

## Temporary Construction Easement

Snohomish County Property Management  
3000 Rockefeller Avenue M/S 404  
Everett, WA 98201



**Snohomish County**  
**Department of Conservation and Natural Resources**  
*Parks & Recreation Division*

**TEMPORARY CONSTRUCTION EASEMENT** This Temporary Construction Easement (“Easement”) is entered into this \_\_\_\_ day of \_\_\_\_\_, 2025, by and between **Snohomish County, a political subdivision of the State of Washington** (“GRANTOR”), **Stillaguamish Tribe of Indians, a federally recognized Tribe,** (“GRANTEE”).

WHEREAS, Grantor is the owner of real property situated in the County of Snohomish, State of Washington, described as follows (hereinafter “Property”) and more specifically described as follows:

**Portion of Tax Parcel Number: 32063000100100**

**Legal Description: PTN GOVT LOT 7 SEC 30 TWP32 NORTH, RANGE 6 EAST WM LYING NORTH AND WEST OF RAILROAD TGW GOVT LOT 6 SEC 30 TWP 32 NORTH RGE 6 EAST TQW PTN OF NORTHEAST AND SOUTHWEST QUARTER OF SEC 30 TWP 32 RGE 6 EAST .**

**Situate in the County of Snohomish, State of Washington.**

WHEREAS, the Grantee is desirous of acquiring certain privileges across, over, and upon that portion of an approximate thirty-eight (38) acres of the Property as shown on Exhibit A attached hereto (the “Premises”) as temporary access for floodplain restoration.

NOW, THEREFORE, the Parties agree as follows:

1. Right to Enter Premises and Perform Work. Grantor hereby grants to Grantee, its agents, contractors, successors and assigns, a temporary, nonexclusive easement over and upon the Premises as shown on Exhibit A attached hereto for the exclusive purpose of performing the following work including rights of ingress and egress over and across the Property as depicted on Exhibit A (the “Permitted Uses”) consistent with the Trafton Floodplain Restoration site plans [attached hereto as Exhibit C]:

Floodplain excavation to include clearing, grubbing, filling, trail improvements, culvert removals of the Premises using heavy equipment, planting, temporary erosion seeding and installing log jams. Equipment



to be used for the work authorized herein includes a bucket truck, dump truck, backhoe and a digger truck and auger.

Grantee may construct temporary bridge(s) as depicted in Exhibit C sheet C-19 and may further use the Premises as a staging area for the wood to be used in the engineered log jams as depicted in Exhibit E Staging Area. Grantee shall use traffic control measures for managing pedestrian traffic during construction activity as described in Section 2 Pedestrian Traffic Control. The Grantee will perform all construction work on the Grantor Premises during standard County working hours of 7:00 AM and 7:00PM, Monday through Friday, excluding County holidays. Project work may only occur outside of approved work ours only by written authorization of the Grantor. Grantee will timely notify and coordinate with the County on any "Substantial Changes" to the construction design elements located on the Grantor Premises and receive written approval from the Grantor prior to implementation. "Substantial Changes" is defined to consist of alterations that would modify the function of the Grantor Premises or require a contractor change order for approval.

Grantee may use the Premises for the Permitted Uses and for no other use or purpose without the Grantor's written consent, which may be granted or withheld in the Grantor's sole discretion. Grantor shall be responsible for all costs and expenses of construction. All work associated with the construction shall be performed in accordance with the standards of practice for the jurisdiction in which the work is to be performed.

2. Pedestrian Traffic Control. The Premises include areas of public access to the floodplain and Stillaguamish River. Ingress and egress to the Premises requires use of portions of the County's Whitehorse Trail, a public trail. During the term of this Easement, Grantee shall be responsible, at its sole cost and expense, for conducting traffic control as described in Exhibit D attached hereto, on the Premises and the Whitehorse Trail to manage pedestrian traffic both on the Premises and on Whitehorse Trail. Grantee shall provide traffic control subject to any permit requirements and local regulations. Grantee shall ensure that its operations and traffic control services do not obstruct or inconvenience the public any more than necessary to complete the Permitted Uses.

3. Term. The term of this Easement will commence upon full execution by the GRANTOR and GRANTEE ("Commencement Date") and will terminate November 30, 2025. The work described in the Trafton Floodplain Restoration site plans referenced in Section 1 above will be completed on or before November 30, 2025.

