monitoring will be done at this restoration project during the project period.

- ❑ *Salmonid Monitoring*
- ❑ *Non-salmonid biological monitoring*
- ❑ *Water (quantity) flow monitoring*
- ❑ *Water quality monitoring*
- ❑ *Rangeland monitoring*

Identify the location for the planned monitoring activities relative to the restoration project location. Check as many boxes as apply.

- ❑ *Onsite*
- ❑ *Downstream*
- ❑ *Upstream*
- ❑ *Upslope*

The following can be selected regardless of whether the effectiveness monitoring is funded by OWEB. However, if you are requesting more than $3,500 in effectiveness monitoring funding from OWEB, you will need to complete a separate Monitoring application.

Will effectiveness monitoring be conducted for this project?

○ Yes
● No

Budget

Item	Unit Type	Unit Number	Unit Cost	OWEB Funds	External Cash	External In-Kind	Total Costs
Salaries, Wages and Benefits							
Coordinator for Salmon SuperHwy, Trout Unlimited	Hours	100	$46.92	$500	$4,192	$0	$4,692
Restoration Project Manager for Salmon SuperHwy, Trout Unlimited	Hours	250	$34.83	$2,000	$6,708	$0	$8,708
Grant Accountant for Project*	Hours	16	$68.00	$200	$888	$0	$1,088
			Category Sub-total	**$2,700**	$11,788	$0	$14,488
Contracted Services							
ODFW technical assistance and fish passage review	Each	1	$500.00	$0	$0	$500	$500
Mobilization	Each	1	$71,500.00	$50,637	$20,863	$0	$71,500
Temporary Erosion Control and BMP's	Each	1	$26,000.00	$26,000	$0	$0	$26,000
Clearing and Grubbing	Each	1	$6,500.00	$6,500	$0	$0	$6,500
Dewatering/Work Area Isolation	Each	1	$65,000.00	$16,151	$48,849	$0	$65,000
Unclassified Excavation	Cubic yards	430	$19.50	$8,385	$0	$0	$8,385
Engineered Fill	Each	70	$19.50	$1,365	$0	$0	$1,365
Off-Haul	Each	350	$45.50	$15,925	$0	$0	$15,925
Tide Gated Culvert Installation**	Each	1	$123,500.00	$0	$123,500	$0	$123,500
Supply Tide Gate, MTR, and Culvert**	Each	1	$195,000.00	$0	$195,000	$0	$195,000
Aggregate Base	Cubic yards	21	$110.50	$2,321	$0	$0	$2,321
Geogrid Reinforced Rock	Cubic yards	36	$195.00	$7,020	$0	$0	$7,020
Class 200 Rip Rap	Cubic yards	100	$195.00	$19,500	$0	$0	$19,500
Rock Wall Boulders	Cubic yards	18	$214.50	$3,861	$0	$0	$3,861
Engineered Streambed Material	Cubic yards	150	$136.50	$20,475	$0	$0	$20,475
Log Structures	Each	2	$5,460.00	$10,920	$0	$0	$10,920
Straw Wattle	Each	1150	$10.40	$11,960	$0	$0	$11,960
Slope Protection Fabric	Each	750	$19.50	$14,625	$0	$0	$14,625
Seeding	Acres	1	$3,250.00	$3,250	$0	$0	$3,250
Live Stake Planting	Each	95	$7.80	$741	$0	$0	$741
Construction Phase Engineering Services	Each	1	$24,000.00	$24,000	$0	$0	$24,000
			Category Sub-total	**$243,636**	$388,212	$500	$632,348
Travel and Training							
Trout Unlimited, Project Manage Travel to Project Site	Miles	640	$0.63	$400	$0	$0	$400
			Category Sub-total	**$400**	$0	$0	$400
Materials and Supplies							
Printing	Each	1	$50.00	$50	$0	$0	$50
			Category Sub-total	**$50**	$0	$0	$50
Equipment							
			$0	$0	$0	$0	$0
			Category Sub-total	**$0**	$0	$0	$0
Other							
Tillamook County LUCS Form	Each	1	$147.00	$147	$0	$0	$147
Joint Permit Fees	Each	1	$535.00	$535	$0	$0	$535

DEQ 1200-c Permit	Each	1	$3,580.00	$3,580	$0	$0	$3,580
			Category Sub-total	**$4,262**	$0	$0	$4,262

* = OWEB funds excluded from indirect.

			Modified Total Direct Cost Amounts	**$251,048**	$400,000	$500	$651,548
Indirect Costs							
Federally Negotiated Indirect Cost Rate	Override Amount			$34,745	$0		$34,745
Post Grant							
Status Reporting Amount	Status Reporting	3	$1,100.00	$3,300	$0	$0	$3,300
			Total	**$289,093**	$400,000	$500	$689,593

Provide context and justification for how your budget was developed. Explain how project costs and/or rates were determined.

We worked with Waterways Consulting, Inc., an engineering firm to develop 30% designs and a construction cost estimate. This was reviewed by technical advisors, including Sarah Zwissler, with more than a decade of experience with developing and constructing fish passage projects on Oregon's North Coast. This budget is based on past, successfully completed projects and the current rising costs of materials such as concrete, steel, fuel, asphalt, and others. We are continuing to seek additional funding from other sources for the aquatic organism passage projects that are part of the Salmon SuperHwy effort.

*For the grant accountant staff time: according to OWEB's GoBIG document, costs for administrative staff time spent specifically on project-related work (e.g. preparing project invoices, preparing project financial reports) that are not included in TU's NICRA can be included as direct costs in the OWEB budget. The accounting costs included in the above budget only cover costs directly attributable to this project.

** Cost based on quote from Leo Kuntz with Nehalem Marine.

Does the budget identify a contingency amount for specific line item(s) within the Contracted Services and/or Material and Supplies budget category?

●Yes

○No

Explain the specific reasons a contingency is needed for each line item.

No line-item contingency is added.

Funding and Match

Fund Sources and Amounts

Organization Type	Name	Source Note	Contribution Type	Amount	Description	Status
State	Oregon Department of Fish and Wildlife	Technical assistance and fish passage review	In-Kind - Labor	$500	technical assistance and fish passage review	Secured
Federal	National Oceanic and Atmospheric Administration	Restoring Fish Passage through Barrier Removal	Cash	$300,000	Restoring Fish Passage through Barrier Removal Grant	Pending
Federal	US Forest Service	Trout Unlimited Agreement	Cash	$100,000	US Forest Service Agreement with Trout Unlimited	Pending
Fund Source Cash Total		**$400,000**	**Fund Source In-Kind Total**		**$500**	

Match

Contribution Source-Type: Description	Amount
Oregon Department of Fish and Wildlife-In-Kind - Labor: technical assistance and fish passage review	$500
National Oceanic and Atmospheric Administration-Cash: Restoring Fish Passage through Barrier Removal Grant	$71,774
US Forest Service-Cash: US Forest Service Agreement with Trout Unlimited	$0
Match Total	**$72,274**

Do match funding sources have any restrictions on how funds are used, timelines or other limitations that would impact the portion of the project proposed for OWEB funding?

○ Yes
● No

Do you need state OWEB dollars (not Federal) to match the requirements of any other federal funding you will be using to complete this project?

○ Yes
● No

Does the non-OWEB cash funding include Pacific Coast Salmon Recovery Funds?

○ Yes
● No

Uploads

Map: Esther Creek Tide Gate Maps.pdf -
Photos: Esther Tide Gate Pictures.pdf -
Support Letters: Esther Creek tide gate LOS.pdf -
Secured Match Forms: Match Form Esther TG.pdf -
Project Design: 22-012 30% Plan Set 2022-09-30.pdf -
Planting Details: Planting Details.pdf -
Federally Negotiated Indirect Cost Rate Plan: FY23 TU Indirect Cost Rate Agreement.pdf -
Risk Assessment: RATool_GS_EstherTG.pdf -

Road Page

Road Questions

Select all the Road Activities you will be doing.

