



Coos County Land Use Permit Application

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

\$2,184 → invoice

FILE NUMBER: ACU-24-030/FP-24-003

Date Received: 7/9/24 Receipt #: _____ Invoiced
Received by: C. Carr

This application shall be filled out electronically. If you need assistance please contact staff.
If the fee is not included the application will not be processed.
(If payment is received on line a file number is required prior to submittal)

LAND INFORMATION

A. Land Owner(s) Lee and Virginia Webster; Oliver Sorensen
Mailing address: 62061 Ross Inlet Road, Coos Bay, OR 97420
Phone: 541-404-7091 (Webster); 541-404-5017 (Sorensen) Email: sunee333@hotmail.com (webster)

Township:	Range:	Section:	¼ Section:	1/16 Section:	Tax lots:
<u>26S</u>	<u>13W</u>	<u>13</u>	<u>A</u>	<u> </u>	<u>900</u>
<u>26S</u>	<u>13W</u>	<u>13</u>	<u>A</u>	<u> </u>	<u>200</u>

Tax Account Number(s): 26S13W13ATL009 Zone: Select Zone Exclusive Farm Use (EFU)
Tax Account Number(s) 26S13W13ATL002 Please Select

B. Applicant(s) Coos Watershed Association
Mailing address: PO Box 388 Central Ave, Coos Bay OR 97420
Phone: 541-888-5922

C. Consultant or Agent: _____
Mailing Address _____
Phone #: _____ Email: _____

Type of Application Requested

- | | | |
|--|---|---|
| <input type="checkbox"/> Comp Plan Amendment | <input checked="" type="checkbox"/> Administrative Conditional Use Review - ACU | <input type="checkbox"/> Land Division - P, SUB or PUD |
| <input type="checkbox"/> Text Amendment | <input type="checkbox"/> Hearings Body Conditional Use Review - HBCU | <input type="checkbox"/> Family/Medical Hardship Dwelling |
| <input type="checkbox"/> Map - Rezone | <input type="checkbox"/> Variance - V | <input type="checkbox"/> Home Occupation/Cottage Industry |

Special Districts and Services

Water Service Type: Select type of Water Service Sewage Disposal Type: Select type of Sewage System
School District: Select School District Fire District: Select Fire District

Please include the supplement application with request. If you need assistance with the application or supplemental application please contact staff. Staff is not able to provide legal advice. If you need help with findings please contact a land use attorney or consultant.

Any property information may be obtained from a tax statement or can be found on the County Assessor's webpage at the following links: [Map Information](#) Or [Account Information](#)

ACCESS INFORMATION

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

Property Address: 62061 Ross Inlet Rd, Coos Bay., OR 97420

Type of Access: County Road Name of Access: Webster property driveway

Is this property in the Urban Growth Boundary? No

Is a new road created as part of this request? No

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

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

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

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

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

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

Coos County Road Department Use Only

Roadmaster or designee: _____

Driveway Parking Access Bonded Date: Receipt # _____

File Number: DR-21-

SANITATION INFORMATION

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

Water Service Type: Select

Sewage Disposal Type: Select

Please check if this request is for industrial, commercial, recreational or home base business use and complete the following questions:

- How many employees/vendors/patrons, total, will be on site?
- Will food be offered as part of the an on-site business?
- Will overnight accommodations be offered as part of an on-site business?
- What will be the hours of operation of the business?

Please check if the request is for a land division.

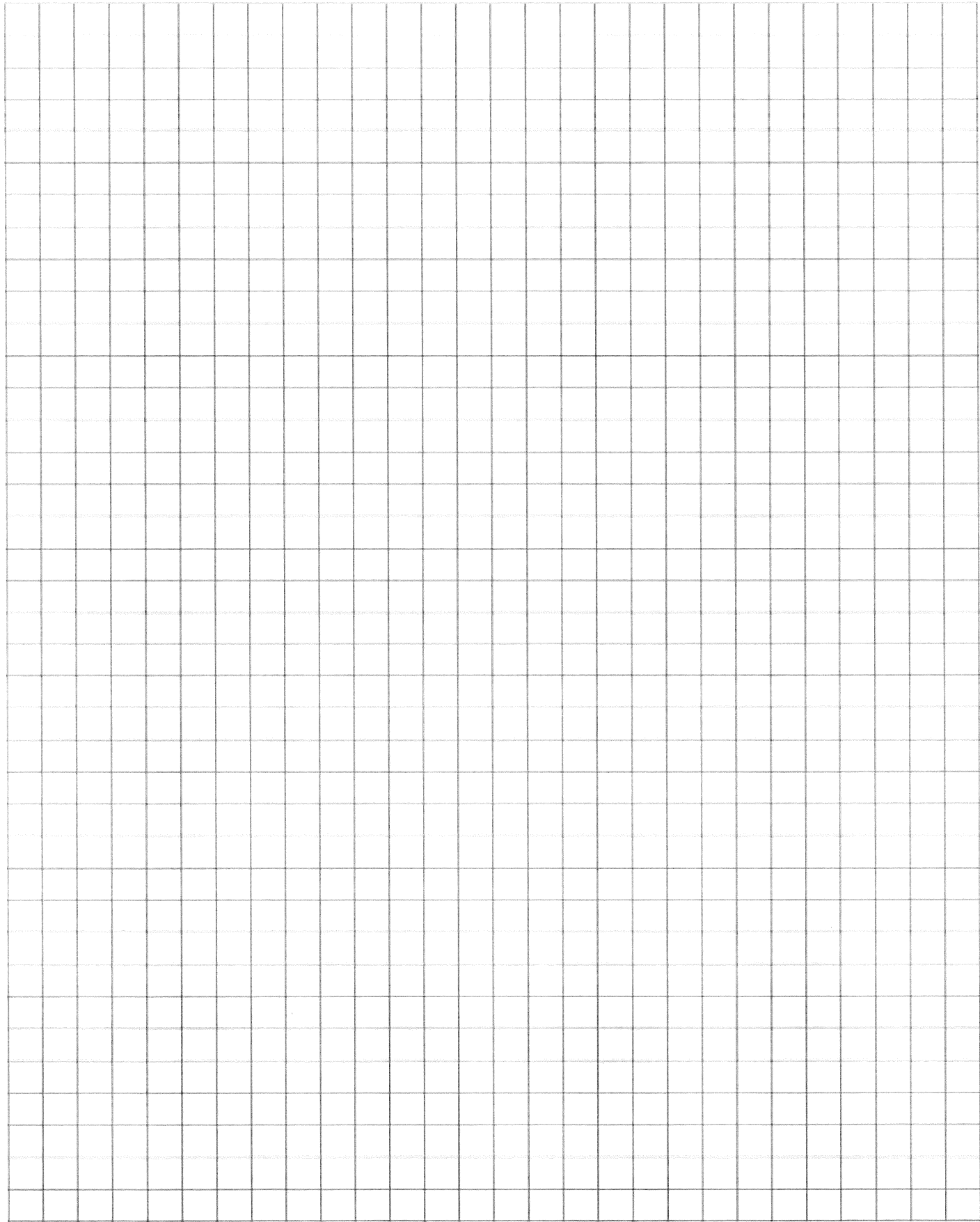
Coos County Environmental Health Use Only:

Staff Reviewing Application: _____

Staff Signature: _____

- This application is found to be in compliance and will require no additional inspections
- This application is found to be in compliance but will require future inspections
- This application will require inspection prior to determining initial compliance. The applicant shall contact Coos Health and Wellness, Environmental Health Division to make an appointment.

Additional Comments:



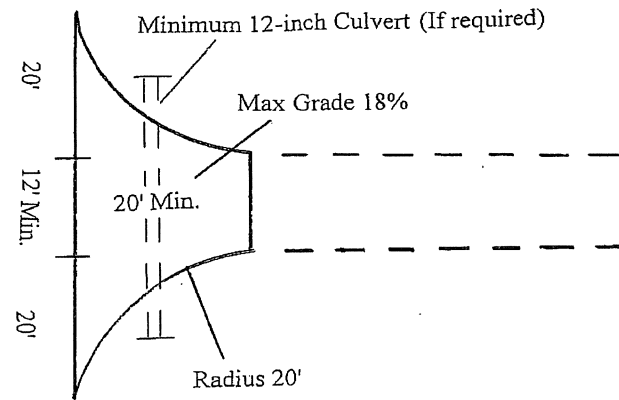
A private road which is created to provide ingress or egress in conjunction with the use of land for forestry, mining or agricultural purposes shall not be required to meet minimum road, bridge or driveway standards set forth in this ordinance, nor are such resource-related roads, bridges or driveways reviewable by the County. However, all new and re-opened forestry, mining or agricultural roads shall meet the access standards listed in this section.

Forestry, Mining or Agricultural Access Standard drawing
Sight Distance Requirements (at the approach entrance)

- Speed less than 35 mph – 100' both directions
- Speed greater than 35 mph – 150' both directions

All Weather Surfaces – minimum aggregate base as required by the Roadmaster
The access will be developed from the edge of the developed road.

Figure 7.1.450

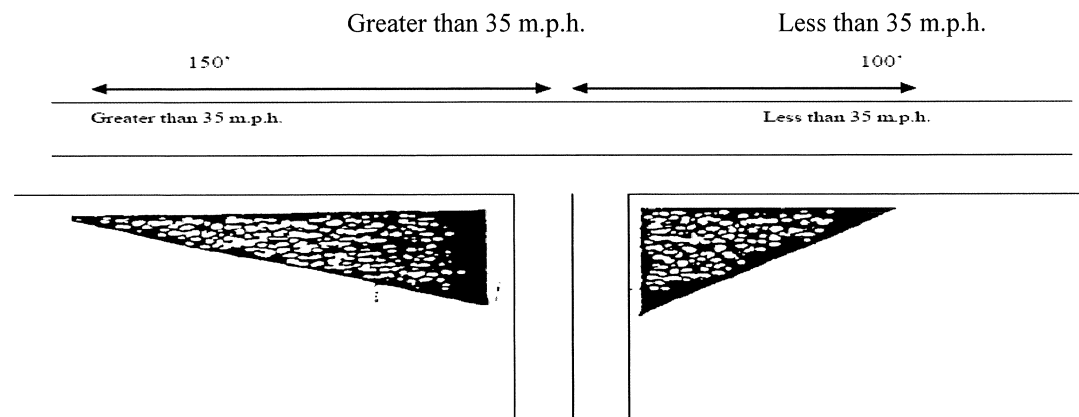


Construct appropriate ditches to prevent water runoff from discharging from the land onto a road under county jurisdiction. Pursuant to ORS 368.256 creation of a road hazard is prohibited.

VISION CLEARANCE TRIANGLE:

The following regulations shall apply to all intersections of streets and roads within all districts in order to provide adequate visibility for vehicular traffic. There shall be no visual obstructions over thirty-six (36) inches in height within the clear vision area established herein. In addition to street or road intersections, the provisions of this section shall also apply to mobile home park, recreational vehicle park, and campground accesses (entrances or exists).

The clear vision area shall extend along the right-of-way of the street for a minimum of 100 feet where the speed limit is less than 35 M.P.H.; and not less than 150 feet where the speed limit is greater than 35 m.p.h. The clear vision area shall be effective from a point in the center of the access not less than 25 feet back from the street right-of-way line.



Other auditorium, meeting room.	1 space per 4 seats or every 8 feet of bench length. 1 Bicycle space
Single-family dwelling.	2 spaces per dwelling unit.
Two-family or multi-family dwellings.	1 ½ spaces per dwelling unit. 1 bicycle space per unit for buildings with 4 or more units.
Motel, hotel, rooming or boarding house.	1 space per guest accommodation plus 1 space per employee.
Mobile home or RV park.	1 ½ spaces per mobile home or RV site.

Parking lot standards – Use the table above along with the area available to calculate the number of spaces required and determine the type of parking lot that needs to be created. The table below explains the spacing and dimensions to be used.

Minimum Horizontal Parking Widths for Standard Automobiles					
	One-way Parallel	30 deg	45 deg	60 deg	90 deg
Figures	A	B	C	D	E
Single row of Parking					
Parking Aisle	9'	20'	22'	23'	20'
Driving Aisle	12'	16'	17'	20'	24'
Minimum width of module (row and aisle)	21'	36'	39'	43'	44'
Figures #'s	F	G	H	I	J
Two Rows of Parking					
Parking Aisle	18'	40'	44'	46'	40'
Driving Aisle	12'	16'	17'	20'	24'
Minimum width of module (row and aisle)	30'	56'	61'	66'	64'

For figures please see Coos County Zoning and Land Development Ordinance (CCZLDO) § 7.5.175.

Please note: If you are developing in any wetlands or floodplain please contact Department of State Lands to ensure you are not required to obtain a state permit.

- Installed 1 fish passage bridge (50% of original scope)
- Installed 12,000' of livestock exclusion fencing (100% of original scope)
- Removed 2 culverts (67% of original scope)
- Planted ~4,600 bareroot plants and ~8,250 cuttings (84% and 75% of original scope respectively)
- Spread 3 pounds of native seed (100% of original scope)
- Maintained riparian planting area for 5 years (100% of original scope)

Because the project did not hydrologically function as intended, we have hired an engineer to examine the problem. He propose two remedial actions. Firstly, to install beaver deceivers on active beaver dam sites. We did this during the spring and summer of 2023, with remarkable success. A majority of the project site was satisfactorily drained, allowing renewed agricultural activity. Secondly, he proposed to re-excavate an undersized portion of channel. This portion of channel appears to be a major point of constriction. It cannot convey the total volume moving downstream, even during low-flow periods, and inundates a substantial portion of the Webster property. Even following the installation of the beaver deceivers, this portion of the Webster property remains flooded. With this permit application we are requesting authorization to complete this re-excavation.

The attached design documents fully detail the scope of this earthwork. In brief, we plan to re-excavate ~0.3 miles of stream channel. This re-excavation will not significantly expand the footprint of the existing channel. Based on topographic surveys and channel cross-section surveys, we expect this will primarily be an exercise in deepening the channels, with minimal widening necessary. Fill removed from this activity will be utilized to fill existing ditches on site. Those ditches were planned to be filled in 2016, but because the project was not fully completed there was not sufficient material generated to completely fill them. Any surplus fill will be thin spread to a maximum depth of 3" across low areas of the adjoining pasture land. We will also create some shallow drainage contours connecting low spots in the pasture to the channel network.