GRANTEE shall complete the work authorized by this Easement by November 30, 2025. GRANTEE shall work with diligence, speed, and due regard for the rights, interest, and convenience of the public and the GRANTOR. If, at the end of November 30, 2025, GRANTEE has not completed the work authorized by this Easement, then the rights conferred on GRANTEE will terminate, unless an extension of time is approved as provided herein.

4. Consideration. The GRANTEE shall pay a one-time use fee in the amount of \$500.00 to for the rights granted in this Easement. Grantor hereby shall apply a \$500.00 credit in lieu of payment from Grantee, for Grantee's work under this Easement to improve Grantor's trail(s) and the related floodplain restoration work.

5. Notice to County. GRANTEE shall contact Tom Teigan, Director of Snohomish County Department of Conservation and Natural Resources, Parks and Recreation Division, located at 6705 Puget Park Drive Snohomish, WA 98296, by phoning 425-388-6600, at least 24 hours prior to entering upon the Property for the first time and to notify the GRANTOR that the work has commenced on the Premises.



6. Permitting Requirements. GRANTEE shall acquire all necessary permits required to perform the work under this Easement. GRANTOR does not warrant that any permit or license is necessary or not necessary.

7. Compliance with Easement Terms and Conditions. GRANTEE agrees to comply with all terms and conditions of this Easement. GRANTEE shall respect and protect all property, contracts, persons, and attendant rights that might be affected by the work authorized herein.

8. Indemnification and Hold Harmless GRANTEE agrees:

(a) As consideration for the rights granted hereunder, the GRANTEE agrees to indemnify, defend and hold harmless the Grantor from any and all claims for injuries or damages (including reasonable attorneys' fees) that may in any manner directly or indirectly arise out of the construction, repairs, maintenance, appurtenances constructed or placed on the premises by GRANTEE or patrolling of the Property pursuant to this Easement or out of the operations of the GRANTEE pursuant to this Easement; provided, that the GRANTEE shall not be responsible to the Grantor for any injuries or damages suffered by any person or property caused by sole negligent acts or omissions of the Grantor, its officers, employees and/or agents.

(b) Solely and expressly for purposes of its duties to indemnify and hold harmless the Grantor as set forth above, the GRANTEE specifically waives any immunity, as respects the Grantor only, it might have under the state industrial insurance law, RCW Title 51, in the event that a claim is made against the Grantor for an injury to any employee of the GRANTEE. THE GRANTEE ACKNOWLEDGES THAT THIS WAIVER HAS BEEN MUTUALLY NEGOTIATED BY THE PARTIES.

(c) The provisions of this Section shall survive the expiration or termination of this Easement with respect to any event occurring prior to such expiration or termination.

(d) Nothing contained in this section or Easement shall be construed to create a liability or a right of indemnification by any third party.

9. Insurance. In satisfaction of the insurance requirements set forth in this Section 8, GRANTEE may self-insure against such risks in such amounts as are consistent with good utility practice. GRANTEE shall provide the GRANTOR with reasonable written evidence that GRANTEE is maintaining such self-insurance. Absent self-insurance, this Easement is subject to the following requirements:

(a) Insurance Required. GRANTEE shall procure, and maintain for the duration of this Easement, insurance against claims for injuries to persons or damages to property which may arise from, or in connection with, the performance of work hereunder by the GRANTEE, its agents, representatives, employees and/or contractors/subcontractors. The GRANTEE or contractor/subcontractor shall pay the costs of such insurance. The GRANTEE shall require each of its contractor/subcontractors to furnish to the GRANTEE separate certificates of insurance and policy endorsements as evidence of compliance with the insurance requirements of this Easement.

The GRANTEE is responsible for ensuring compliance with all of the insurance requirements stated herein either by purchasing such insurance or by self-insuring. Failure by the GRANTEE, its agents, employees, officers, contractor/subcontractors to comply with the insurance requirements stated herein shall constitute a material breach of this Easement.



Where applicable, each insurance policy shall be written on an “occurrence” form; except that insurance on a “claims made” form may be acceptable with prior GRANTOR approval. If coverage is approved and purchased on a “claims made” basis, the GRANTEE warrants continuation of coverage, either through policy renewals or the purchase of an extended discovery period, if such extended coverage is available, for not less than three years from the date of Easement termination, and/or conversion from a “claims made” form to an “occurrence” coverage form.