- ❑**Road closures/decommissioning for the purpose of restoration**
- ❑**Road Obliteration**
- ❑**Road Relocation**
- ❑**Road drainage system improvement**
- ❑**Road Surface Improvement**

Total miles of road treated

Plant Page

Planting Questions

The intent of the planting questions is to have the applicant show a logic framework for the proposed planting. OWEB understands that planting designs are preliminary pending final mapping of species and availability of plants, and that details of the planting may change between time of grant application and project implementation. At application phase, applicants should be able to draw a rough map of where they will plant, identify their target plant community, and list some species they expect to plant.

Relationship to other conservation programs

❑ *This project will use OWEB funds to increase the planting density on CREP acres.*

Planting Activities

Describe the current condition of the site(s) to be planted.

The site is currently dominated by invasive blackberry and reed canary grass (see photos) with few native plant species

Describe how you will prepare the site(s) prior to planting and how those activities are appropriate considering the site conditions described in the previous question.

The area will be cleared to bare soil because of the process to replace the tide gate and incorporate the stream simulation. This is also beneficial for planting the new native plants as we will be removing the invasive competition.

Planting details

For Details Upload Here

Fill out the table below. Identify the vegetation communities you plan on planting in, the acres each vegetation community encompasses, and the density of your planting.

Vegetation Community	Acres	Density
Emergent Wetland	~0.3	200

Fill out the table below for each vegetation community listed in the table above, provide the common and scientific names of up to five plants that will be planted, the form(tree, shrub, grass), type of plant (bare root, cutting, etc) and the planting timing.

Vegetation Community	Plants: Common Name	Plants: Scientific Name	Form	Type	Year	Month
Emergent Wetland	Hookers willow	Salix hookeriana	Shrub	Cutting	2024	January

Plant Stewardship

After the plantings are installed, will you conduct plant stewardship ("free to grow")?

- ○ Yes
- ● No

Explain

We work with a local partner who is an expert in planning and completing plantings in the area. The planting will occur in the fall winter after construction is completed. The landowner will conduct upkeep to the area.

Measures of Planting Success

Use the table below to explain how you will document and determine success for the plantings.

Vegetation Community	Parameter	Percentages
Emergent Wetland	Native Cover	50%

If, in the course of the 3-5 years following planting, the success rate falls below your standard, what is your plan?

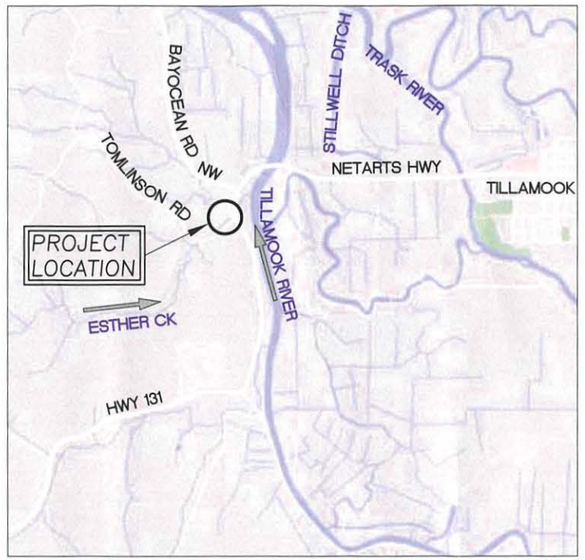
We will be in contact with the landowner about the status of the project and if he would like assistance with future plantings and/or upkeep of the area we will work together to accomplish these goals.

Permit Page

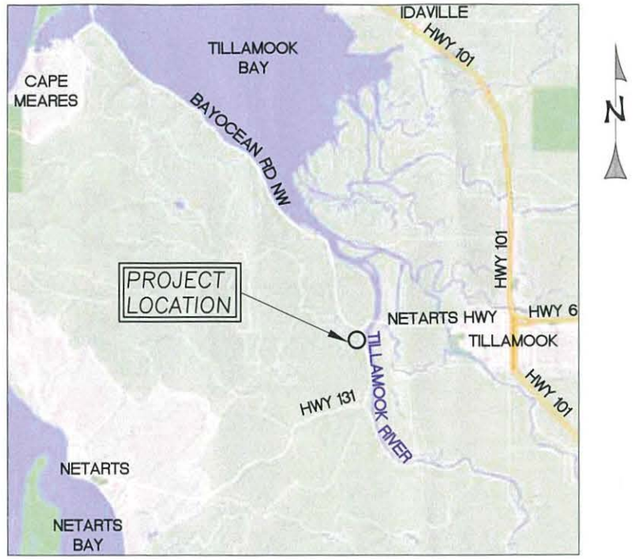
Project Activity Requiring a Permit or License	Name of Permit or License	Entity Issuing Permit or License	Status
Construction in a waterway	Joint Removal Fill Permit	US Army Corps of Engineers & OR Dept of State Land	To be submitted fall 2022
Soil fill/removal	Section 106 Cultural Resources Coordination	State Historic Preservation Office	To be submitted fall 2022
Discharge in waters of the state	CWA 401 Water Quality Certification	OR Dept of Enviornmental Quality	To be submitted fall 2022
OWEB funds	Land Use Compatibility Statment (LUCS)	Tillamook County	To be submitted fall 2022
Fish passage trigger, replacing exsisting culvert	Fish Passage Review	Oregon Department of Fish & Wildlife (ODFW)	To be submitted fall 2022

ESTHER CREEK
TIDE GATE PROJECT

60% DESIGN SUBMITTAL



VICINITY MAP
N.T.S. (GOOGLE)



REGIONAL MAP
N.T.S. (GOOGLE)

GENERAL NOTES

1. TOPOGRAPHIC MAPPING WAS PERFORMED BY:
   WATERWAYS CONSULTING, INC.
   509A SWIFT STREET
   SANTA CRUZ, CA 95060
   SURVEY DATE; MAY 5, 2022.
2. ELEVATION DATUM: GPS TIES TO NAVD88 USING THE LEICA GEOSYSTEMS SMARTNET GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) NETWORK.
3. BASIS OF BEARINGS: GPS TIES TO NAD83 OREGON STATE PLANE NORTH, INTERNATIONAL FEET USING THE LEICA GEOSYSTEMS SMARTNET GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) NETWORK.
4. AERIAL PHOTO SOURCE: AUTODESK CIVIL 3D 2019.
5. CONTOUR INTERVAL IS ONE FOOT. ELEVATIONS AND DISTANCES SHOWN ARE IN DECIMAL FEET.
6. THIS IS NOT A BOUNDARY SURVEY. PROPERTY LINES WERE COMPILED FROM RECORD INFORMATION. THE LOCATION OF THESE LINES IS SUBJECT TO CHANGE, PENDING THE RESULTS OF A COMPLETE BOUNDARY SURVEY.
7. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE 2021 EDITION OF THE OREGON DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (HEREAFTER REFERRED TO AS "STANDARD SPECIFICATIONS").
8. THESE DESIGNS ARE INCOMPLETE WITHOUT THE FINAL STAMPED TECHNICAL SPECIFICATIONS PREPARED BY WATERWAYS CONSULTING, INC. REFER TO TECHNICAL SPECIFICATIONS FOR DETAILS NOT SHOWN HEREON.