Description of the Property in Question

The Webster property (TLID 26S13W13ATL0090000) is 75.05 acres. It is accessed via a gravel driveway off of Ross Inlet Road. Approximately 1/3 of the site is low-lying wetland with grassy vegetation. The remaining 2/3 of the site is gently rolling upland, which includes timbered land, a house, and two out buildings. The wetland area is being utilized as cattle pasture, and before it became inundated was also used for hay production. The proposed project will be taking place within the low-lying wetland area.

The Sorensen property (TLID 26S13WATL0020000) is 29.10 acres. It is accessed via a gravel driveway off of Ross Inlet Road. Approximately 4/5 of the site is low-lying wetland with grassy vegetation. The remaining 1/5 of the site is gently rolling upland, which is timbered. There is a

TECHNICAL MEMORANDUM

To: Ed Cope, Project Manager, Coos Watershed Association

From: Jake Hofeld, P.E. Waterways Consulting, Inc.

Date: June 12, 2024

Re: Ross Slough Drainage Improvement Project – FEMA Hydraulic Analysis

Introduction

Waterways Consulting Inc. (Waterways) has been retained by the Coos Watershed Association (CWA) to design and evaluate the hydraulic effects on the Ross Slough (tributary to Catching Slough/Coos River) during a 100-year base flood discharge from the proposed grading to expand the size of the existing channel and using the excavated materials to fill low spots in the adjacent floodplain. The main objectives of this project are to improve drainage and reduce fish entrapment. The project is located south of the City of Coos Bay in Coos County at 62058 Ross Inlet Road, east of the residential structure (see Sheet C1, **Attachment A**). The entire project area is located within the FEMA designated Zone A special flood hazard area (FIRM Panels 41011C0330F and 41011C0335F, effective December 7, 2018, **Attachment B**). No floodway has been established for the project area. The proposed project will involve grading approximately 1,990 cubic yards of materials within the special flood hazard area.

The following report has been prepared to support floodplain development permitting with Coos County for the proposed project and presents our hydraulic analysis of existing and proposed conditions for the 100-year flood event along Ross Slough within the vicinity of the proposed grading. This report is based on the guidance outlined in Section 4.11.251.7 of the Coos County Zoning and Land Use Ordinances which requires, "...a licensed engineer's certification that the "other development" shall not: b. result in a cumulative increase of more than one foot during the occurrence of the base flood discharge if the development will occur within a designated flood plain outside of a designated floodway."

HYDRAULIC MODELING METHODOLOGY

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) has mapped Ross Slough at the project area as a Special Flood Hazard Area (SFHA) Zone A which means that FEMA has not prepared a hydraulic model of the area and the flood plain boundary is approximated. Waterways prepared a hydraulic model for the project area using the United States Army Corps of Engineers (USACE) Hydraulic Engineering Center River Analysis Software (HEC-RAS), version 6.5 to determine the base flood elevations associated with the project site. The attached design drawings show existing and proposed grading extents. All elevations are referenced to a NAVD 88 vertical datum. This model was used as the basis for all hydraulic modeling.

A one-dimensional hydraulic model was completed to characterize the existing and proposed conditions at the project site during the 100-year recurrence interval peak flow at Ross Slough. A total of 16 cross sections across the channel and floodplain were developed for this analysis as shown on **Figure 1**.

CERTIFICATION

This is to certify that I am a duly qualified engineer licensed to practice in the State of Oregon. It is to further certify that the attached technical data supports the finding that the proposed Ross Slough Drainage Improvement Project meets the Zoning Ordinance for areas within floodplains without established floodways.



Digitally signed
by Jake Hofeld
Date: 2024.06.12
11:45:10 -07'00'



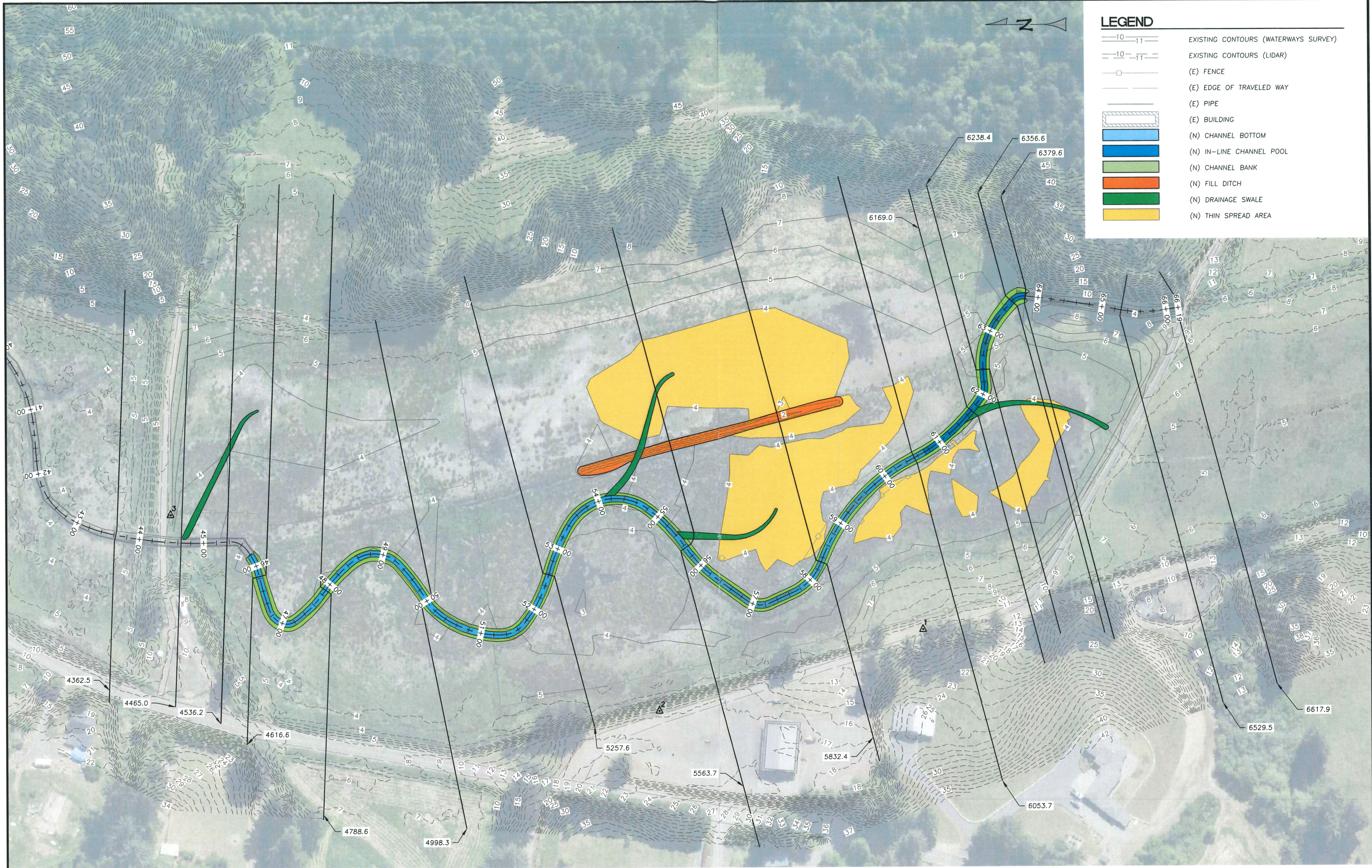
EXPIRES: 6/30/2025

Jake Hofeld, P.E.
Principal Engineer
Waterways Consulting, Inc.
1020 SW Taylor St. Suite 380
Portland, OR 97205

ATTACHMENT A: 95% DESIGN DRAWINGS

(separate attachment)

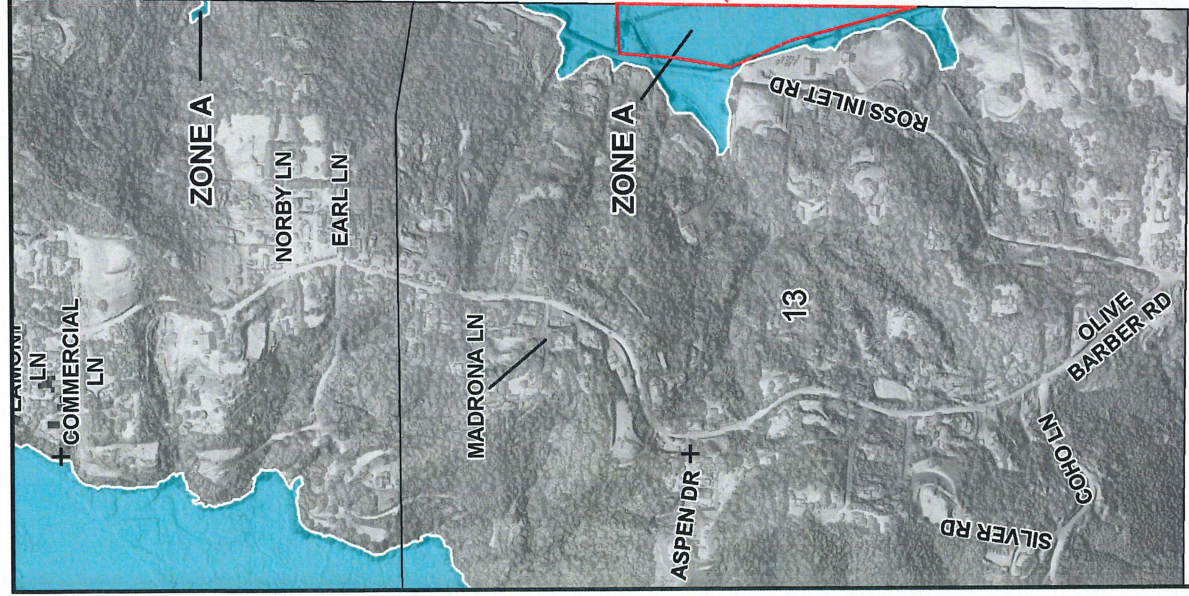
F:\Projects\21-042 Ross Slough\Webside\Property\CAD\Figures\DWG\21-042 No_Rise_Figures_2024-06-11.dwg - 5/12/2024 9:21 AM



LEGEND

	EXISTING CONTOURS (WATERWAYS SURVEY)
	EXISTING CONTOURS (LIDAR)
	(E) FENCE
	(E) EDGE OF TRAVELED WAY
	(E) PIPE
	(E) BUILDING
	(N) CHANNEL BOTTOM
	(N) IN-LINE CHANNEL POOL
	(N) CHANNEL BANK
	(N) FILL DITCH
	(N) DRAINAGE SWALE
	(N) THIN SPREAD AREA

NO-RISE SITE PLAN
 SCALE: 1" = 140'



43° 18' 45"
124° 11' 15"

project area

NATIONAL FLOOD INSURANCE RATE

COOS COUNTY, OREGON
And Incorporated Areas
PANEL 330 of 1200



Panel Contains:
COMMUNITY COOS COUNTY
NUMBER 410042
PANEL 0330
SUFFIX F

VERSION NUMBER
2.3.3.3
MAP NUMBER
41011C0330F
MAP REVISED
DECEMBER 7, 2018

This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at <https://msc.fema.gov>.

ATTACHMENT C: STREAMSTATS REPORT

➤ Peak-Flow Statistics

Peak-Flow Statistics Parameters [Reg 1 Coastal Cooper]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.32	square miles	0.28	673
I24H2Y	24 Hour 2 Year Precipitation	2.82	inches	2.52	5.79
SOILPERM	Average Soil Permeability	1.17	inches per hour	0.72	4.76
JANMAXT2K	Mean Maximum January Temperature from 2K resolution PRISM 1961-1990 data	53.3	degrees F	42.4	53.9
WATCAPORC	Available_Water_Capacity_OR_Cooper	0.23	inches	0.1	0.23
ORREG2	Oregon Region Number	729	dimensionless		

Peak-Flow Statistics Flow Report [Reg 1 Coastal Cooper]

PII: Prediction Interval-Lower, Plu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PII	Plu	SE	ASEp	Equiv. Yrs.
50-percent AEP flood	140	ft ³ /s	93.7	209	26.8	26.8	2.4
20-percent AEP flood	220	ft ³ /s	140	346	25.3	25.3	3.7
10-percent AEP flood	277	ft ³ /s	171	449	25.6	25.6	5
4-percent AEP flood	355	ft ³ /s	187	674	26.6	26.6	6.4
2-percent AEP flood	417	ft ³ /s	275	633	27.8	27.8	7.2
1-percent AEP flood	481	ft ³ /s	364	636	29.1	29.1	7.9
0.2-percent AEP flood	639	ft ³ /s	319	1280	32.6	32.6	8.9

Peak-Flow Statistics Citations

Cooper, R.M.,2005, Estimation of Peak Discharges for Rural, Unregulated Streams in Western Oregon: U.S. Geological Survey Scientific Investigations Report 2005-5116, 76 p. (<http://pubs.usgs.gov/sir/2005/5116/pdf/sir2005-5116.pdf>)

➤ Low-Flow Statistics

Low-Flow Statistics Parameters [LowFlow Ann Region10 2008 5126]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.32	square miles	0.447	3938.223
OR_HIPERMG	OR Percent HighPerm Geologic	0	percent	0	21.2222
PRECIP	Mean Annual Precipitation	63.7	inches	37.0618	121.9655
WATCAPORR	Available_Water_Capacity_OR_Risley	0.23	inch per inch	0.071	0.167

Low-Flow Statistics Disclaimers [LowFlow Ann Region10 2008 5126]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [LowFlow Ann Region10 2008 5126]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0	ft ³ /s