Nothing contained within these insurance requirements shall be deemed to limit the scope, application and/or limits of the coverage afforded by said policies or self-insurance, which coverage will apply to each insured to the full extent provided by the terms and conditions of the policy(s), where applicable. Nothing contained in this provision shall affect and/or alter the application of any other provision contained within this Easement.

(b) Risk Assessment by GRANTEE. By requiring such minimum insurance, the GRANTOR shall not be deemed or construed to have assessed the risks that may be applicable to the GRANTEE under this Easement, nor shall such minimum limits be construed to limit the limits available under any insurance coverage obtained by the GRANTEE. The GRANTEE shall assess its own risks and, if it deems appropriate and/or prudent, maintain greater limits and/or broader coverage.

(c) Minimum Scope and limits of Insurance. Coverage shall be at least as broad as and with limits not less than the following:

1. (i) **Commercial General Liability Insurance** on a coverage form at least as broad as CG 00 01 current edition, including coverage for Premises and Operations; Products and Completed Operations; Broad Form Property Damage (including Completed Operations); Explosion, Collapse, Underground Hazards (including subsidence); Contractual Liability insurance obligations assumed in this agreement; Personal Injury and Advertising Liability, Severability of Interest Clause, Waiver of Subrogation endorsement in favor of County as required by contract.

Minimum Limits of Liability shall be:

\$ 5,000,000 Each Occurrence; OR the full per occurrence limit of the Contractor’s policy, whichever is greater; and Personal Injury Liability;  
\$ 5,000,000 General Aggregate limit; and Products & Completed Operations Aggregate;  
Stop Gap shall be included (unless insured as Employers Liability under Part B. of a Workers Compensation Insurance Policy).

(ii) Automobile Liability. Insurance Services Office form number (CA 00 01) BUSINESS AUTO COVERAGE (or self-insurance) symbol 1 for “any auto”; or the appropriate coverage provided by symbols 2, 7, 8, or 9 of \$5,000,000 combined single limit per accident for bodily injury and property damage if the use of motor vehicles is contemplated.

(iii) Workers’ Compensation. Workers’ Compensation coverage (or self-insurance/Excess Workers Compensation), as required by the Industrial Insurance Act of the State of Washington

Umbrella/Excess Liability insurance is acceptable to meet the above defined CGL and Auto requirements

(d) Other Insurance Provisions. The insurance policies required in this Easement are to contain, or be endorsed to contain, the following provisions:



(i) All Liability Policies except Workers Compensation.

1. (1)

2. Snohomish County and its officers, elected officials, employees, and agents are to be covered as additional insureds as respects liability arising out of activities performed by or on behalf of the GRANTEE in connection with this Easement, including Products and Completed Operations. Such coverage shall be primary and non-contributory insurance as respects Snohomish County and its officers, elected officials, employees, and agents. Additional Insured Endorsements shall be included with the Certificate of Liability Insurance, "CG 20 10" and "CG 20 37", or their equivalent are required.

(2) To the extent of the GRANTEE's/contractor's negligence, the GRANTEE's/contractor's insurance coverage shall be primary insurance with respect to the County, its officers, officials, employees, and agents. Any insurance and/or self-insurance maintained by the County, its officers, officials, employees, or agents shall not contribute with the GRANTEE's insurance or benefit the GRANTEE in any way.

(3) The GRANTEE's insurance shall apply separately to each insured against whom claim is made and/or lawsuit is brought, except with respect to the limits of the insurer's liability.

(ii) All Policies. Coverage shall not be suspended, voided, canceled, reduced in coverage or in limits, except by the reduction of the applicable aggregate limit by claims paid, until after 30 days prior written notice has been given to the GRANTOR. In the event of said cancellation or intent not to renew, the GRANTEE shall obtain and furnish to the GRANTOR evidence of replacement insurance policies meeting the requirements of this Section by the cancellation date. Failure to provide proof of insurance could result in suspension of the Easement.

(e) Acceptability of Insurers. Unless otherwise approved by the GRANTOR, insurance is to be placed with insurers with a Bests' rating of no less than A VII, or, if not rated with Bests, with minimum surpluses the equivalent of Bests' surplus size VIII. Any exception must be approved by the GRANTOR. If, at any time, the foregoing policies shall fail to meet the above requirements, the GRANTEE shall, upon notice to that effect from the GRANTOR, promptly obtain a new policy, and shall submit the same to the GRANTOR, with appropriate certificates and endorsements, for approval.