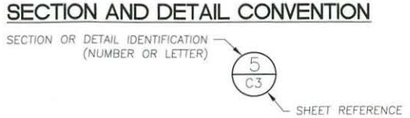
*** CALL BEFORE YOU DIG ***
CONTACT UNDERGROUND SERVICE ALERT (USA)
PRIOR TO ANY CONSTRUCTION WORK 1-800-332-2344

ABBREVIATIONS

APPROX	APPROXIMATE
AVG.	AVERAGE
CC	CONCRETE
CMP	CORRUGATED METAL PIPE
CY	CUBIC YARDS
DIA.	DIAMETER
E	EXISTING
EG	EXISTING GROUND
ESM	ENGINEERED STREAMBED MATERIAL
ELEV.	ELEVATION
DI	DRAINAGE INLET
FG	FINISHED GRADE
FT	FEET
HDPE	HIGH DENSITY POLYETHYLENE
IN	INCH
INV	INVERT
MIN	MINIMUM
N	NEW
NIC	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
ODOT	OREGON DEPARTMENT OF TRANSPORTATION
RC	RELATIVE COMPACTION
RSP	ROCK SLOPE PROTECTION
S	SLOPE
SQ.FT.	SQUARE FOOT
T	TREE
T.B.D.	TO BE DETERMINED
TYP	TYPICAL
UNK	UNKNOWN
WSE	WATER SURFACE ELEVATION
YR	YEAR

TREE SPECIES
W WILLOW

SECTION AND DETAIL CONVENTION



PROJECT DESCRIPTION

THESE DRAWINGS PROVIDE DESIGN DETAILS FOR THE REPLACEMENT OF AN EXISTING CULVERT AND TIDE GATE ON AN EXISTING LEVEE TO IMPROVE FISH PASSAGE CONDITIONS ALONG ESTHER CREEK IN TILLAMOOK COUNTY, OREGON.

WORK SHALL CONSIST OF REMOVING AN EXISTING TIDE GATED CULVERT, INSTALLING A NEW TIDE GATED CULVERT WITH MUTED TIDAL REGULATOR, GRADING THE CHANNEL FOR IMPROVED FISH PASSAGE, INSTALLING HABITAT LOGS FOR FISH HABITAT IMPROVEMENTS, AND PLANTING.

SHEET INDEX

WATERWAYS CONSULTING INC.
1020 SW TAYLOR STREET, STE. 380
PORTLAND, OR 97205
PH:(503)227-1982 // FAX:(888)919-6847
WWW.WATWAYS.COM

PRELIMINARY
NOT FOR CONSTRUCTION

PREPARED AT THE REQUEST OF:
TROUT UNLIMITED
7125 BEWLEY CREEK ROAD
TILLAMOOK, OR 97141

COVER

ESTER CREEK
TIDE GATE
60% DESIGN SUBMITTAL

DESIGNED BY: A.S.
DRAWN BY: D.H.
CHECKED BY: J.H.
DATE: 6/13/2023
JOB NO.: 22-012

BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

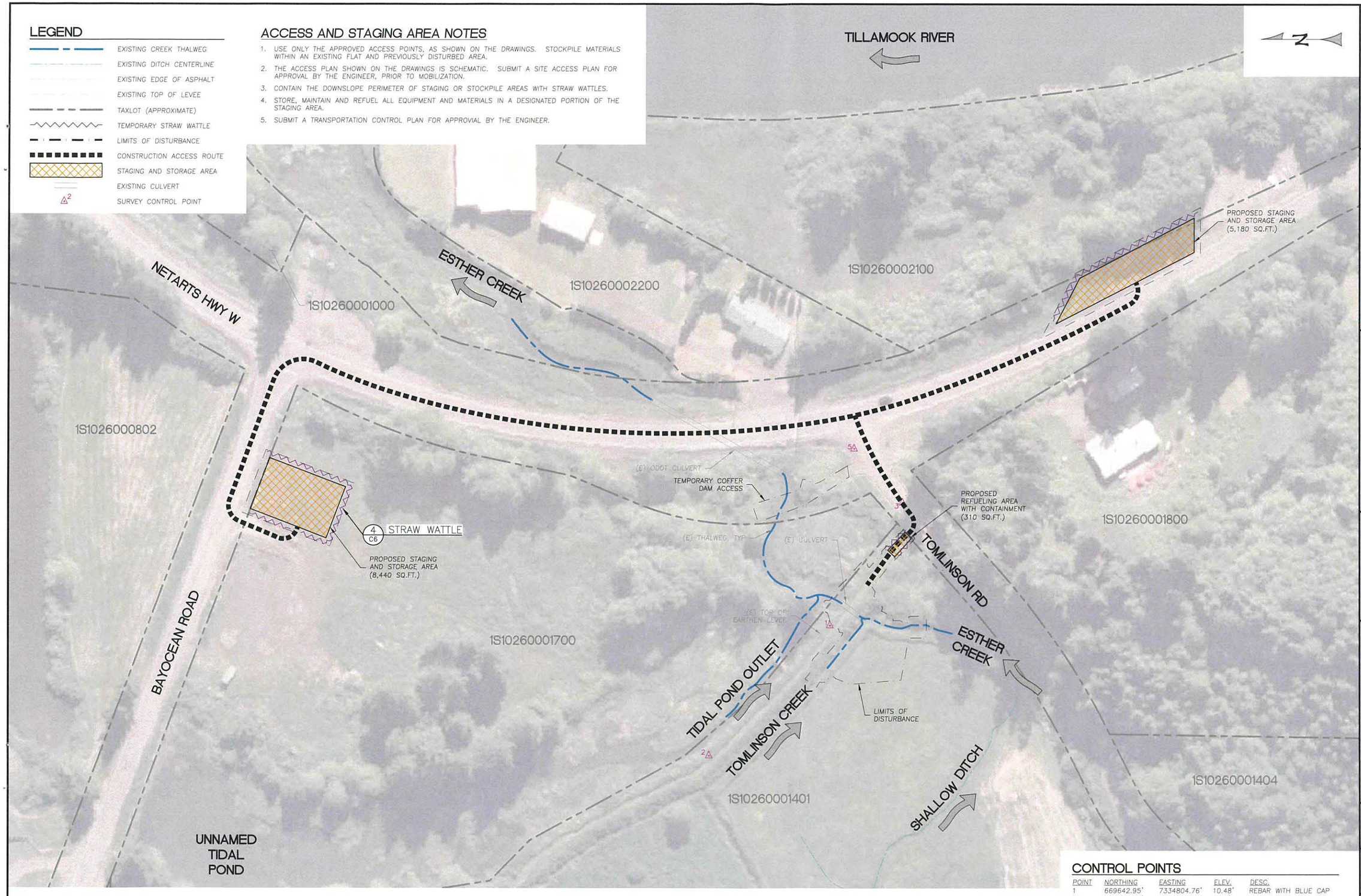
C1 | 1 OF 7

LEGEND

- EXISTING CREEK THALWEG
- EXISTING DITCH CENTERLINE
- EXISTING EDGE OF ASPHALT
- EXISTING TOP OF LEVEE
- TAXLOT (APPROXIMATE)
- TEMPORARY STRAW WATTLE
- LIMITS OF DISTURBANCE
- CONSTRUCTION ACCESS ROUTE
- STAGING AND STORAGE AREA
- EXISTING CULVERT
- $\triangle^{2}$ SURVEY CONTROL POINT

ACCESS AND STAGING AREA NOTES

1. USE ONLY THE APPROVED ACCESS POINTS, AS SHOWN ON THE DRAWINGS. STOCKPILE MATERIALS WITHIN AN EXISTING FLAT AND PREVIOUSLY DISTURBED AREA.
2. THE ACCESS PLAN SHOWN ON THE DRAWINGS IS SCHEMATIC. SUBMIT A SITE ACCESS PLAN FOR APPROVAL BY THE ENGINEER, PRIOR TO MOBILIZATION.
3. CONTAIN THE DOWNSLOPE PERIMETER OF STAGING OR STOCKPILE AREAS WITH STRAW WATTLES.
4. STORE, MAINTAIN AND REFUEL ALL EQUIPMENT AND MATERIALS IN A DESIGNATED PORTION OF THE STAGING AREA.
5. SUBMIT A TRANSPORTATION CONTROL PLAN FOR APPROVIAL BY THE ENGINEER.