HEC-RAS River: River 1 Reach: Reach 1 Profile: 1 pct Storm

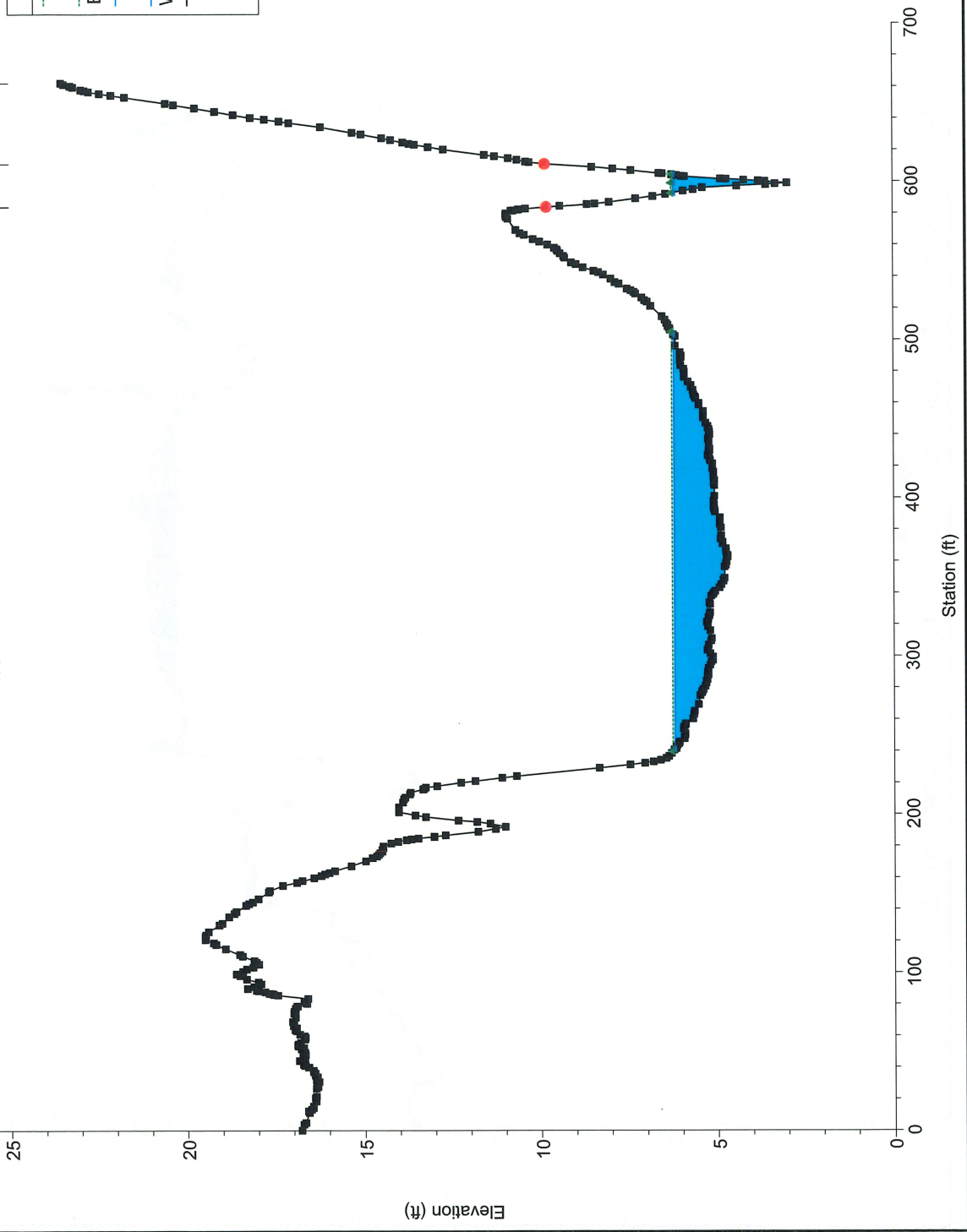
Reach	River Sta	Profile	Plan	Q Total (cfs)	Mfn Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Ch
Reach 1	6617.918	1 pct Storm	Exist	481.00	2.98	6.21	6.27	6.27	0.001866	1.76	246.21	273.35	0.27
Reach 1	6617.918	1 pct Storm	Proposed	481.00	2.98	6.21	6.27	6.27	0.001870	1.76	246.05	273.33	0.27
Reach 1	6529.474	1 pct Storm	Exist	481.00	3.02	5.78	5.95	5.95	0.008465	3.83	145.72	250.21	0.60
Reach 1	6529.474	1 pct Storm	Proposed	481.00	3.02	5.83	5.97	5.97	0.006620	3.42	159.74	256.71	0.53
Reach 1	6379.647	1 pct Storm	Exist	481.00	3.34	5.59	5.63	5.63	0.000796	1.28	317.70	277.00	0.18
Reach 1	6379.647	1 pct Storm	Proposed	481.00	3.32	5.60	5.64	5.64	0.000969	1.44	303.94	282.61	0.21
Reach 1	6356.614	1 pct Storm	Exist	481.00	3.31	5.58	5.61	5.61	0.000685	1.05	334.85	285.72	0.15
Reach 1	6356.614	1 pct Storm	Proposed	481.00	0.44	5.60	5.63	5.63	0.000590	1.69	360.83	308.74	0.18
Reach 1	6238.420	1 pct Storm	Exist	481.00	3.32	5.50	5.53	5.53	0.000690	1.18	365.77	396.40	0.17
Reach 1	6238.420	1 pct Storm	Proposed	481.00	0.44	5.54	5.56	5.56	0.000533	1.72	397.92	399.65	0.17
Reach 1	6168.980	1 pct Storm	Exist	481.00	3.27	5.43	5.47	5.47	0.001096	1.53	316.53	373.62	0.21
Reach 1	6168.980	1 pct Storm	Proposed	481.00	0.44	5.49	5.52	5.52	0.000589	1.82	380.24	379.55	0.18
Reach 1	6053.719	1 pct Storm	Exist	481.00	3.44	5.36	5.38	5.38	0.000528	0.93	419.56	415.17	0.14
Reach 1	6053.719	1 pct Storm	Proposed	481.00	2.41	5.43	5.46	5.46	0.000526	1.50	423.21	422.94	0.17
Reach 1	5832.399	1 pct Storm	Exist	481.00	1.62	5.33	5.33	5.33	0.000091	0.72	803.08	565.53	0.07
Reach 1	5832.399	1 pct Storm	Proposed	481.00	2.25	5.34	5.35	5.35	0.000381	1.34	519.53	567.98	0.15
Reach 1	5563.738	1 pct Storm	Exist	481.00	2.89	5.30	5.31	5.31	0.000118	0.64	771.70	611.94	0.08
Reach 1	5563.738	1 pct Storm	Proposed	481.00	2.06	5.29	5.29	5.29	0.000145	0.85	728.87	611.48	0.09
Reach 1	5257.599	1 pct Storm	Exist	481.00	2.69	5.25	5.26	5.26	0.000236	0.93	622.31	621.94	0.11
Reach 1	5257.599	1 pct Storm	Proposed	481.00	1.84	5.23	5.24	5.24	0.000215	1.08	636.99	621.31	0.11
Reach 1	4998.272	1 pct Storm	Exist	481.00	2.75	5.20	5.20	5.20	0.000169	0.81	709.96	648.93	0.09
Reach 1	4998.272	1 pct Storm	Proposed	481.00	1.66	5.19	5.19	5.19	0.000156	0.93	723.08	648.60	0.10
Reach 1	4788.554	1 pct Storm	Exist	481.00	2.34	5.16	5.17	5.17	0.000153	0.79	767.59	757.42	0.09
Reach 1	4788.554	1 pct Storm	Proposed	481.00	1.50	5.15	5.16	5.16	0.000140	0.87	783.74	756.81	0.09
Reach 1	4616.569	1 pct Storm	Exist	481.00	2.03	5.13	5.14	5.14	0.000197	0.92	702.93	743.69	0.10
Reach 1	4616.569	1 pct Storm	Proposed	481.00	1.38	5.13	5.13	5.13	0.000178	1.01	719.64	743.09	0.10
Reach 1	4536.230	1 pct Storm	Exist	481.00	1.81	5.10	5.12	5.12	0.000353	1.32	530.57	580.60	0.14
Reach 1	4536.230	1 pct Storm	Proposed	481.00	1.81	5.10	5.11	5.11	0.000314	1.24	549.14	580.39	0.13
Reach 1	4465	1 pct Storm	Exist	481.00	1.81	5.00	5.07	5.07	0.001568	2.68	250.90	268.80	0.29

21-042 Ross No-Rise Plan: 1) Exist 6/11/2024 2) Proposed 6/11/2024

RS = 6617.918

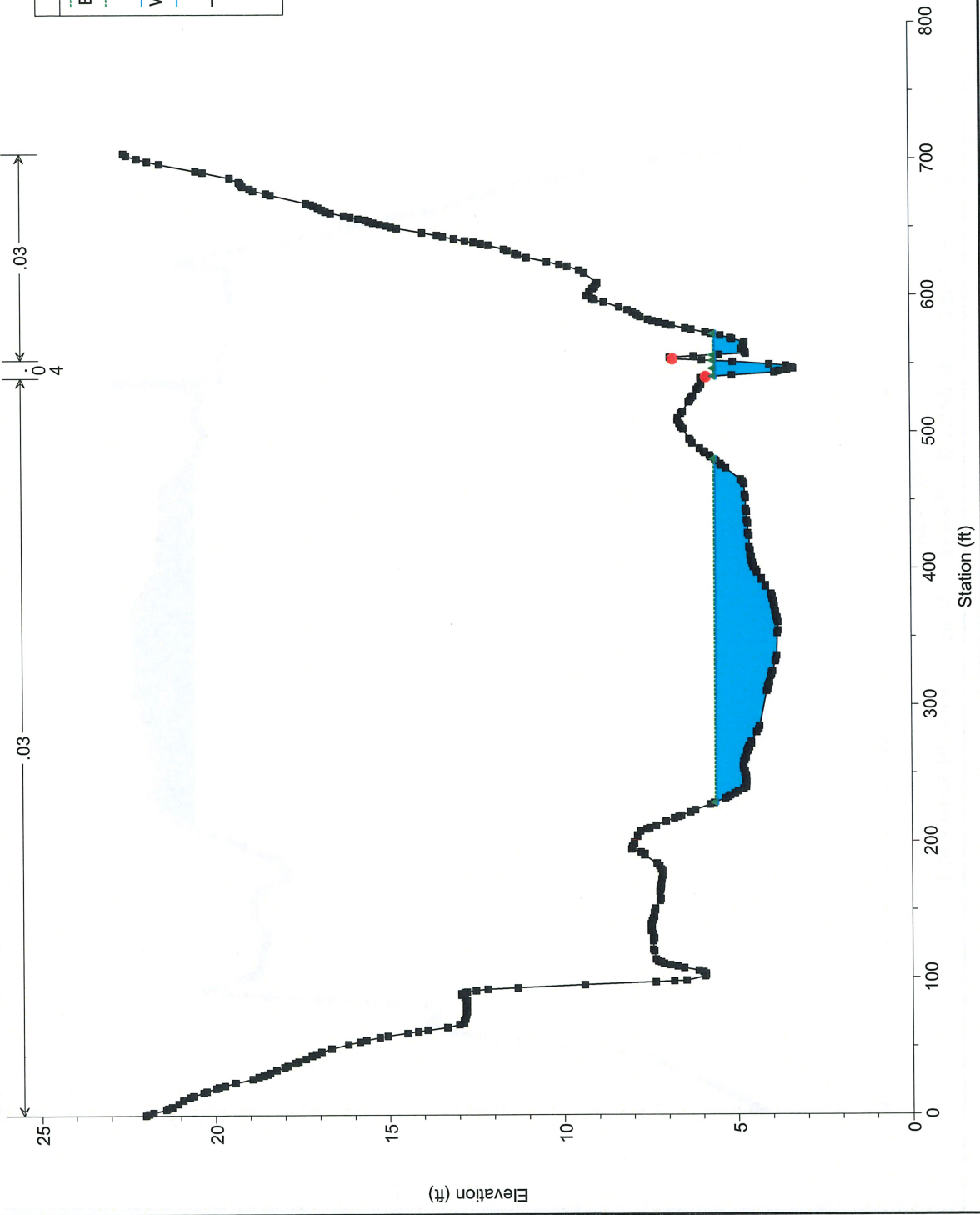
.03 .04 .03

Legend	
EG 1 pct Storm - Exist	—
EG 1 pct Storm - Proposed	—
WS 1 pct Storm - Exist	—
WS 1 pct Storm - Proposed	—
Ground	■
Bank Sta	●



21-042 Ross No-Rise Plan: 1) Exist 6/11/2024 2) Proposed 6/11/2024

RS = 6379.647



Legend

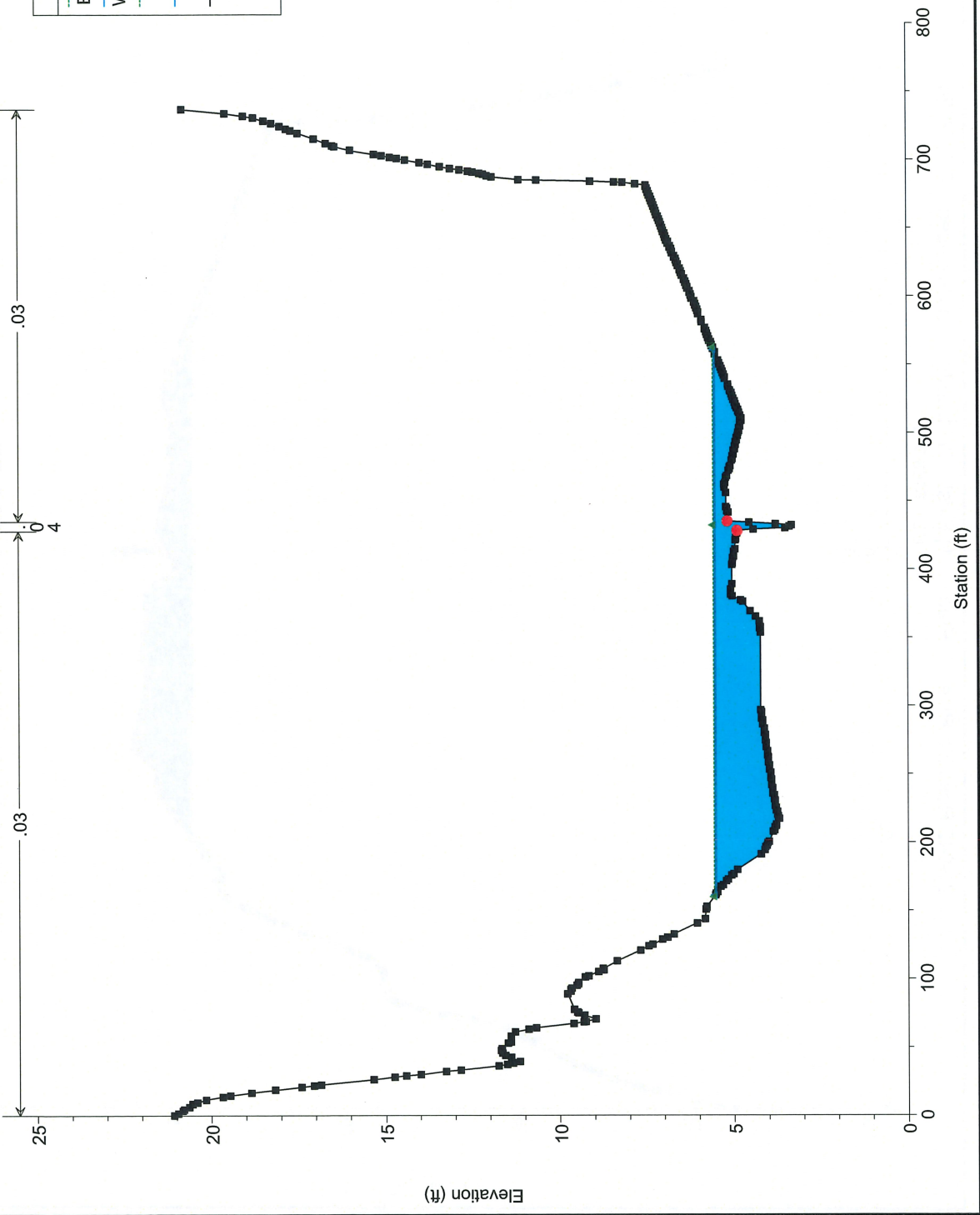
- EG 1 pct Storm - Proposed
- EG 1 pct Storm - Exist
- WS 1 pct Storm - Proposed
- WS 1 pct Storm - Exist
- Ground
- Bank Sta