(f) Verification of Coverage. The GRANTEE shall furnish the GRANTOR with a certificate of insurance and Additional Insured Endorsements outlining the coverages required by this Easement

(g) Subcontractors. The GRANTEE shall include all subcontractors as insured under its policies or shall require separate certificates of insurance and policy endorsements from each subcontractor. If the GRANTEE is relying on the insurance coverage provided by subcontractors as evidence of compliance with the insurance requirements of this Easement, then such requirements and documentation shall be subject to all of the requirements stated herein.

10. No Interest in Property. GRANTEE agrees that GRANTEE does not and shall not at any time claim any interest or estate of any kind or extent whatsoever in the Property by virtue of this Easement or the work authorized by this Easement.

11. No Interference or Obstruction. GRANTEE agrees that it will not interfere or obstruct the GRANTOR'S use of the Property during the term of this Easement.



12. Nonexclusive Nature of Rights and Privileges. The rights and privileges granted under this Easement to GRANTEE are nonexclusive. This Easement does not prohibit GRANTOR from granting other Easements or rights of like nature to other public or private entities, nor shall it prevent GRANTOR from using any of its roads, streets, and real property for any and all public use or affect its jurisdiction over any part of them.

13. GRANTOR Revocation of Easement. This Easement may be revoked by GRANTOR, including by verbal notice effective immediately by contacting Jim Whitehead at 425-783-4498 at any time that GRANTOR determines that public health, public safety, the general welfare, or the interest of GRANTOR requires revocation. GRANTOR may revoke this Easement if GRANTEE violates any term or condition of this Permit by written notice in the mail to the following address:

STILLAGUAMISH TRIBE OF INDIANS  
3322 236<sup>TH</sup> ST NE  
ARLINGTON, WA 98223

ATTENTION: JASON GRIFFITH – ENVIRONMENTAL PROGRAM MANAGER

14. GRANTEE Termination of Easement. The GRANTEE may terminate the Easement by written notice to the Grantor at this address:

SNOHOMISH COUNTY PROPERTY MANAGEMENT  
3000 ROCKEFELLER AVENUE M/S 404  
EVERETT, WA. 98201  
ATTN: PROPERTY OFFICER

15. Erosion, Hazardous Waste, and Hazardous Materials. GRANTEE shall take all necessary measures and follow all applicable laws to prevent erosion and spills of any hazardous materials and noxious waste substances onto the Premises and to keep the Premises free from any debris and waste.

To the best of the GRANTOR's knowledge, the Premises is not in violation of any law, ordinance, rule or regulation relating to the environmental conditions thereon. Moreover, to the best of the GRANTOR's knowledge, there is no hazardous waste or other substance, including but not limited to those that would be a hazardous waste, material or substance, toxic substance, gas or pollutant, as defined under the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. Section 9601 et. seq., the Washington Model Toxics Control Act, RCW Ch. 70.105D, RCW Ch. 70.95, and the regulations promulgated thereunder or under any applicable local or state environmental ordinance, statute, law, rule or regulation ("Hazardous Substances"), on or about the Premises or on any parcels of land which abut the Premises. Further, to the best of the GRANTOR's knowledge: (i) there has been no release, spill, leak, discharge, emission, leak or disposal, (ii) there are no substances or conditions, in or on the Premises or any other parcels of land which may affect the Premises or use thereof that may support a claim or cause of action under any federal, state or local environmental statute, regulation, ordinance or other environmental regulatory requirements and (iii) there is no asbestos, PCBs or underground storage tanks located on the Premises or which have been removed therefrom.

The GRANTEE agrees to indemnify, hold harmless and defend the County, its appointed officials, officers, employees, agents and representatives, from and against any and all claims, actions, suits, liability, loss, cost, expenses and damages of any nature whatsoever, including costs and attorneys' fees, which are caused by or arise out of (i) the existence of Hazardous Substances on the Premises or the migration of Hazardous Substances originally released or deposited on the Premises onto other parcels of land; (ii) the



GRANTEE's failure or insufficient compliance with any federal, state or local laws applicable to Hazardous Substances; or (iii) any claim, in law or equity, brought by any third party or the GRANTEE's own officials, officers, employees, agents or representatives alleging any cause of action relating to the existence of Hazardous Substances on the Premises or any migration of Hazardous Substances originally released or deposited on the Premises onto other parcels of land, and, with respect to (i), (ii) and (iii), that existed, or in the case of migration commenced due to a condition that existed, as of or prior to the commencement of this Easement.