CONTROL POINTS

POINT	NORTHING	EASTING	ELEV.	DESC.
1	669642.95'	7334804.76'	10.48'	REBAR WITH BLUE CAP
2	669776.78'	7334661.97'	9.76'	REBAR WITH BLUE CAP
3	669562.97'	7334939.92'	12.27'	REBAR WITH YELLOW CAP
5	669616.13'	7334999.49'	13.80'	REBAR WITH YELLOW CAP

OVERVIEW, ACCESS, AND STAGING PLAN

SCALE: 1" = 50'

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OVERVIEW, ACCESS, AND STAGING PLAN

ESTER CREEK TIDE GATE
60% DESIGN SUBMITTAL

DESIGNED BY:	A.S.
DRAWN BY:	D.H.
CHECKED BY:	J.H.
DATE:	6/13/2023
JOB NO.:	22-012

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0 1"

NETARTS HWY W

TOMLINSON RD

ESTHER CREEK

TIDAL POND OUTLET

TOMLINSON CREEK

AUG

5

3

2

1

N

LEGEND

- EXISTING TOPO SURVEY CONTOURS
- EXISTING LIDAR CONTOURS
- EXISTING CREEK THALWEG
- EXISTING ORDINARY HIGH WATER
- EXISTING MEAN HIGHEST HIGH WATER
- EXISTING HIGHEST TIDE
- EXISTING EDGE OF ASPHALT
- EXISTING TOP OF LEVEE
- EXISTING GATE
- TAXLOT (APPROXIMATE)
- EXISTING WETLAND
- EXISTING CULVERT
- EXISTING POST
- EXISTING WATER VALVE
- EXISTING WATER VAULT
- EXISTING FIRE HYDRANT
- EXISTING POWER POLE
- EXISTING OVERHEAD ELECTRICAL
- EXISTING GUY WIRE
- EXISTING PIER
- EXISTING POST
- EXISTING WATER LEVEL GAGE
- AUG EXISTING GEOTECHNICAL AUGER
- EXISTING CULVERT
- SURVEY CONTROL POINT

EXISTING CONDITIONS

SCALE: 1" = 10'

ELEVATION NOTES:

1. FEMA BASE FLOOD ELEVATION = 13.50 (NAVD88)
2. MAXIMUM RECORDED TIDE LEVEL = 11.56 (NAVD88)
3. MEAN TIDE LEVEL = 4.43 (NAVD88)
4. MEAN HIGHER HIGH WATER = 7.80 (NAVD88)

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0 1"

PROPOSED LEVEE FILL 2H:1V SIDE SLOPES

PROPOSED 72-IN DIA. CULVERT 37-FT LONG SOLID WALL HDPE WITH MUTED TIDAL REGULATOR AND SIDE HINGE GATE INVERT ELEV 1.1

4 C7 STRAW WATTLE

LOG STRUCTURE (HABITAT) 3 C7

0.5H:1V STACKED ROCK WALL OMITTED FROM THIS SHEET FOR GRAPHICAL CLARITY, SEE PROFILE 2/C5.

PROPOSED TOP OF LEVEE (10-FT WIDE, MIN)

ESTHER CREEK ALIGNMENT 2 C5

ESTHER CREEK

0.5H:1V STACKED ROCK WALL OMITTED FROM THIS SHEET FOR GRAPHICAL CLARITY, SEE PROFILE 2/C5.

PROPOSED BANK LAYBACK (TYP)

3 C5 TOMLINSON CREEK ALIGNMENT

DEMOLISH AND DISPOSE (E) 60-IN CMP CULVERT WITH TIDE GATE INV. ELEV = 1.5±

TIDAL POND OUTLET

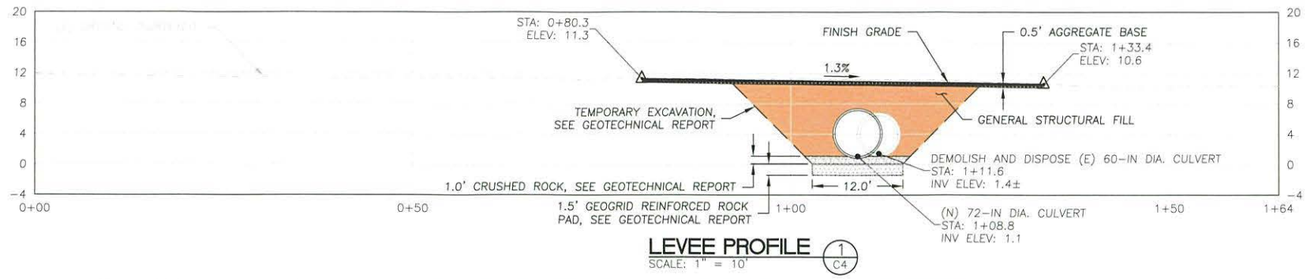
LEVEE ALIGNMENT 1 C4

LOG STRUCTURE (BANK) 3 C7

TOMLINSON CREEK

PROPOSED FENCELINE, LOCATION APPROXIMATE. CONTRACTOR TO VERIFY LENGTH OF NEW FENCE AND TIE IN LOCATIONS TO EXISTING FENCE IN THE FIELD PRIOR TO BID.

GRADING PLAN
SCALE: 1" = 10'



LEVEE PROFILE 1 C4
SCALE: 1" = 10'

LEGEND

- EXISTING TOPO SURVEY CONTOURS
- EXISTING LIDAR CONTOURS
- PROPOSED CONTOURS
- EXISTING FLOW LINE
- PROPOSED CREEK CENTERLINE
- EXISTING ORDINARY HIGH WATER
- EXISTING MEAN HIGHEST HIGH WATER
- EXISTING HIGHEST TIDE
- EXISTING EDGE OF ASPHALT
- EXISTING TOP OF LEVEE
- EXISTING GATE
- TAXLOT (APPROXIMATE)
- PROPOSED FENCE
- LIMITS OF DISTURBANCE
- EXISTING WETLAND
- PROPOSED CHANNEL BOTTOM
- PROPOSED BANK LAYBACK
- PROPOSED INSET FLOODPLAIN
- PROPOSED LEVEE SLOPES
- PROPOSED TOP OF LEVEE
- PROPOSED STACKED ROCK
- PROPOSED SOD MAT WITH LIVE STAKES
- PROPOSED FABRIC WITH LIVE STAKES
- EXISTING CULVERT
- PROPOSED CULVERT
- EXISTING PIER
- EXISTING POST
- PROPOSED BANK LOG STRUCTURE
- PROPOSED HABITAT LOG STRUCTURE

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GRADING PLAN

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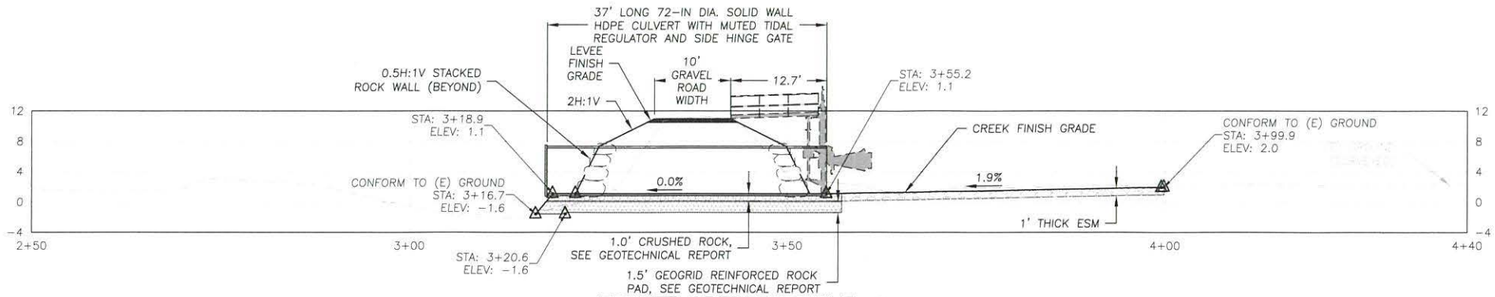
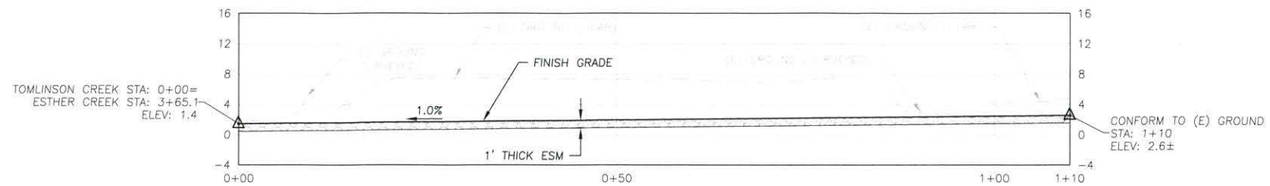