21-042 Ross No-Rise Plan: 1) Exist 6/11/2024 2) Proposed 6/11/2024

RS = 6238.420

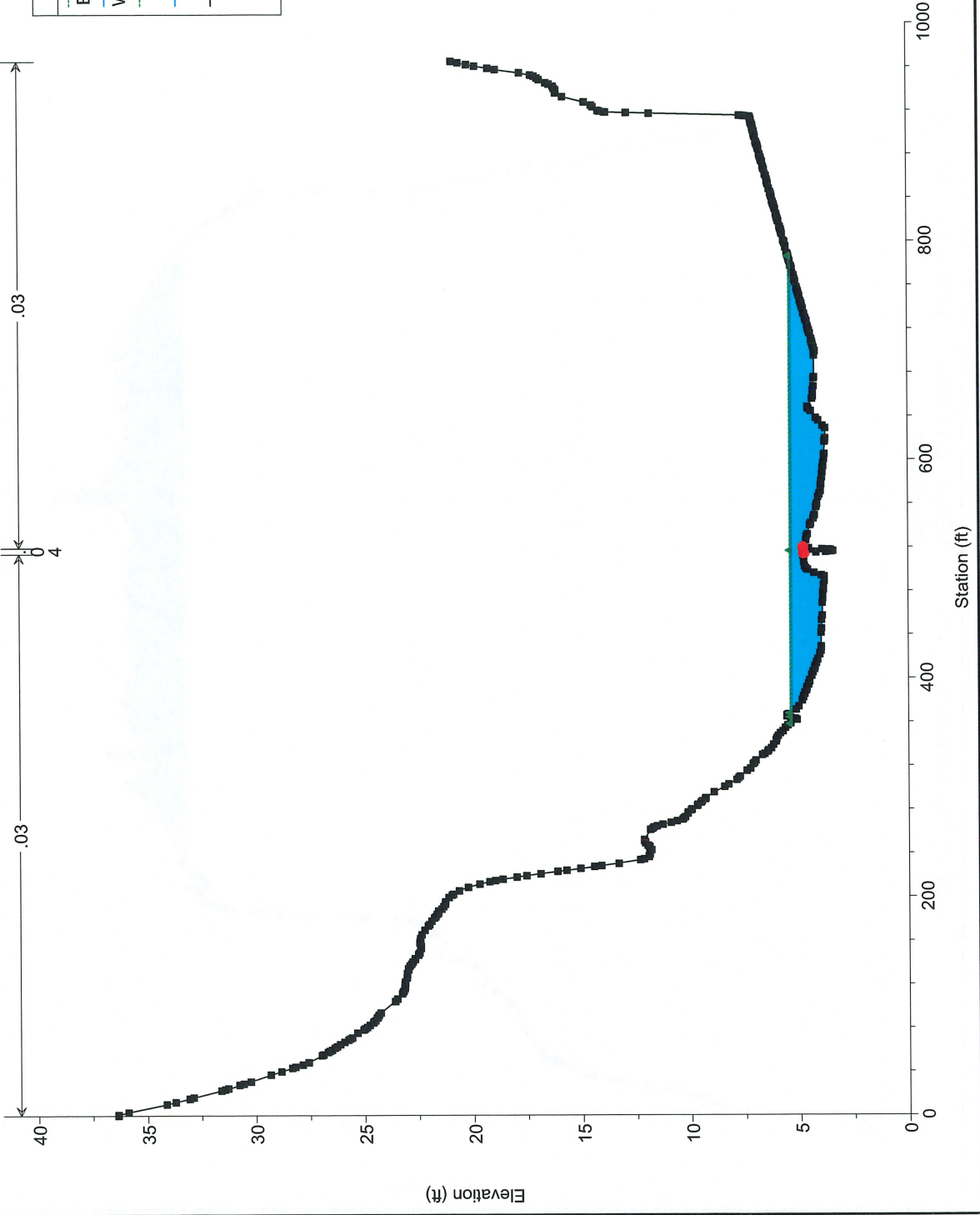


Legend	
	EG 1 pct Storm - Proposed
	WS 1 pct Storm - Proposed
	EG 1 pct Storm - Exist
	WS 1 pct Storm - Exist
	Ground
	Bank Sta



21-042 Ross No-Rise Plan: 1) Exist 6/11/2024 2) Proposed 6/11/2024

RS = 6053.719

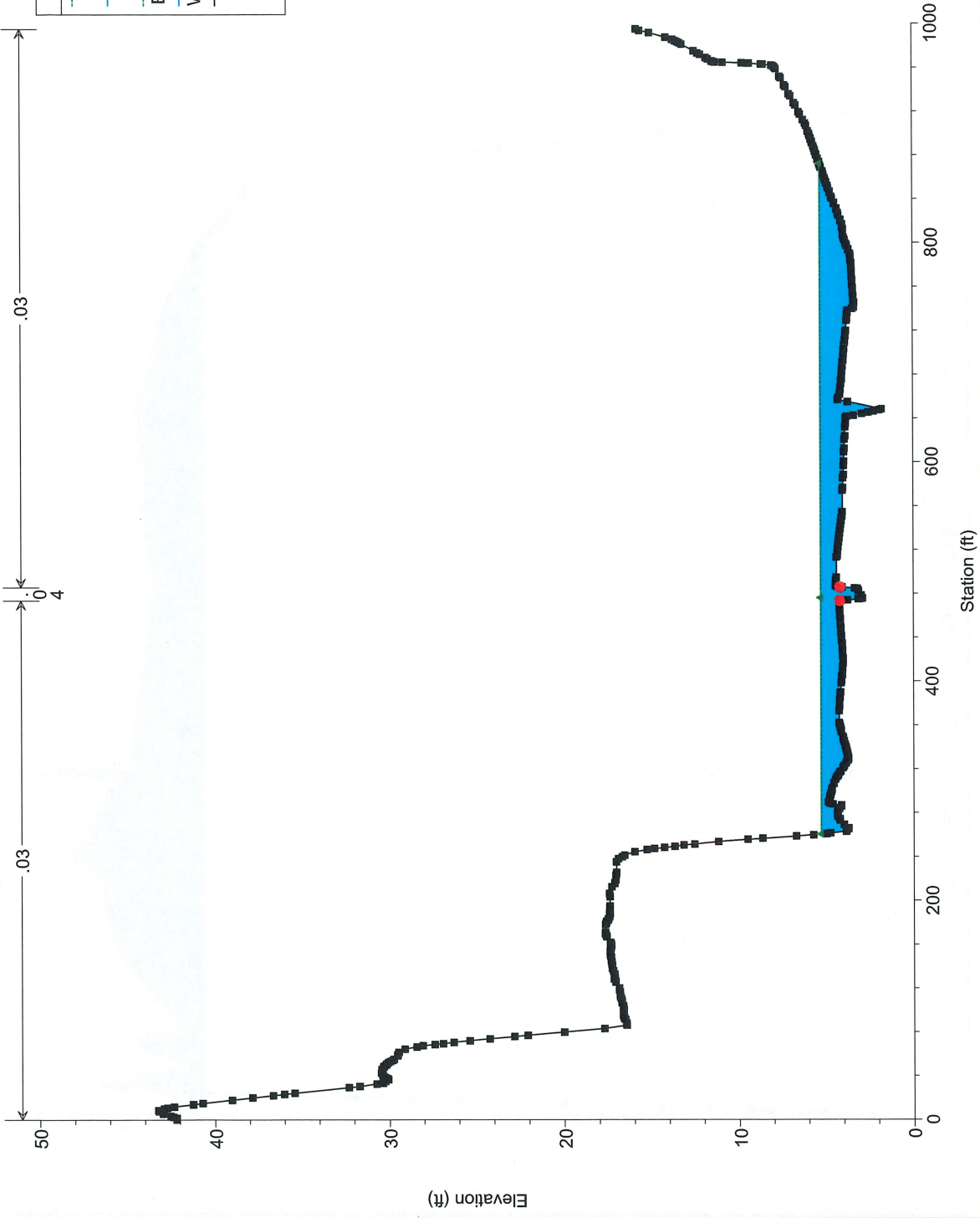


Legend

- EG 1 pct Storm - Proposed
- WS 1 pct Storm - Proposed
- EG 1 pct Storm - Exist
- WS 1 pct Storm - Exist
- Ground
- Bank Sta

21-042 Ross No-Rise Plan: 1) Exist 6/11/2024 2) Proposed 6/11/2024

RS = 5563.738

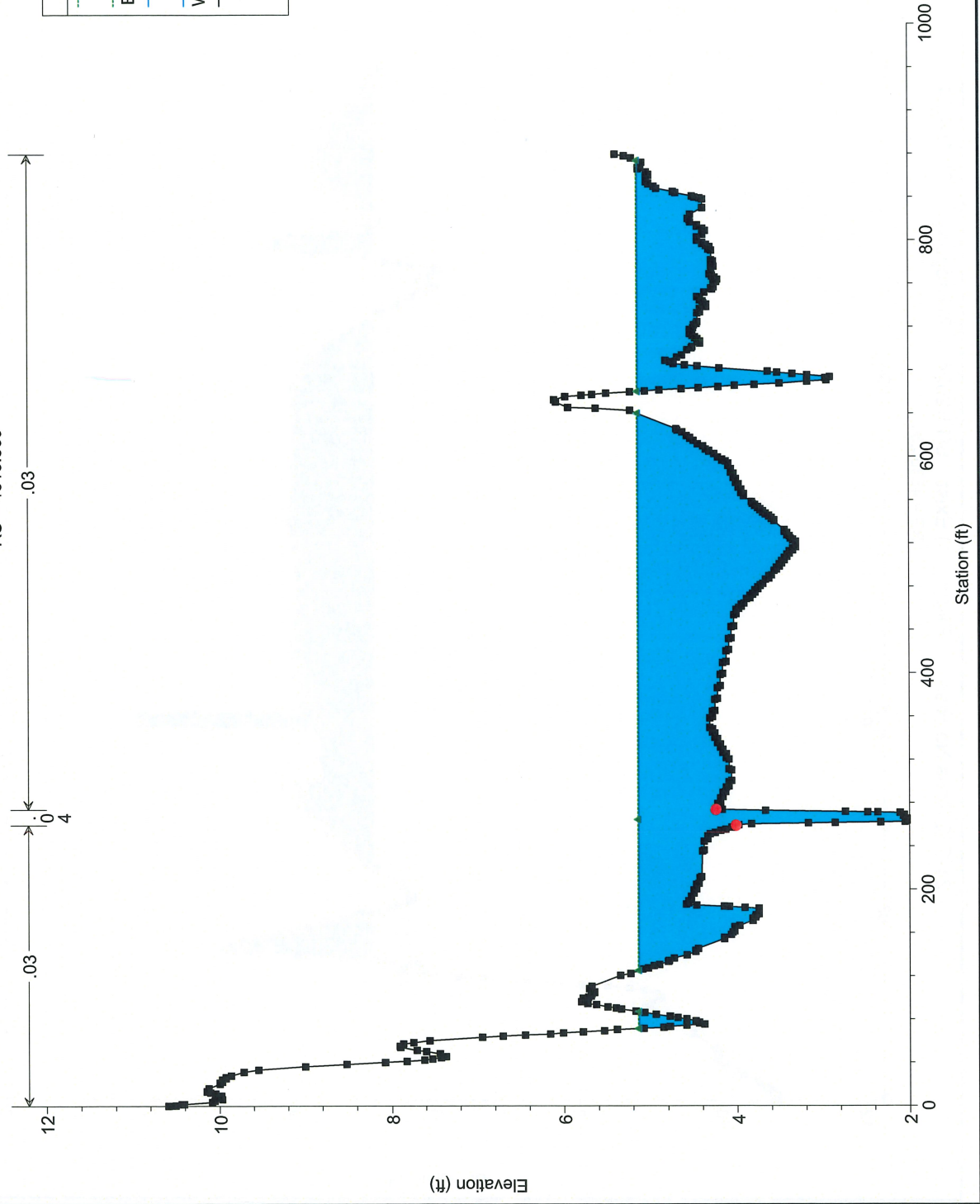


Legend

- EG 1 pct Storm - Exist
- WS 1 pct Storm - Exist
- EG 1 pct Storm - Proposed
- WS 1 pct Storm - Proposed
- Ground
- Bank Sta