16. Restoration and Repair.

(a) In the event that any damage of any kind is caused by GRANTEE in the course of performing work authorized by this Easement, GRANTEE will repair the damage at its sole cost and expense on or before November 30, 2025 or earlier termination of this Easement. If the Property is not restored at the expiration or termination of this Easement, GRANTOR may complete the work and upon demand GRANTEE shall pay to the GRANTOR all reasonable and appropriate costs of such work, including materials and other expenses. GRANTEE agrees not to disturb any pre-existing critical areas on the Property except as authorized under applicable County and State law, including but not limited to SCC 30.62A.510. Any disturbance of these areas by GRANTEE except as permitted by law will require GRANTEE to restore critical areas at GRANTEE'S sole cost and expense and upon final approval of GRANTOR.

(b) GRANTOR may at any time do, order, or have done any and all work considered necessary to restore to a safe condition any real or personal property left by GRANTEE in a condition that appears dangerous to life or property and upon demand GRANTEE shall pay to the GRANTOR all reasonable and appropriate costs of such work, including materials and other expenses.

17. Assignment, Successors and Assigns. This Easement may not be assigned, sublet or possession thereof transferred voluntarily or involuntarily by the GRANTEE. All of the provisions of this Easement shall be binding upon and inure to the benefit of GRANTOR, GRANTEE and their respective successors and assigns.

18. Compliance with Laws. GRANTEE shall comply with all federal, state and local laws, rules, and regulations, executive orders, policies, guidelines, and requirements applicable to GRANTEE's use and occupation of the Easement.

19. Prevailing Wage. To the extent any of the work performed on the Premises under the terms of this Easement meets the definition of a "public work" under RCW 39.04.010, GRANTEE and any subcontractors engaged in performing such work shall pay all workers, laborers, or mechanics an amount not less than the prevailing rate of wages established for each trade or occupation as established by the Washington Department of Labor and Industries. GRANTEE shall be solely responsible to ensure compliance with all requirements of chapter 39.12 RCW and to determine the appropriate classifications and verify the applicable prevailing wage rates.

20. Complete Agreement. This Easement represents the complete agreement of the parties regarding the matters described herein. There are no other verbal or written agreements regarding the rights and obligations set forth herein, except as contained in this Easement. This Easement may only be modified by a written document signed by the parties.



21. Severability. If any provision of this Easement is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, such provision shall not affect the validity of the remaining provisions of this Easement.

22. Governing Law and Venue. This Easement shall be governed by and construed in accordance with the laws of the State of Washington. The venue for any action to enforce or interpret this Easement shall lie in the Superior Court of Washington for Snohomish County, Washington.

23. Authority. Each party signing this Easement if on behalf of an entity, represents that they have full authority to sign this Easement on behalf of such entity.

24. Compliance with Storm Water Pollution Prevention Plan. The GRANTEE is required to comply with the Snohomish County Trafton Storage Site, Storm Water Pollution Plan ("SWPPP") attached hereto and reference herein as Exhibit B.

25. Limited Waiver of Sovereign Immunity. The GRANTEE expressly reserves all of its inherent sovereign rights as a federally recognized Indian tribe, including sovereign immunity from suit in any state, federal or tribal court without the GRANTEE'S consent. By entering into this Easement, the GRANTEE hereby grants a limited waiver of sovereign immunity to the GRANTOR only, subject to and conditioned on the following:

(a) This limited waiver of immunity shall not extend to interpretation of the Treaty of Point Elliott, 12 Stat. 927, or the rights reserved by the GRANTEE under that Treaty. This waiver of immunity shall not extend to or be used for or to the benefit of any other person or entity of any kind or description whatsoever, including any successor or assign of the GRANTOR.

(b) To the extent that jurisdiction obtains, this limited waiver of immunity shall be deemed a consent to jurisdiction only of the Snohomish County Superior Court.