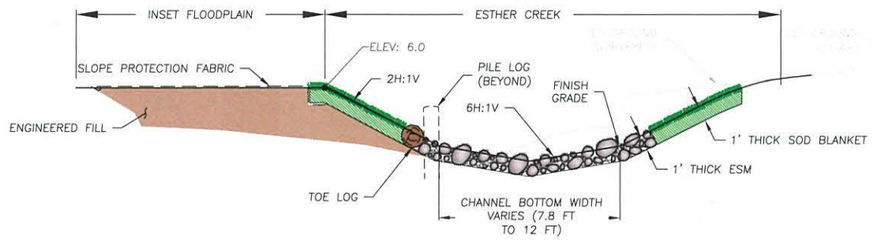
ESTHER CREEK PROFILE (2/C4)

SCALE: 1" = 10'



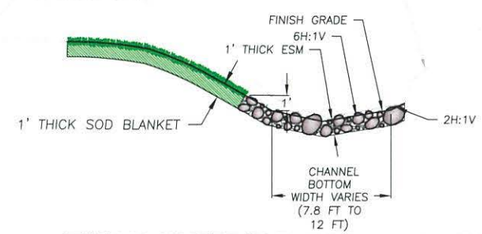
TOMLINSON CREEK PROFILE (3/C4)

SCALE: 1" = 10'



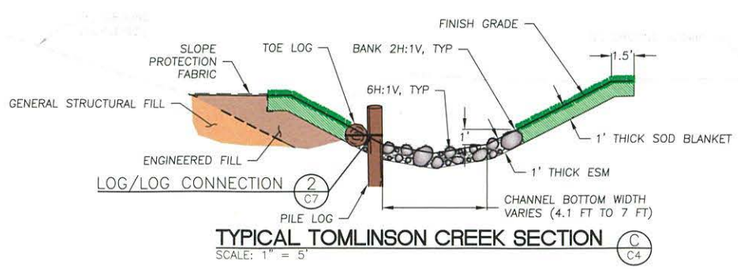
TYPICAL ESTHER CREEK SECTION AT INSET FLOODPLAIN (A/C4)

SCALE: 1" = 5'



TYPICAL UPSTREAM ESTHER CREEK SECTION (B/C4)

SCALE: 1" = 5'



TYPICAL TOMLINSON CREEK SECTION (C/C4)

SCALE: 1" = 5'

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PORTLAND, OR 97205
PH:(503)227-5979 // FAX:(888)819-6847
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PREPARED AT THE REQUEST OF:
TROUT UNLIMITED
7125 BEWLEY CREEK ROAD
TILLAMOOK, OR 97141

CREEK PROFILES AND SECTIONS

ESTER CREEK TIDE GATE

60% DESIGN SUBMITTAL

DESIGNED BY:	A.S.
DRAWN BY:	D.H.
CHECKED BY:	J.H.
DATE:	6/13/2023
JOB NO.:	22-012

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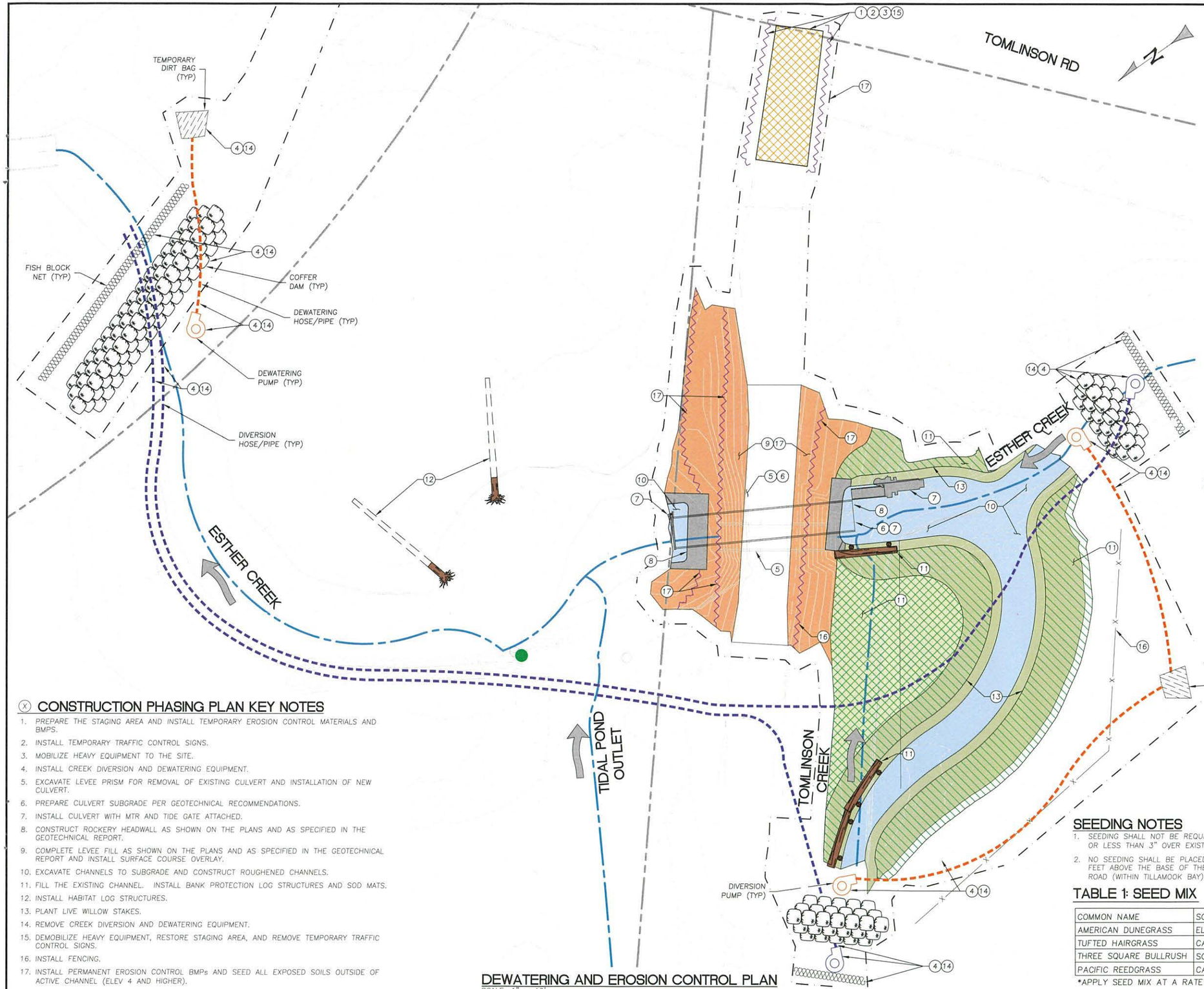
0 1"