21-042 Ross No-Rise Plan: 1) Exist 6/11/2024 2) Proposed 6/11/2024

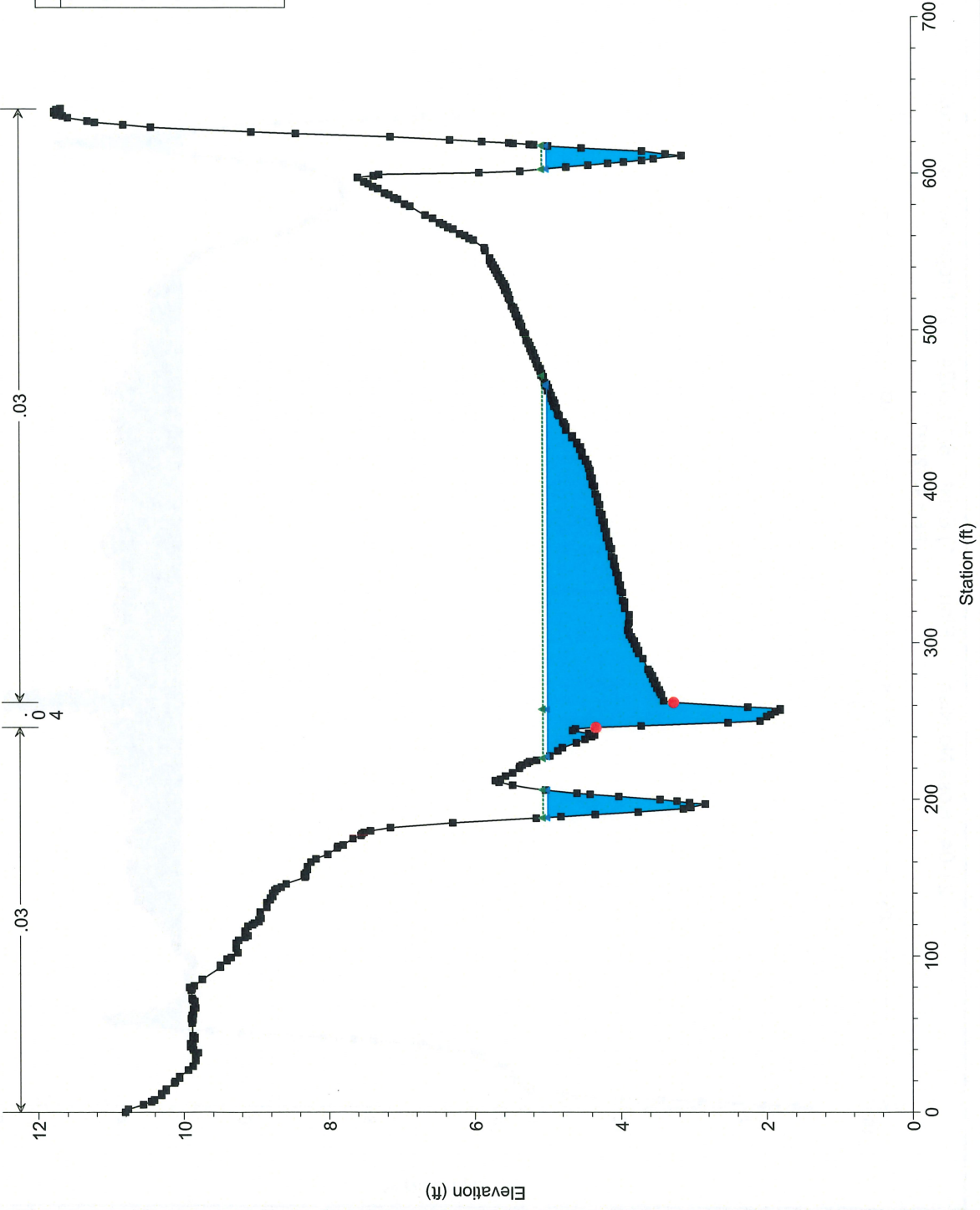
RS = 4616.569



Legend

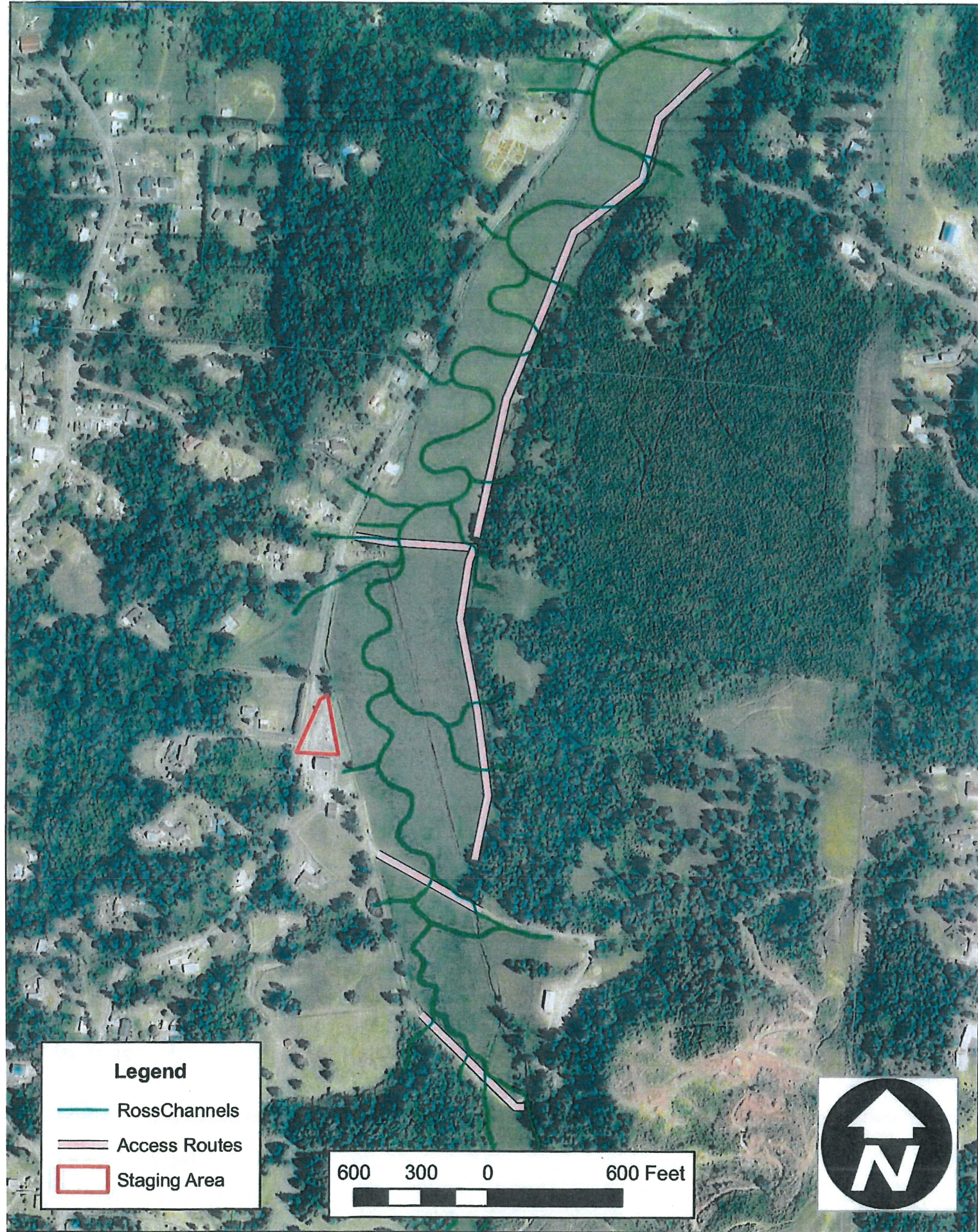
- EG 1 pct Storm - Exist
- EG 1 pct Storm - Proposed
- WS 1 pct Storm - Exist
- WS 1 pct Storm - Proposed
- Ground
- Bank Sta

21-042 Ross No-Rise Plan: 1) Exist 6/11/2024 2) Proposed 6/11/2024
RS = 4465

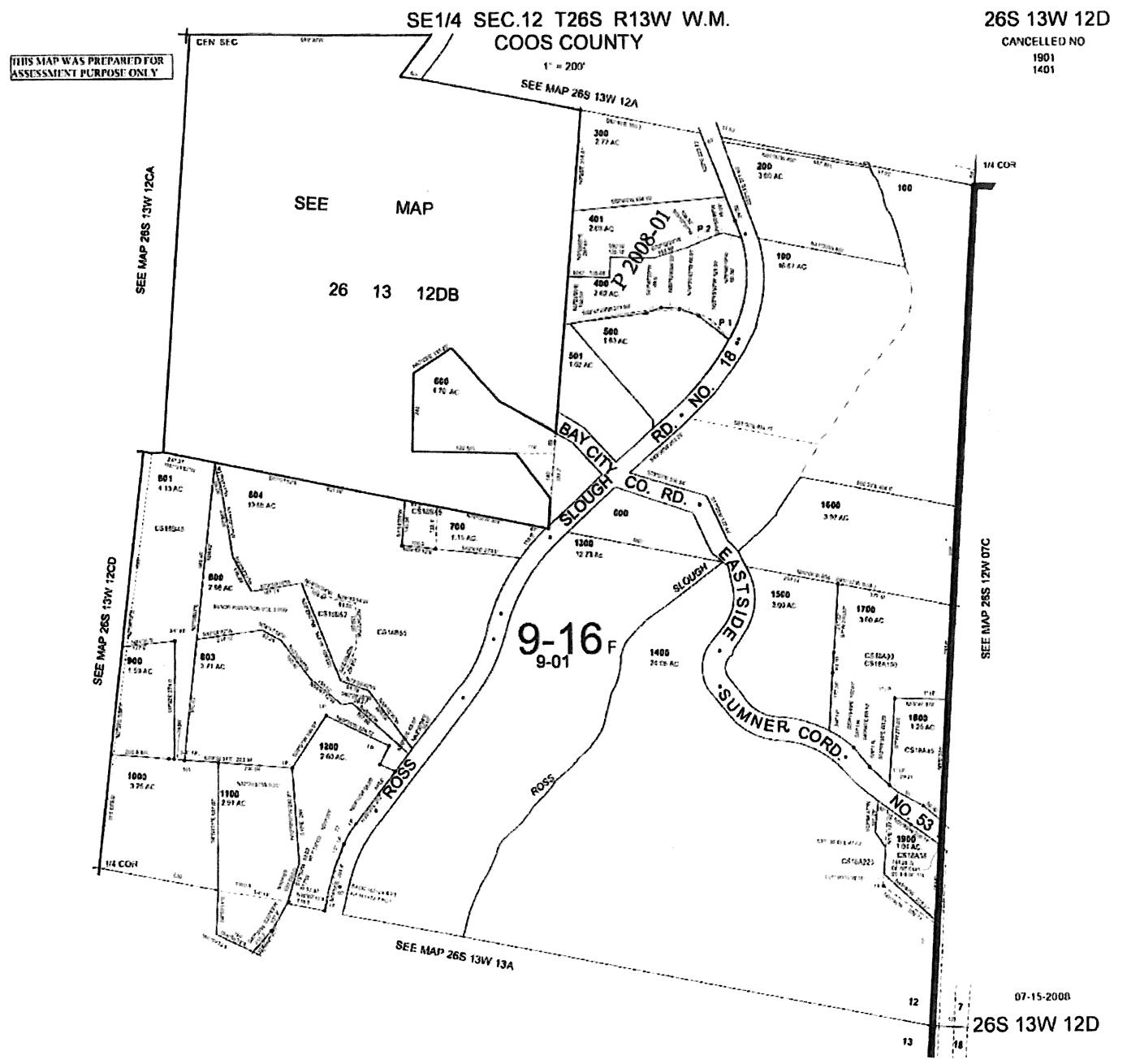


Legend	
EG 1 pct Storm - Exist	--- (dashed line)
EG 1 pct Storm - Proposed	--- (dashed line)
WS 1 pct Storm - Exist	--- (dashed line)
WS 1 pct Storm - Proposed	--- (dashed line)
Ground	— (solid line)
Bank Sta	● (red dot)

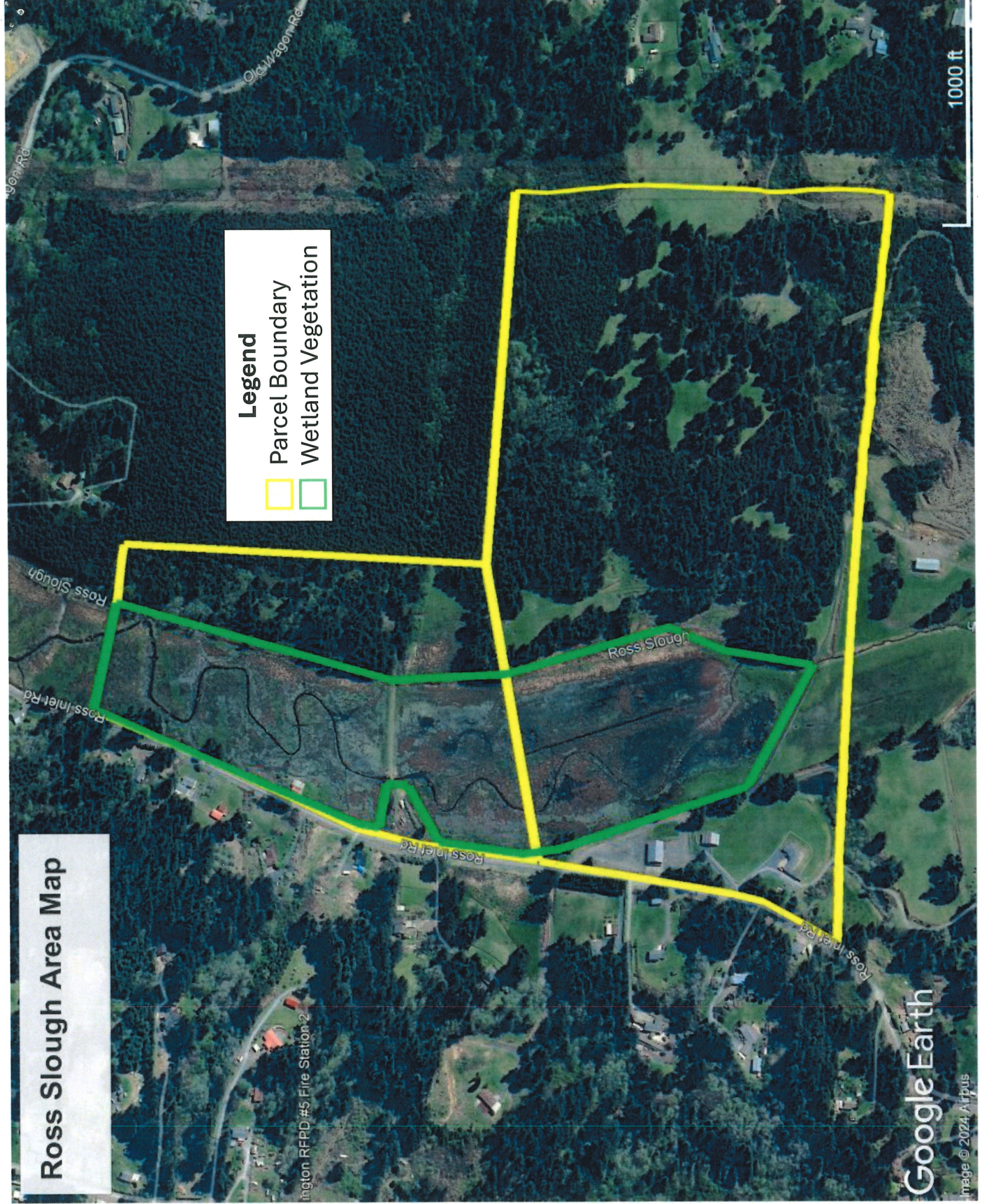
Ross Slough Staging & Access Routes



Ross Slough Stream Restoration



Ross Slough Area Map



Legend

- Parcel Boundary
- Wetland Vegetation

Google Earth
Image © 2024 Airpuz

1000 ft

ington RFPD #5 Fire Station 2

Dated this 14th day of December, 2015

GRANTORS:

Lee Webster and Virginia Webster

Lee Webster
Lee Webster

Virginia Webster
Virginia Webster

Notarization

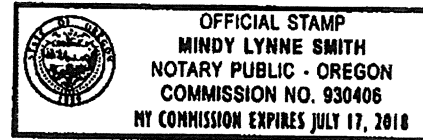
STATE OF OREGON)

COUNTY OF COOS, SS:)

On the 14th day of December, 2015, Lee Webster and Virginia Webster, personally appeared before me, the undersigned Notary Public, personally known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged to me that they executed the same in their authorized capacity, and by their signature(s) on the within instrument, the entity on behalf of which the person(s) acted, executed the within instrument.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal, on the day set forth above.

Mindy L. Smith
Notary Public
My Commission expires: July 17, 2018



ACCEPTANCE

The undersigned grantee (s) hereby accept (s) this property line adjustment deed and signs this acceptance in accordance with ORS 92.190 (4).

GRANTEE:

Oliver Sorensen

Oliver Sorensen
Oliver Sorensen

Notarization

STATE OF OREGON)

COUNTY OF COOS, SS:)

On the 14th day of December, 2015, Oliver Sorensen, personally appeared before me, the undersigned Notary Public, personally known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged to me that they executed the same in their authorized capacity, and by their signature(s) on the within instrument, the entity on behalf of which the person(s) acted, executed the within instrument.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal, on the day set forth above.

Mindy L. Smith
Notary Public
My Commission expires: July 17, 2018



Dated this 14th day of December, 2015

GRANTOR:

Oliver Sorensen

Oliver Sorensen
Oliver Sorensen

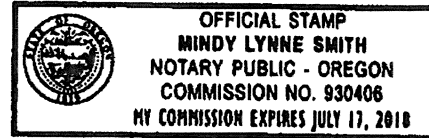
Notarization

STATE OF OREGON)
)
COUNTY OF COOS, SS:)

On the 14th day of December, 2015, Oliver Sorensen personally appeared before me, the undersigned Notary Public, personally known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged to me that they executed the same in their authorized capacity, and by their signature(s) on the within instrument, the entity on behalf of which the person(s) acted, executed the within instrument.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal, on the day set forth above.

Mindy L. Smith
Notary Public
My Commission expires: July 17, 2018



ACCEPTANCE

The undersigned grantee (s) hereby accept (s) this property line adjustment deed and signs this acceptance in accordance with ORS 92.190 (4).

GRANTEES:

Lee Webster and Virginia Webster

Lee Webster
Lee Webster

Virginia Webster
Virginia Webster

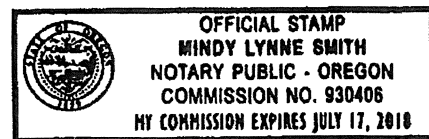
Notarization

STATE OF OREGON)
)
COUNTY OF COOS, SS:)

On the 14 day of December, 2015, Lee Webster and Virginia Webster, personally appeared before me, the undersigned Notary Public, personally known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged to me that they executed the same in their authorized capacity, and by their signature(s) on the within instrument, the entity on behalf of which the person(s) acted, executed the within instrument.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal, on the day set forth above.

Mindy L. Smith
Notary Public
My Commission expires: July 17, 2018



AFTER RECORDING, RETURN TO
and until a change is requested,
SEND ALL TAX STATEMENTS TO:

F. Oliver Sorensen
1090 Ingersoll Ave.
Coos Bay, OR 97420

BARGAIN AND SALE DEED

Susan Lora Goodman, Grantor, conveys to Oliver Sorensen, Grantee, all that real property situated in Coos County, State of Oregon, described as:

SEE ATTACHED EXHIBIT "A". Tax Acct. Nos: 5250.01, 5243.04, and 5250.91.

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

The true and actual consideration for this transfer is to comply with a Judgment of Dissolution of Marriage.

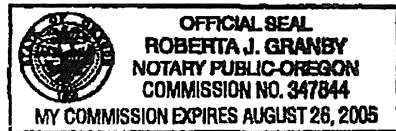
The foregoing recital of consideration is true as I verily believe.

DATED this 29 day of October, 2004.

Susan Lora Goodman
Susan Lora Goodman

STATE OF OREGON)
) ss.
County of Coos)

Personally appeared before me on the 29 day of Oct., 2004, the above named Susan Lora Goodman and acknowledged the foregoing instrument to be her voluntary act and deed.



Roberta J. Granby
Notary Public for Oregon

97-335
RETURN TO: F.A.T.CO.

97 07 0693

5250.91
.01
5243.04

Until a change is requested, all tax statements shall be sent to the following address: 933 South 10th
Coos Bay, Oregon 97420

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that MILTON C. CAVANAGH, also known as CHARLES MILTON CAVANAGH and ARABELLE E. CAVANAGH, husband and wife, hereinafter called Grantors, for the consideration hereinafter stated, do hereby grant, bargain, sell and convey unto OLIVER SORENSEN and FREDRIK SORENSEN, Grantees, not as tenants in common but with right of survivorship that is, that the fee shall vest in the survivor of the grantees, all of that certain real property with the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, situated in the County of Coos, State of Oregon; described as follows, to-wit:

The following parcel of property being a portion of the SE 1/4 of Section 12 and the NE 1/4 of Section 13, Township 26 South, Range 13 West of the Willamette Meridian, Coos County, Oregon, described as follows:

Beginning at an iron pipe 1,155 feet South of the quarter section corner between Sections 12 and 13, Township 26 South, Range 13 West of the Willamette Meridian, Coos County, Oregon; thence East a distance of 380 feet, more or less, to the East line of the Ross Slough County Road to the point of beginning; thence, Northerly along the East line of the Ross Slough County Road a distance of 2,475 feet, more or less, to the North line of the SE 1/4 of the SE 1/4 of said Section 12; thence, Easterly along the North line of said quarter-quarter line a distance of 550 feet, more or less, to the center of Ross Slough; thence, Southerly along the center of Ross Slough a distance of 1,500 feet, more or less, to a point on the section line between said Sections 12 and 13; thence, Easterly along the section line a distance of 250 feet, more or less, to the Northwest corner of the NE 1/4 of the NE 1/4 of said Section 13; thence Southerly along the West line of said quarter-quarter line a distance of 1,355 feet, more or less, to the Southwest corner of the NE 1/4 of the NE 1/4 of said Section 13; thence, along the South line of said quarter-quarter line South 84° 05' 26" East a distance of 566.20 feet; thence, South 11° 00' 00" East a distance of 425 feet; thence parallel to the said South line of said Section 13 North 84° 05' 26" West a distance of 750 feet; thence North 11° 00' 00" West a distance of 425 feet, more or less, to a point which is located North 84° 05' 26" West a distance of 183.80 feet from the Southwest corner of the NE 1/4 of the NE 1/4 of said Section 13; thence, along the quarter-quarter line North 84° 05' 26" West a distance of 250 feet, more or less, to the center of Ross Slough; thence, Northerly along the center of Ross Slough a distance of 335 feet, more or less, to a point Easterly from the point of beginning; thence Westerly a distance of 575 feet, more or less, to the point of beginning.

Consideration \$63,000.00

WARRANTY DEED (1)

COOS COUNTY CLERK, OREGON TOTAL \$41.00
TERRI L. TURI, CCC, COUNTY CLERK

11/15/2004 #2004-16459
04:08:22PM 3 OF 4

11/10

EX. A-2

STATE OF OREGON)

County of Coos)

March 24, 1995

Personally appeared before me the above-named Charles Milton Cavanagh aka Milton Cavanagh who acknowledged the foregoing instrument to be his voluntary act and deed.



Janet M. Rubin
Notary Public for Oregon
My Commission Expires: 10-27-1998

STATE OF OREGON)

County of Coos)

March 24, 1995

Personally appeared before me the above-named Arabelle E. Cavanagh who acknowledged the foregoing instrument to be her voluntary act and deed.



Janet M. Rubin
Notary Public for Oregon
My Commission Expires: 10-27-1998

COOS COUNTY, COQUILLE REC \$41.00
TERRI L. TURI, COOS COUNTY CLERK

06/03/2002 #2002-7136
11:44:55AM 2 OF 4

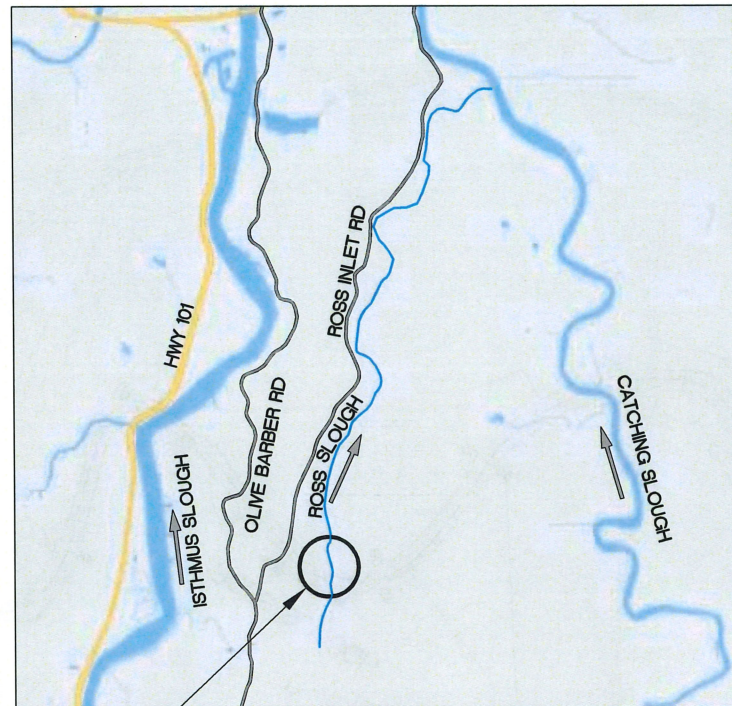
COOS COUNTY, COQUILLE
TERRI L. TURL, COOS COUNTY CLERK
REC \$41.00

06/03/2002
11:44:55AM
#2002-7136
4 OF 4

- (G) The rights of fishing, navigation and commerce in the State of Oregon and the Federal Government and the rights of the public in and to that portion thereof lying below the ordinary high water mark of the Ross Slough.
- (H) Cavanagh Partition Final Plat, including the terms and provisions thereof, recorded February 22, 1995, at Microfilm Reel No. 95-02-0658 Cab C-101, Records of Coos County, Oregon.
- (I) Any lien or encumbrance placed upon the herein described real property or suffered by Grantees.

ROSS SLOUGH DRAINAGE IMPROVEMENT PROJECT

95% DESIGN SUBMITTAL



PROJECT LOCATION

VICINITY MAP
N.T.S. (GOOGLE)



PROJECT LOCATION

REGIONAL MAP
N.T.S. (GOOGLE)

GENERAL NOTES

- TOPOGRAPHIC MAPPING WAS PERFORMED BY: WATERWAYS CONSULTING, INC. 1020 SW TAYLOR ST SUITE 380 PORTLAND, OR 97205 SURVEY DATE; DECEMBER 14, 2022 AND NOVEMBER 28, 2023
- LIDAR CONTOURS OUTSIDE OF TOPOGRAPHIC MAPPING AREA WERE PROVIDED BY DOGAMI, SOUTH COAST LIDAR (2009).
- ELEVATION DATUM: GPS TIES TO NAVD88 USING THE LEICA GEOSYSTEMS SMARTNET GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) NETWORK.
- BASIS OF BEARINGS: GPS TIES TO NAD83 OREGON STATE PLANE, SOUTH INTERNATIONAL FEET USING THE LEICA GEOSYSTEMS SMARTNET GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) NETWORK.
- CONTOUR INTERVAL IS ONE FOOT. ELEVATIONS AND DISTANCES SHOWN ARE IN DECIMAL FEET.
- THIS IS NOT A BOUNDARY SURVEY. PROPERTY LINES ARE NOT SHOWN HEREON.
- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE CURRENT EDITION OF THE STATE OF OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION ISSUED BY THE DEPARTMENT OF TRANSPORTATION (HEREAFTER REFERRED TO AS "STANDARD SPECIFICATIONS").
- THESE DESIGNS ARE INCOMPLETE WITHOUT THE FINAL STAMPED TECHNICAL SPECIFICATIONS PREPARED BY WATERWAYS CONSULTING, INC. REFER TO TECHNICAL SPECIFICATIONS FOR DETAILS NOT SHOWN HEREON.

ABBREVIATIONS

AVG.	AVERAGE	NIC	NOT IN CONTRACT
BW	BOTTOM WIDTH	N.T.S.	NOT TO SCALE
CC	CONCRETE	O.C.	ON CENTER
CY	CUBIC YARDS	RC	RELATIVE COMPACTION
DIA.	DIAMETER	RSP	ROCK SLOPE PROTECTION
E	EXISTING	SPK	SPIKE
EG	EXISTING GROUND	SQ.FT.	SQUARE FOOT
ELEV.	ELEVATION	SW	SOUTHWEST
DI	DRAINAGE INLET	T	TREE
FG	FINISHED GRADE	T.B.D.	TO BE DETERMINED
FT	FEET	TYP	TYPICAL
INV	INVERT	UNK	UNKNOWN
MIN	MINIMUM	WSE	WATER SURFACE ELEVATION
N	NEW	YR	YEAR
NE	NORTHEAST		

PROJECT DESCRIPTION

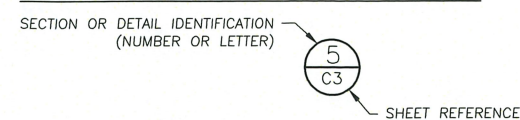
THESE DRAWINGS PROVIDE DESIGN DETAILS FOR THE GRADING OF THE ROSS SLOUGH CHANNEL AND ADJACENT FLOODPLAIN TO IMPROVE DRAINAGE AND REDUCE FISH ENTRAPMENT ON TWO PRIVATE PROPERTIES IN COOS COUNTY, OREGON.

WORK SHALL CONSIST OF DEWATERING THE PROJECT SITE FOLLOWING BY WIDENING AND DEEPENING OF THE CHANNEL. SHALLOW SWALES CONNECTING LOW SPOTS IN THE FLOODPLAIN TO THE CHANNEL SHALL ALSO BE CREATED. SOIL EXCAVATED FROM THE CHANNEL AND SWALES SHALL BE PLACED WITHIN A REMNANT PORTION OF DRAINAGE DITCH THAT IS HYDRAULICALLY DISCONNECTED FROM THE CHANNEL. ANY REMAINING SOIL SHALL BE THIN SPREAD IN THE FLOODPLAIN.

SHEET INDEX

- C1 COVER
- C2 EXISTING CONDITIONS
- C3 PROPOSED CONDITIONS PLAN AND PROFILE
- C4 SECTIONS
- C5 EROSION AND SEDIMENT CONTROL PLAN
- C6 DETAILS
- C7 NOTES

SECTION AND DETAIL CONVENTION



*** CALL BEFORE YOU DIG ***

CONTACT UNDERGROUND SERVICE ALERT (USA)
PRIOR TO ANY CONSTRUCTION WORK 1-800-332-2344

PRELIMINARY
NOT FOR CONSTRUCTION

PREPARED AT THE REQUEST OF:
COOS WATERSHED ASSOCIATION

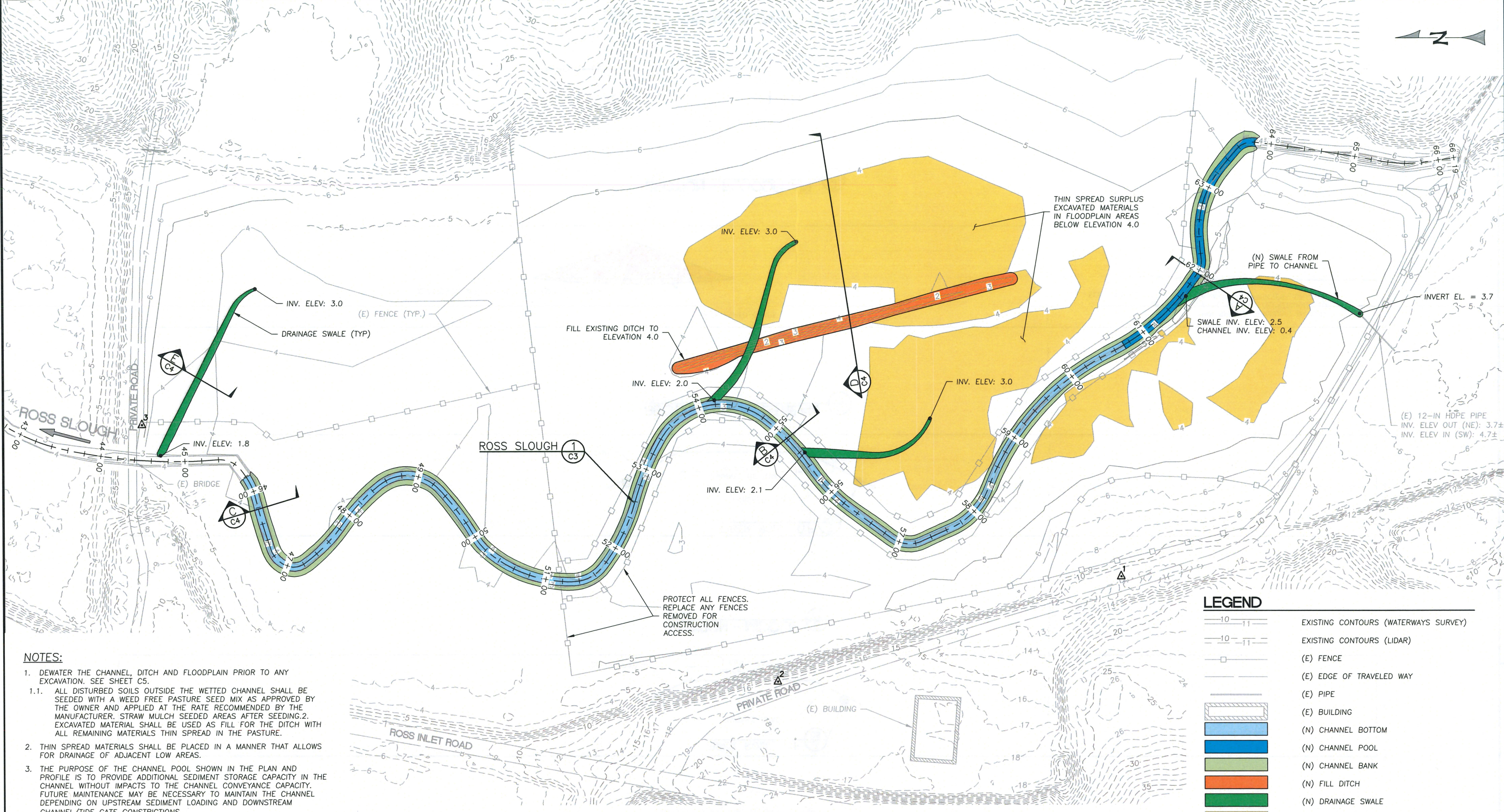
COVER

ROSS SLOUGH DRAINAGE IMPROVEMENT PROJECT
95% DESIGN SUBMITTAL

DESIGNED BY: J.H.
DRAWN BY: M.L.
CHECKED BY: J.H.
DATE: 6/12/2024
JOB NO.: 21-042

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

C1 1 OF 7

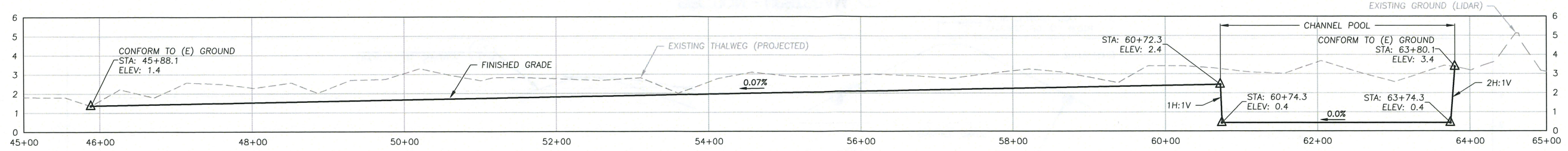


PROPOSED CONDITIONS PLAN
 SCALE: 1" = 60'

- NOTES:**
- DEWATER THE CHANNEL, DITCH AND FLOODPLAIN PRIOR TO ANY EXCAVATION. SEE SHEET C5.
 - 1.1. ALL DISTURBED SOILS OUTSIDE THE WETTED CHANNEL SHALL BE SEEDED WITH A WEED FREE PASTURE SEED MIX AS APPROVED BY THE OWNER AND APPLIED AT THE RATE RECOMMENDED BY THE MANUFACTURER. STRAW MULCH SEEDED AREAS AFTER SEEDING. EXCAVATED MATERIAL SHALL BE USED AS FILL FOR THE DITCH WITH ALL REMAINING MATERIALS THIN SPREAD IN THE PASTURE.
 2. THIN SPREAD MATERIALS SHALL BE PLACED IN A MANNER THAT ALLOWS FOR DRAINAGE OF ADJACENT LOW AREAS.
 3. THE PURPOSE OF THE CHANNEL POOL SHOWN IN THE PLAN AND PROFILE IS TO PROVIDE ADDITIONAL SEDIMENT STORAGE CAPACITY IN THE CHANNEL WITHOUT IMPACTS TO THE CHANNEL CONVEYANCE CAPACITY. FUTURE MAINTENANCE MAY BE NECESSARY TO MAINTAIN THE CHANNEL DEPENDING ON UPSTREAM SEDIMENT LOADING AND DOWNSTREAM CHANNEL/TIDE GATE CONSTRICTIONS.

LEGEND

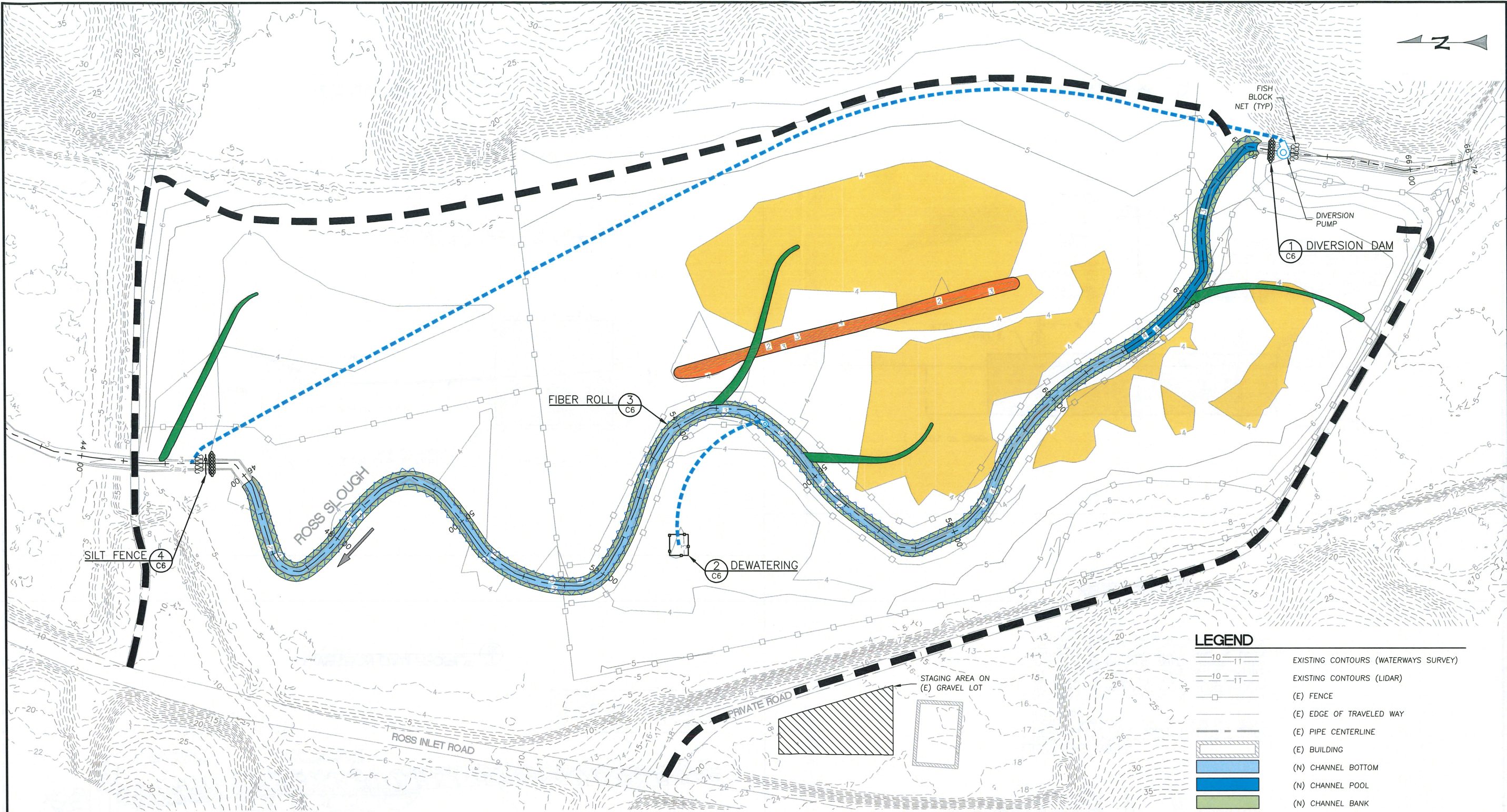
	EXISTING CONTOURS (WATERWAYS SURVEY)
	EXISTING CONTOURS (LIDAR)
	(E) FENCE
	(E) EDGE OF TRAVELED WAY
	(E) PIPE
	(E) BUILDING
	(N) CHANNEL BOTTOM
	(N) CHANNEL POOL
	(N) CHANNEL BANK
	(N) FILL DITCH
	(N) DRAINAGE SWALE
	(N) THIN SPREAD AREA



ROSS SLOUGH PROFILE
 SCALE: HORIZ: 1" = 75'; VERT: 1" = 3'

F:\Projects\21-042 Ross Slough-Webster-Property\CAD\21-042 Proposed Conditions.dwg - 6/12/2024 11:29 AM

F:\Projects\21-042_Ross Slough-Webster Property\CAD\21-042_EROSION CONTROL.dwg - 6/12/2024 11:26 AM



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 SILT FENCE.
4. STORE, MAINTAIN AND REFUEL ALL EQUIPMENT AND MATERIALS IN A DESIGNATED PORTION OF THE STAGING AREA.