C5



LEGEND

- EXISTING TOPO SURVEY CONTOURS
- EXISTING LIDAR CONTOURS
- EXISTING FLOW LINE
- PROPOSED FLOW LINE
- EXISTING EDGE OF ASPHALT
- EXISTING TOP OF LEVEE
- EXISTING GATE
- TAXLOT (APPROXIMATE)
- PROPOSED FENCE
- LIMITS OF DISTURBANCE
- PROPOSED CHANNEL BOTTOM
- PROPOSED BANK LAYBACK
- PROPOSED INSET FLOODPLAIN
- PROPOSED LEVEE SLOPES
- PROPOSED TOP OF LEVEE
- PROPOSED STACKED ROCK
- PROPOSED SOD MAT AND WILLOW STAKES 6-FT O.C., SEE DETAIL 5/C7
- PROPOSED SLOPE PROTECTION FABRIC AND WILLOW STAKES 6-FT O.C., SEE DETAIL 5/C7
- EXISTING CULVERT
- PROPOSED CULVERT
- EXISTING PIER
- EXISTING POST
- PROPOSED BANK LOG STRUCTURE
- PROPOSED HABITAT LOG STRUCTURE
- TEMPORARY DIVERSION PUMP
- TEMPORARY DIVERSION HOSE/PUMP
- TEMPORARY DEWATERING PUMP
- TEMPORARY DEWATERING HOSE/PUMP
- TEMPORARY COFFER DAM
- FISH BLOCK NET
- TEMPORARY DIRT BAG
- KEYNOTES

(X) CONSTRUCTION PHASING PLAN KEY NOTES

1. PREPARE THE STAGING AREA AND INSTALL TEMPORARY EROSION CONTROL MATERIALS AND BMPS.
2. INSTALL TEMPORARY TRAFFIC CONTROL SIGNS.
3. MOBILIZE HEAVY EQUIPMENT TO THE SITE.
4. INSTALL CREEK DIVERSION AND DEWATERING EQUIPMENT.
5. EXCAVATE LEVEE PRISM FOR REMOVAL OF EXISTING CULVERT AND INSTALLATION OF NEW CULVERT.
6. PREPARE CULVERT SUBGRADE PER GEOTECHNICAL RECOMMENDATIONS.
7. INSTALL CULVERT WITH MTR AND TIDE GATE ATTACHED.
8. CONSTRUCT ROCKERY HEADWALL AS SHOWN ON THE PLANS AND AS SPECIFIED IN THE GEOTECHNICAL REPORT.
9. COMPLETE LEVEE FILL AS SHOWN ON THE PLANS AND AS SPECIFIED IN THE GEOTECHNICAL REPORT AND INSTALL SURFACE COURSE OVERLAY.
10. EXCAVATE CHANNELS TO SUBGRADE AND CONSTRUCT ROUGHENED CHANNELS.
11. FILL THE EXISTING CHANNEL. INSTALL BANK PROTECTION LOG STRUCTURES AND SOD MATS.
12. INSTALL HABITAT LOG STRUCTURES.
13. PLANT LIVE WILLOW STAKES.
14. REMOVE CREEK DIVERSION AND DEWATERING EQUIPMENT.
15. DEMOBILIZE HEAVY EQUIPMENT, RESTORE STAGING AREA, AND REMOVE TEMPORARY TRAFFIC CONTROL SIGNS.
16. INSTALL FENCING.
17. INSTALL PERMANENT EROSION CONTROL BMPs AND SEED ALL EXPOSED SOILS OUTSIDE OF ACTIVE CHANNEL (ELEV 4 AND HIGHER).

DEWATERING AND EROSION CONTROL PLAN

SCALE: 1" = 10'

SEEDING NOTES

1. SEEDING SHALL NOT BE REQUIRED FOR AREAS WHERE SOIL IS SPREAD TO A DEPTH EQUAL TO OR LESS THAN 3" OVER EXISTING VEGETATED SURFACES.
2. NO SEEDING SHALL BE PLACED ON THE BASE OF CHANNELS AND THE FIRST TWO (2) VERTICAL FEET ABOVE THE BASE OF THE CHANNELS. NO SEEDING SHALL BE PLACED NORTHEAST OF THE ROAD (WITHIN TILLAMOOK BAY). ALL OTHER EXPOSED SOILS SHALL BE SEEDED AND MULCHED.

TABLE 1: SEED MIX

COMMON NAME	SCIENTIFIC NAME	% COMPOSITION (BY WEIGHT)
AMERICAN DUNEGRASS	ELYMUS MOLLIS	25
TUFTED HAIRGRASS	CAREX LYNGBYEI	25
THREE SQUARE BULLRUSH	SCHOENOPLECTUS AMERICANUS	25
PACIFIC REEDGRASS	CALAMAGROSTIS NUTKAENESIS	25

*APPLY SEED MIX AT A RATE OF 40 LBS/ACRE

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DEWATERING AND EROSION CONTROL PLAN

ESTER CREEK TIDE GATE

60% DESIGN SUBMITTAL

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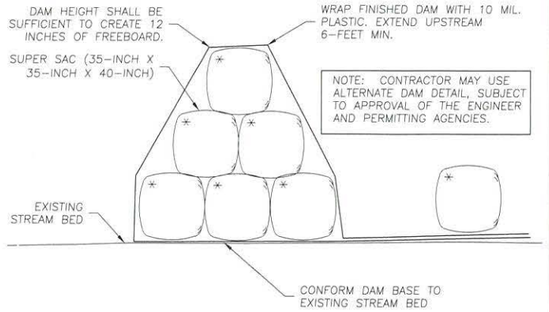
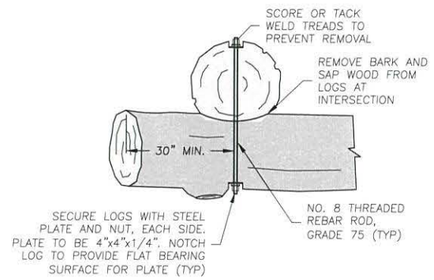
0 1"

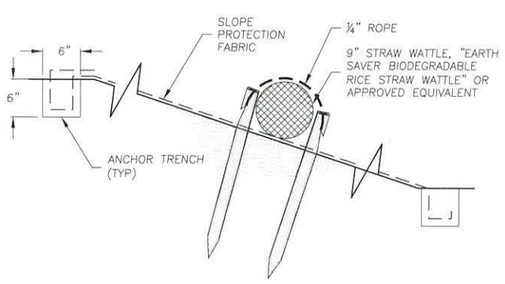
C6



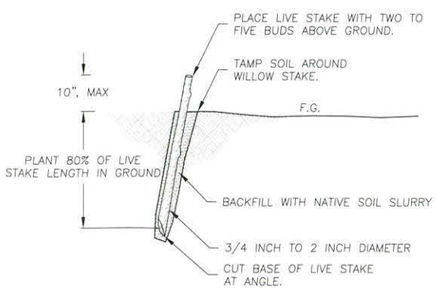
COFFER DAM PROFILE (1 C6)
SCALE: 1" = 5'



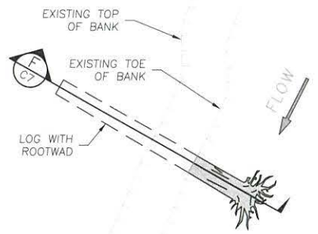
LOG/LOG CONNECTION (2 C7)
SCALE: 1" = 2'



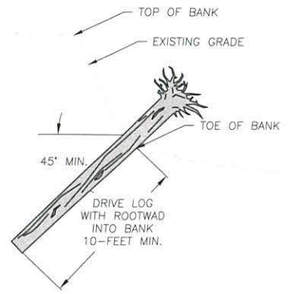
STRAW WATTLE (4 C2,C4,C6)
SCALE: 1" = 1'



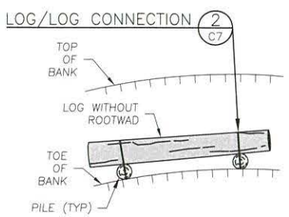
LIVE STAKE (5 C6)
SCALE: 1" = 2'



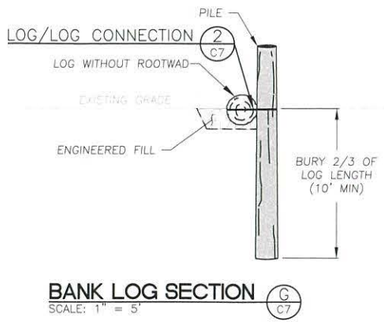
HABITAT LOG PLAN
SCALE: 1" = 5'



HABITAT LOG SECTION (F C6)
SCALE: 1" = 5'



BANK LOG PLAN
SCALE: 1" = 5'



BANK LOG SECTION (G C7)
SCALE: 1" = 5'

LOG STRUCTURE (3 C4)
SCALE: 1" = 5'

LOG STRUCTURE NOTES

1. PLACEMENT LOCATIONS: LOG STRUCTURE LOCATIONS AND DESIGNS ARE SHOWN CONCEPTUALLY DUE TO THE INHERENT VARIABILITY OF THE MATERIAL PROPERTIES. THE DESIGN REQUIRES THAT THE ENGINEER WILL OBSERVE CONSTRUCTION OF THE LOG STRUCTURES TO ENSURE THE INTENT OF THE DESIGN IS MET. OBSERVATIONS MUST INCLUDE LOG SELECTION, PLACEMENT, AND BACKFILLING. ANY LOG STRUCTURES CONSTRUCTED WITHOUT THE ENGINEER PRESENT ON-SITE MAY RESULT IN REJECTION OF THE WORK BY THE ENGINEER.

2. LOGS: LOGS SHALL BE DOUGLAS FIR OR HEMLOCK, SOUND AND FREE OF SIGNIFICANT DECAY. MATERIALS FOR USE IN THE STRUCTURES SHALL MEET THE FOLLOWING SIZE CRITERIA:

BANK TOE PROTECTION LOG STRUCTURES:

ITEM	DIAMETER	LENGTH	COUNT
TOE LOG	18"-24" (MIN. 18" AT ANY POINT)	12-15'	3
PILE LOGS	12"-18" (MIN. 12" AT ANY POINT)	10'-15'	6

ITEM	COUNT
LOG/LOG CONNECTIONS	6

HABITAT LOGS:

ITEM	DIAMETER	LENGTH	COUNT
LOG WITH ROOTWAD	18"-24" (MIN. 18" AT ANY POINT)	15'-20'	2

STREAM/WETLAND CONSTRUCTION BEST MANAGEMENT PRACTICES

1. ALL WORK WITHIN THE WETTED CHANNEL SHALL BE COMPLETED WITHIN THE IN-WATER WORK WINDOW AS LISTED IN THE PERMITS.
2. FISH RELOCATION
   - 2.1. SHALL BE PERFORMED BY THE CONTRACTOR (UNLESS STATED OTHERWISE IN THE CONTRACT DOCUMENTS) PRIOR TO PERFORMING ANY CONSTRUCTION WITHIN THE WETTED CHANNEL. ALL FISH RELOCATION WORK SHALL BE SUPERVISED BY A QUALIFIED FISHERIES BIOLOGIST WITH EXPERIENCE IN WORK AREA ISOLATION, AND A VALID ODFW SCIENTIFIC TAKE PERMIT. PERFORM THE FOLLOWING STEPS IN THE ORDER LISTED FOR FISH RELOCATION:
   - 2.2. CONDUCT FISH RELOCATION ACTIVITIES DURING PERIODS OF THE DAY WITH THE COOLEST AIR AND WATER TEMPERATURES POSSIBLE.
   - 2.3. ISOLATE THE WETTED STREAM CHANNEL AT THE UPSTREAM END OF THE LIMITS OF DISTURBANCE WITH BLOCK NETS. CLOSELY MONITOR ALL BLOCK NETS THROUGHOUT CONSTRUCTION TO ENSURE THEY STAY SECURED TO THE BANKS AND FREE OF ORGANIC ACCUMULATION.
   - 2.4. CONDUCT AN INITIAL SWEEP OF THE WETTED CHANNEL WITH SEIN NETS WITHIN THE WORK ZONE FROM UPSTREAM TO DOWNSTREAM.
   - 2.5. ISOLATE THE DOWNSTREAM END OF THE WETTED CHANNEL WITH BLOCK NETS.
   - 2.6. INSTALL DEWATERING EQUIPMENT AND BEGIN SLOWLY DEWATERING WHILE CONTINUING FISH RELOCATION ACTIVITIES.
   - 2.7. ELECTROFISHING SHALL FOLLOW NMFS (2000) GUIDELINES
   - 2.8. FISH TRANSPORT
     - 2.8.1. MINIMIZE THE TIME FISH ARE IN TRANSPORT CONTAINERS.
     - 2.8.2. KEEP TRANSPORT CONTAINERS IN SHADED AREA.
     - 2.8.3. LIMIT THE NUMBER OF FISH WITHIN CONTAINERS AND ONLY KEEP FISH OF RELATIVELY COMPARABLE SIZE WITHIN A GIVEN CONTAINER.
     - 2.8.4. USE AERATORS OR REPLACE THE WATER IN THE CONTAINERS AT LEAST EVERY 15 MINUTES WITH COLD CLEAR WATER.
     - 2.8.5. RELEASE FISH IN AN AREA UPSTREAM OF THE CONSTRUCTION AREA WITH ADEQUATE COVER AND FLOW REFUGE. DOWNSTREAM IS ACCEPTABLE PROVIDED THE RELEASE SITE IS BELOW THE INFLUENCE OF CONSTRUCTION.
     - 2.8.6. MONITOR AND RECORD FISH PRESENCE, HANDLING, AND INJURY/MORTALITY DURING ALL PHASES OF FISH RELOCATION AND SUBMIT A FISH SALVAGE REPORT AS REQUIRED BY PERMITS WITHIN 60 DAYS.
3. DEWATERING/BYPASS FLOWS
   - 3.1. PUMPS: WHENEVER A PUMP IS USED TO DEWATER THE ISOLATION AREA AND ESA-LISTED FISH MAY BE PRESENT, A FISH SCREEN WILL BE USED THAT MEETS THE MOST CURRENT VERSION OF NMFS'S FISH SCREEN CRITERIA (NMFS 2011A). NMFS APPROVAL IS REQUIRED FOR PUMPING AT A RATE THAT EXCEEDS 3 CFS.
   - 3.2. TREAT ALL DISCHARGE WATER FROM DEWATERING ACTIVITIES WITHIN THE CONSTRUCTION AREA USING BEST MANAGEMENT PRACTICES TO REMOVE DEBRIS, SEDIMENT, PETROLEUM PRODUCTS, AND ANY OTHER POLLUTANTS LIKELY TO BE PRESENT.DEWATER THE SHORTEST LINEAR EXTENT OF WORK AREA PRACTICABLE.
   - 3.3. FLOW BYPASS SHALL BE PERFORMED AS SHOWN ON THE DRAWINGS, OR AS DIRECTED BY THE ENGINEER IN THE FIELD.
   - 3.4. RE-WATERING OF THE WORK AREA FOLLOWING CONSTRUCTION SHALL BE PERFORMED SLOWLY TO PREVENT LOSS OF SURFACE FLOW DOWNSTREAM AND ANY SUDDEN INCREASE IN STREAM TURBIDITY.
4. TEMPORARY STREAM CROSSINGS
   - 4.1. MINIMIZE THE NUMBER OF STREAM CROSSINGS TO MAXIMUM EXTENT PRACTICABLE.
   - 4.2. NO STREAM CROSSINGS SHALL BE ALLOWED IN ACTIVE SPAWNING SITES, WHEN HOLDING ADULT LISTED FISH ARE PRESENT, OR WHEN EGGS OR ALEVINS ARE IN THE GRAVEL.
   - 4.3. TEMPORARY CROSSINGS SHALL NOT OCCUR IN AREA THAT MAY INCREASE THE RISK OF CHANNEL RE-ROUTING OR AVULSION, OR IN POTENTIAL SPAWNING HABITAT.
   - 4.4. CONSTRUCTION EQUIPMENT AND VEHICLES SHALL CROSS STREAMS AT RIGHT ANGLES TO THE MAIN CHANNEL.
   - 4.5. CONSTRUCTION EQUIPMENT AND VEHICLES SHALL ONLY BE ALLOWED TO CROSS STREAMS IN THE WET WHERE THE STREAMBED IS BEDROCK, OR WHERE MATS OR OFF-SITE LOGS ARE PLACED IN THE STREAM AND USED AS A CROSSING.
   - 4.6. DECOMMISSION ALL TEMPORARY STREAM CROSSINGS IMMEDIATELY FOLLOWING CONSTRUCTION AND RETURN AREA TO PRECONSTRUCTION CONDITIONS.