EROSION AND SEDIMENT CONTROL PLAN
SCALE: 1" = 60'

LEGEND

	EXISTING CONTOURS (WATERWAYS SURVEY)
	EXISTING CONTOURS (LIDAR)
	(E) FENCE
	(E) EDGE OF TRAVELED WAY
	(E) PIPE CENTERLINE
	(E) BUILDING
	(N) CHANNEL BOTTOM
	(N) CHANNEL POOL
	(N) CHANNEL BANK
	(N) FILL DITCH
	(N) DRAINAGE SWALE
	(N) THIN SPREAD AREA
	CONSTRUCTION ACCESS ROUTE
	(N) FIBER ROLL
	TEMPORARY SEDIMENT FENCE
	TEMPORARY FISH BLOCK NET
	TEMPORARY DIVERSION/DEWATERING HOSE
	TEMPORARY DIVERSION DAM
	TEMPORARY PUMP

PRELIMINARY
NOT FOR CONSTRUCTION

PREPARED AT THE REQUEST OF:
COOS WATERSHED ASSOCIATION

EROSION AND SEDIMENT CONTROL PLAN

ROSS SLOUGH DRAINAGE IMPROVEMENT PROJECT
95% DESIGN SUBMITTAL

DESIGNED BY: J.H.
DRAWN BY: M.L.
CHECKED BY: J.H.
DATE: 6/12/2024
JOB NO.: 21-042

BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES FOR REDUCED PLOTS

GENERAL NOTES

- 1. NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER OR A DESIGNATED REPRESENTATIVE SHALL OBSERVE THE CONSTRUCTION PROCESS, AS NECESSARY TO ENSURE PROPER INSTALLATION PROCEDURES.
- 2. EXISTING UNDERGROUND UTILITY LOCATIONS:
 - A. CALL UNDERGROUND SERVICE ALERT (1-800-332-2344) TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO COMMENCING CONSTRUCTION.
 - B. PRIOR TO BEGINNING WORK, CONTACT ALL UTILITIES COMPANIES WITH REGARD TO WORKING OVER, UNDER, OR AROUND EXISTING FACILITIES AND TO OBTAIN INFORMATION REGARDING RESTRICTIONS THAT ARE REQUIRED TO PREVENT DAMAGE TO THE FACILITIES.
 - C. EXISTING UTILITY LOCATIONS SHOWN ARE COMPILED FROM INFORMATION SUPPLIED BY THE APPROPRIATE UTILITY AGENCIES AND FROM FIELD MEASUREMENTS TO ABOVE GROUND FEATURES READILY VISIBLE AT THE TIME OF SURVEY. LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE DIMENSIONS, SIZES, MATERIALS, LOCATIONS, AND DEPTH OF UNDERGROUND UTILITIES.
 - D. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE LOCATION AND/OR PROTECTION OF ALL EXISTING AND PROPOSED PIPING, UTILITIES, TRAFFIC SIGNAL EQUIPMENT (BOTH ABOVE GROUND AND BELOW GROUND), STRUCTURES, AND ALL OTHER EXISTING IMPROVEMENTS THROUGHOUT CONSTRUCTION.
 - E. PRIOR TO COMMENCING FABRICATION OR CONSTRUCTION, DISCOVER OR VERIFY THE ACTUAL DIMENSIONS, SIZES, MATERIALS, LOCATIONS, AND ELEVATIONS OF ALL EXISTING UTILITIES AND POT HOLE THOSE AREAS WHERE POTENTIAL CONFLICTS ARE LIKELY OR DATA IS OTHERWISE INCOMPLETE.
 - F. TAKE APPROPRIATE MEASURES TO PROTECT EXISTING UTILITIES DURING CONSTRUCTION OPERATIONS. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COST OF REPAIR/REPLACEMENT OF ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
 - G. UPON LEARNING OF THE EXISTENCE AND/OR LOCATIONS OF ANY UNDERGROUND FACILITIES NOT SHOWN OR SHOWN INACCURATELY ON THE PLANS OR NOT PROPERLY MARKED BY THE UTILITY OWNER, IMMEDIATELY NOTIFY THE UTILITY OWNER AND THE CITY BY TELEPHONE AND IN WRITING.
 - H. UTILITY RELOCATIONS REQUIRED FOR THE CONSTRUCTION OF THE PROJECT FACILITIES WILL BE PERFORMED BY THE UTILITY COMPANY, UNLESS OTHERWISE NOTED.
- 3. IF DISCREPANCIES ARE DISCOVERED BETWEEN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION SHOWN ON THESE DRAWINGS, NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE FULLY INFORMED OF AND TO COMPLY WITH ALL LAWS, ORDINANCES, CODES, REQUIREMENTS AND STANDARDS WHICH IN ANY MANNER AFFECT THE COURSE OF CONSTRUCTION OF THIS PROJECT, THOSE ENGAGED OR EMPLOYED IN THE CONSTRUCTION AND THE MATERIALS USED IN THE CONSTRUCTION.
- 5. ALL TESTS, INSPECTIONS, SPECIAL OR OTHERWISE, THAT ARE REQUIRED BY THE BUILDING CODES, LOCAL BUILDING DEPARTMENTS, OR THESE PLANS, SHALL BE DONE BY AN INDEPENDENT INSPECTION COMPANY. JOB SITE VISITS BY THE ENGINEER DO NOT CONSTITUTE AN OFFICIAL INSPECTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE REQUIRED TESTS AND INSPECTIONS ARE PERFORMED.
- 6. PROJECT SCHEDULE: PRIOR TO COMMENCEMENT OF WORK, SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL A DETAILED CONSTRUCTION SCHEDULE. DO NOT BEGIN ANY CONSTRUCTION WORK UNTIL THE PROJECT SCHEDULE AND WORK PLAN IS APPROVED BY THE ENGINEER. ALL CONSTRUCTION SHALL BE CLOSELY COORDINATED WITH THE ENGINEER SO THAT THE QUALITY OF WORK CAN BE CHECKED FOR APPROVAL. PURSUE WORK IN A CONTINUOUS AND DILIGENT MANNER TO ENSURE A TIMELY COMPLETION OF THE PROJECT.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN, PERMITTING, INSTALLATION, AND MAINTENANCE OF ANY AND ALL TRAFFIC CONTROL MEASURES DEEMED NECESSARY.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GENERAL SAFETY DURING CONSTRUCTION. ALL WORK SHALL CONFORM TO PERTINENT SAFETY REGULATIONS AND CODES. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR FURNISHING, INSTALLING, AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK, AND PROVIDE FOR THE PROPER AND SAFE ROUTING OF VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF OSHA IN THE CONSTRUCTION PRACTICES FOR ALL EMPLOYEES DIRECTLY ENGAGED IN THE CONSTRUCTION OF THIS PROJECT.
- 9. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTION LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL. NEITHER THE PROFESSIONAL ACTIVITIES OF CONSULTANT NOR THE PRESENCE OF CONSULTANT OR THEIR OR HER EMPLOYEES OR SUB-CONSULTANTS AT A CONSTRUCTION SITE SHALL RELIEVE THE CONTRACTOR AND ITS SUBCONTRACTORS OF THEIR RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING OR COORDINATING ALL PORTIONS OF THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND APPLICABLE HEALTH OR SAFETY REQUIREMENTS OF ANY REGULATORY AGENCY OR OF STATE LAW.
- 10. MAINTAIN A CURRENT, COMPLETE, AND ACCURATE RECORD OF ALL AS-BUILT DEVIATIONS FROM THE CONSTRUCTION AS SHOWN ON THESE DRAWINGS AND SPECIFICATIONS, FOR THE PURPOSE OF PROVIDING THE ENGINEER OF RECORD WITH A BASIS FOR THE PREPARATION OF RECORD DRAWINGS.
- 11. MAINTAIN THE SITE IN A NEAT AND ORDERLY MANNER THROUGHOUT THE CONSTRUCTION PROCESS. STORE ALL MATERIALS WITHIN APPROVED STAGING AREAS.
- 12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE FULLY INFORMED OF AND TO COMPLY WITH ALL PERMIT CONDITIONS, LAWS, ORDINANCES, CODES, REQUIREMENTS AND STANDARDS, WHICH IN ANY MANNER AFFECT THE COURSE OF CONSTRUCTION OF THIS PROJECT, THOSE ENGAGED OR EMPLOYED IN THE CONSTRUCTION AND THE MATERIALS USED IN THE CONSTRUCTION.
- 13. PROVIDE, AT CONTRACTOR'S SOLE EXPENSE, ALL MATERIALS, LABOR AND EQUIPMENT REQUIRED TO COMPLY WITH ALL APPLICABLE PERMIT CONDITIONS AND REQUIREMENTS.
- 14. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING AND LAYOUT, UNLESS OTHERWISE SPECIFIED.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND PRESERVATION OF ALL SURVEY MONUMENTS OR PROPERTY CORNERS. DISTURBED MONUMENTS SHALL BE RESTORED BACK TO THEIR ORIGINAL LOCATION AND SHALL BE CERTIFIED BY A REGISTERED CIVIL ENGINEER OR LAND SURVEYOR AT THE SOLE EXPENSE OF THE CONTRACTOR.
- 16. THE OWNER SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL PROPERTY LINES AND EASEMENTS AND CONFIRMING THAT PROPOSED PROJECT ELEMENTS ARE LOCATED ON DISTRICT OWNED LANDS OR ARE COORDINATED WITH OWNERS AND APPROPRIATE PERMISSIONS ARE GRANTED FOR THE WORK.

EARTHWORK NOTES

- 1. GRADING SUMMARY:
 - TOTAL CUT VOLUME = 1990 CY
 - TOTAL FILL VOLUME = 1990 CY
 - NET (CUT/FILL) = 0 CY
- THE ABOVE QUANTITIES ARE APPROXIMATE IN-PLACE VOLUMES CALCULATED AS THE DIFFERENCE BETWEEN EXISTING GROUND AND THE PROPOSED FINISH GRADE, PREPARED FOR PERMITTING PURPOSES ONLY. EXISTING GROUND IS DEFINED BY THE TOPOGRAPHIC CONTOURS AND/OR SPOT ELEVATIONS ON THE PLAN. PROPOSED FINISH GRADE IS DEFINED AS THE DESIGN SURFACE ELEVATION OF WORK TO BE CONSTRUCTED. THE QUANTITIES HAVE NOT BEEN FACTORED TO INCLUDE ALLOWANCES FOR BULKING, CLEARING AND GRUBBING, SUBSIDENCE, SHRINKAGE, OVER EXCAVATION, AND RECOMPACTION, UNDERGROUND UTILITY AND SUBSTRUCTURE SPOILS AND CONSTRUCTION METHODS.
- THE CONTRACTOR SHALL PERFORM AN INDEPENDENT EARTHWORK ESTIMATE FOR THE PURPOSE OF PREPARING BID PRICES FOR EARTHWORK. THE BID PRICE SHALL INCLUDE COSTS FOR ANY NECESSARY IMPORT AND PLACEMENT OF EARTH MATERIALS OR THE EXPORT AND PROPER DISPOSAL OF EXCESS OR UNSUITABLE EARTH MATERIALS.
- 2. PRIOR TO COMMENCING WORK, PROTECT ALL SENSITIVE AREAS TO REMAIN UNDISTURBED WITH TEMPORARY FENCING, AS SHOWN ON THE DRAWINGS, AS SPECIFIED, OR AS DIRECTED BY THE ENGINEER.
- 3. DO NOT DISTURB AREAS OUTSIDE OF THE DESIGNATED LIMITS OF DISTURBANCE, UNLESS AUTHORIZED IN WRITING BY THE ENGINEER. THE COST OF ALL ADDITIONAL WORK ASSOCIATED WITH RESTORATION AND REVEGETATION OF DISTURBED AREAS OUTSIDE THE DESIGNATED LIMITS OF DISTURBANCE, AS SHOWN ON THE DRAWINGS, SHALL BE BORNE SOLELY BY THE CONTRACTOR.
- 4. REMOVE ALL EXCESS SOILS TO AN APPROVED DUMP SITE OR DISPOSE OF ON SITE AT A LOCATION TO BE APPROVED BY THE ENGINEER, IN A MANNER THAT WILL NOT CAUSE EROSION.
- 5. PRIOR TO STARTING WORK ON THE PROJECT, SUBMIT FOR ACCEPTANCE BY THE ENGINEER A HAZARDOUS MATERIALS CONTROLS AND SPILL PREVENTION PLAN. INCLUDE PROVISIONS FOR PREVENTING HAZARDOUS MATERIALS FROM CONTAMINATING SOIL OR ENTERING WATER COURSES, AND ESTABLISH A SPILL PREVENTION AND COUNTERMEASURE PLAN.
- 10. FINE GRADING ELEVATIONS, CONFORMS, AND SLOPES NOT CLEARLY SHOWN ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD TO DIRECT DRAINAGE TO PROTECTED DRAINAGE CONTROL STRUCTURES OR NATURAL WATERWAYS IN A MANNER THAT SUPPORTS THE INTENT OF THE DESIGN. ALL FINAL GRADING SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.
- 11. SPREAD FILL MATERIAL IN LIFTS OF APPROXIMATELY 8 INCHES, MOISTENED OR DRIED TO NEAR OPTIMUM MOISTURE CONTENT AND RECOMPACTED. THE MATERIALS FOR ENGINEERED FILL SHALL BE APPROVED BY A REGISTERED CIVIL ENGINEER. ANY IMPORTED MATERIALS MUST BE APPROVED BEFORE BEING BROUGHT TO THE SITE. THE MATERIALS USED SHALL BE FREE OF ORGANIC MATTER AND OTHER DELETERIOUS MATERIALS.
- 12. ALL CONTACT SURFACES BETWEEN ORIGINAL GROUND AND RECOMPACTED FILL SHALL BE EITHER HORIZONTAL OR VERTICAL. ALL ORGANIC MATERIAL SHALL BE REMOVED AND THE REMAINING SURFACE SCARIFIED TO A DEPTH OF AT LEAST 12 INCHES, UNLESS DEEPER EXCAVATION IS REQUIRED BY THE ENGINEER.

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. 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.
- 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 UNPAVED SURFACES SHALL BE LIMITED TO 15 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.



PRELIMINARY
NOT FOR CONSTRUCTION

PREPARED AT THE REQUEST OF:
COOS WATERSHED ASSOCIATION

NOTES

ROSS SLOUGH DRAINAGE IMPROVEMENT PROJECT 95% DESIGN SUBMITTAL

DESIGNED BY: J.H.
DRAWN BY: M.L.
CHECKED BY: J.H.
DATE: 6/12/2024
JOB NO.: 21-042

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

F:\Projects\21-042 Ross Slough\Website\Property\CA01\21-042 NOTES.dwg - 6/12/2024 11:27 AM