EROSION CONTROL NOTES

1. THE ESCP MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, UPGRADE THESE MEASURES AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS.
2. PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION.
3. IDENTIFY, MARK, AND PROTECT (BY FENCING OFF OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS.
4. PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED.
5. EROSION AND SEDIMENT CONTROL MEASURES INCLUDING PERIMETER SEDIMENT CONTROL MUST BE IN PLACE BEFORE VEGETATION IS DISTURBED AND MUST REMAIN IN PLACE AND BE MAINTAINED, REPAIRED, AND PROMPTLY IMPLEMENTED FOLLOWING PROCEDURES ESTABLISHED FOR THE DURATION OF CONSTRUCTION, INCLUDING PROTECTION FOR ACTIVE STORM DRAIN INLETS AND CATCH BASINS AND APPROPRIATE NON-STORMWATER POLLUTION CONTROLS.
6. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES AND FOR ALL ROADWAYS INCLUDING GRAVEL ROADWAYS.
7. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS.
8. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPS MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES.
9. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE.
10. USE BMPS TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, LEFTOVER PAINTS, SOLVENTS, AND GLUES FROM CONSTRUCTION OPERATIONS.
11. FUELING ACTIVITIES MUST BE LOCATED A MINIMUM OF 150 FEET FROM ORDINARY HIGH WATER AND SENSITIVE WATERS, INCLUDING WETLANDS OR WITHIN CONTAINED AREA AS SHOWN ON THE DRAWINGS.
12. IMPLEMENT THE FOLLOWING BMPS WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES.
13. USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL.
14. ONSITE VEHICLE SPEED ON UPAVED SURFACES SHALL BE LIMITED TO 5 MPH.
15. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE.
16. IF A STORMWATER TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
17. TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR.
18. AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPS MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS.
19. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND DURING WET WEATHER.
20. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL.
21. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME.
22. THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS, DRAINAGE WAYS, OR WETLANDS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS.
23. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE.
24. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE.
25. PROVIDE PERMANENT EROSION CONTROL MEASURES ON ALL EXPOSED AREAS AS THEY ARE COMPLETED. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. HOWEVER, DO REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AS EXPOSED AREAS BECOME STABILIZED, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. PROPERLY DISPOSE OF CONSTRUCTION MATERIALS AND WASTE, INCLUDING SEDIMENT RETAINED BY TEMPORARY BMPS.

WATERWAYS CONSULTING INC.
1020 SW TAYLOR STREET, STE. 380
PORTLAND, OR 97205
PH:(503)227-5979 // FAX:(888)819-6847
WWW.WATWAYS.COM

PRELIMINARY

NOT FOR CONSTRUCTION

PREPARED AT THE REQUEST OF:
TROUT UNLIMITED
7125 BEWLEY CREEK ROAD
TILLAMOOK, OR 97141

DETAILS AND NOTES

ESTER CREEK TIDE GATE

60% DESIGN SUBMITTAL

DESIGNED BY:	A.S.
DRAWN BY:	D.H.
CHECKED BY:	J.H.
DATE:	6/13/2023
JOB NO.:	22-012

BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS
0 1"

C7

EXHIBIT

C

Wetland Land Use Notice Response

Response Page

Department of State Lands (DSL) WN# *

WN2024-0227

Responsible Jurisdiction

Staff Contact	Jurisdiction Type	Municipality
Melissa Jenck	County	Tillamook

Local case file #	County
851-23-000514-PLNG	Tillamook

Activity Location

Township	Range	Section	QQ section	Tax Lot(s)
01S	10W	26		1401

Street Address

2 Tomlinson Rd

Address Line 2

City	State / Province / Region
Tillamook	OR

Postal / Zip Code	Country
97141	Tillamook

Latitude	Longitude
45.453615	-123.880724

Wetland/Waterway/Other Water Features

- [x] There are/may be wetlands, waterways or other water features on the property that are subject to the State Removal-Fill Law based upon a review of wetland maps, the county soil survey and other available information.
- [x] The National Wetlands Inventory shows wetland, waterway or other water features on the property
- [x] The county soil survey shows hydric (wet) soils on the property. Hydric soils indicate that there may be wetlands.
- [x] The property includes or is adjacent to designated Essential Salmonid Habitat.
- [x] The property includes or is adjacent to state-owned waters.

Your Activity

☑ It appears that the proposed project **will** impact Essential Salmonid Habitat and, therefore, **requires** a State permit.

☑ An onsite inspection by a qualified wetland consultant is recommended prior to site development to determine if the site has wetlands or other waters that may be regulated. The determination or delineation report should be submitted to DSL for review and approval. Approved maps will have a DSL stamp with approval date and expiration date.

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.

☑ A state permit is required for any amount of fill, removal, and/or other ground alteration in Essential Salmonid Habitat and within adjacent off-channel rearing or high-flow refugia habitat with a permanent or seasonal surface water connection to the stream.

Closing Information

Additional Comments

Based on review of the submitted 60% design plans, it appears that the proposed project (replace existing culvert & tidegate, realign portion of Tomlinson Creek) will impact Essential Salmonid Habitat (ESH) creeks and wetlands, and therefore requires a state Removal-Fill permit.

It's possible that the applicant may have been in communication with DSL's Aquatic Resource Coordinator for Tillamook County in early design phases, in which case I am happy to discuss DSL's recommendations further. However, DSL does not have appear to have a wetland delineation report or permit application on file for this project, which is required for projects in ESH areas.

It is recommended that the applicant hire a qualified wetland consultant to prepare a wetland & waters delineation report for DSL's review and approval prior to submitting a permit application. Alternatively, the applicant can assume that ALL proposed ground-disturbance activities (including staging areas) take place in jurisdictional wetlands & waters, in which case a permit application that accounts for appropriate mitigation may be accepted in place of delineation report approval. Please be sure to confirm with DSL's Aquatic Resource Coordinator (currently vacant, but covered by Bethany Harrington) that this second approach is appropriate for the project before application submittal.

This is a preliminary jurisdictional determination and is advisory only.

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

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

Contact Information

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

Response Date

4/30/2024

Response by:	Response Phone:
Jessica Salgado	541-408-1892

Melissa Jenck

From: BRADLEY Robert * ODFW <Robert.BRADLEY@odfw.oregon.gov>
Sent: Friday, March 29, 2024 3:22 PM
To: Melissa Jenck
Subject: EXTERNAL: RE: Notice of Application - Estuary Creek DP 851-23-000514-PLNG

Melissa,

This is a good project with benefits to the stream, fish and the landowner. ODFW fish passage approval still needs to be obtained (we have been working with the applicant but the approval has not been issued yet).

Robert

Robert W. Bradley
District Fish Biologist
Oregon Department of Fish and Wildlife
North Coast Watershed District
4907 Third St
Tillamook, OR 97141
503-842-2741 x18613 (w)
503-842-8385 (fax)

From: Melissa Jenck <Melissa.Jenck@tillamookcounty.gov>
Sent: Friday, March 29, 2024 9:20 AM
To: Melissa Jenck <Melissa.Jenck@tillamookcounty.gov>
Cc: Lynn Tone <Lynn.Tone@tillamookcounty.gov>
Subject: Notice of Application - Estuary Creek DP 851-23-000514-PLNG

Good afternoon,

Please see the Notice of Application for an Estuary & Floodplain Development Permit for Liz Ransom and Eric Peterson. The proposal is to replace an existing culvert and tidegate with a new culvert and tidegate.

A copy of the notice can be found on the Land Use Application page here.

Sincerely,

***** Please note that the Tillamook County domain has changed, and my email address is now Melissa.Jenck@tillamookcounty.gov so 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

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 https://www.tillamookcounty.gov/commdev *to access the appointment scheduler portal.*