(c) This limited waiver of immunity in favor of the GRANTOR shall commence and become effective as of the effective date of this Easement and shall remain in effect and extend for three (3) years from the ending date under Section 2 or three (3) years from earlier termination of this Easement as set forth in Sections 12 and 13 herein. Notwithstanding any applicable statute of limitations or other law, upon expiration of the above three (3) year period that extends from the ending date or early termination of this Easement, this limited waiver of immunity shall be deemed withdrawn without further action by the GRANTEE or notice to the GRANTOR.

(d) Nothing contained in this Easement shall be deemed a consent to levy of any judgment, lien or attachment upon any assets, property or interest of the GRANTEE except as specifically described herein.

(e) Nothing in this Easement nor any activity of the GRANTEE shall implicate or in any way involve the trust assets or credit of the GRANTEE or any of its members.



The GRANTEE hereby expressly provides a limited waiver of sovereign immunity to suit with respect to claims made relating to, or arising under, this Easement by any party, to interpret or enforce the terms of this Easement, or to a claim of indemnification by the GRANTOR. The limit for any claim of indemnification will be the insurance limit required by this Easement. The parties agree that in discharging this indemnification obligation, where the required insurance is procured, the GRANTOR shall look only to the proceeds of the insurance procured by the GRANTEE herein and the policy of insurance obtained by the GRANTEE shall prohibit the insurer from asserting a defense of sovereign immunity to a claim made under the policy. The GRANTEE warrants its authority to and agrees to assign over to the GRANTOR, at its request, any and all of its rights against the insurer to effectuate a payment of its indemnification obligation.

**THE SPACE BELOW IS LEFT BLANK INTENTIONALLY SEE NEXT PAGE**



GRANTOR: SNOHOMISH COUNTY

GRANTEE: STILLAGUAMISH TRIBE OF  
INDIANS

BY \_\_\_\_\_  
Dave Somers, Executive

BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

DATE \_\_\_\_\_

Approval as to form:

\_\_\_\_\_  
Deputy Prosecuting Attorney

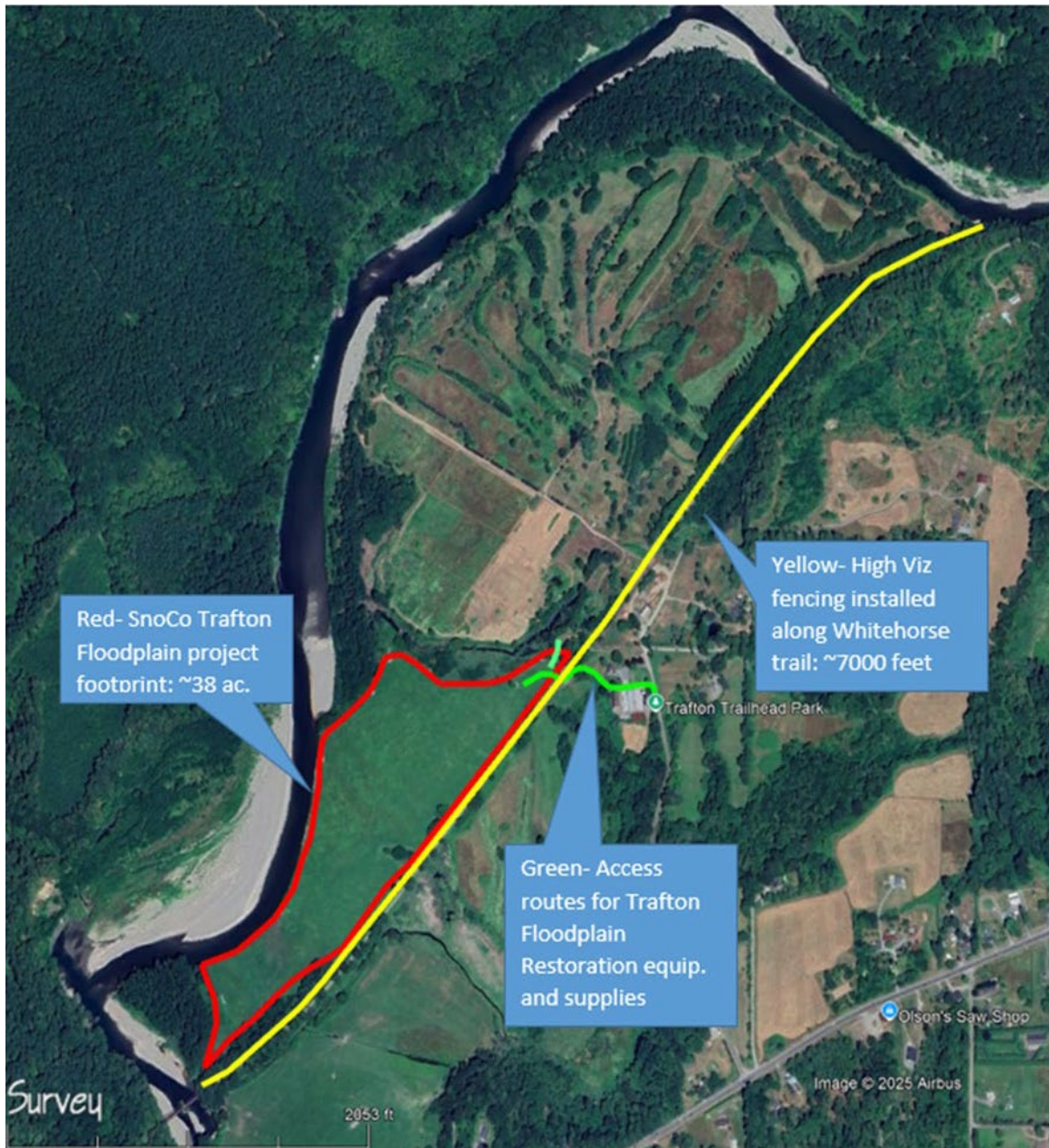
Reviewed by Risk Management:

☐ Approved ☐ Other

\_\_\_\_\_  
Risk Management Signature



**EXHIBIT A  
THE PREMISES**





**EXHIBIT B**  
STORM WATER POLLUTION PREVENTION PLAN

# Spill Prevention, Control, and Countermeasures Plan Trafton Reach Floodplain Restoration

**Prime Contractor: Trimaxx Construction**

THIS PLAN SHALL BE UPDATED AS NECESSARY TO REFLECT ACTUAL  
SITE CONDITIONS AND PRACTICES  
AND MUST BE UPDATED AT LEAST ANNUALLY

A COMPLETE, UPDATED COPY OF THIS PLAN MUST BE ACCESSIBLE ON THE  
PROJECT SITE AT ALL TIMES

Prepared by

Trimaxx Construction Inc.  
12903 Wayward Way  
Sedro Woolley, WA 98284  
(360) 661-6857

March 20th, 2025

## Table of Contents

SPCC Plan Implementation Requirements .....	1
SPCC Plan Elements.....	2
1. Responsible Personnel .....	2



2. Spill Reporting .....	2
3. Project and Site Information .....	5
4. Potential Spill Sources .....	5
5. Pre-Existing Contamination .....	7
6. Spill Prevention and Response Training .....	7
7. Spill Prevention .....	7
8. Spill Response .....	8
9. Project Site Map.....	14
10. Spill Report Form(s) .....	14
Management Approval.....	14

**SPCC Plan Trafton Floodplain**

**March 20, 2025**

**Restoration**

**Page**

**i**

## **SPCC Plan Implementation Requirements**

WSDOT Standard Specification 1-07.15(1) and WSDOT General Special Provision 071501.FR1 require a Spill Prevention, Control and Countermeasures Plan (SPCC Plan or



Plan) to be developed for each WSDOT project. The purpose of an SPCC Plan is to protect human health and the environment from spills and releases of "hazardous materials," a generic term WSDOT uses in Chapter 447 of its Environmental Procedures Manual to mean dangerous waste, problem waste, petroleum products, and hazardous substances.

Trimaxx Construction Incorporated (TCI), the Prime Contractor for Trafton Reach Floodplain Restoration Project, has developed this SPCC Plan to satisfy WSDOT Standard Specification 1- 07.15(1) and WSDOT General Special Provision 071501.FR1 for the Project.

TCI will use this SPCC Plan for the duration of the Project and will update the Plan throughout Project construction so that the Plan reflects actual site conditions and practices. At a minimum, TCI will update this Plan annually. TCI will maintain an updated copy of this Plan on the Project site and all Project employees will have immediate access to this Plan.

No on-site Project construction activities will commence until The Stillaguamish Tribe accepts this SPCC Plan. TCI will implement the spill prevention measures identified in this SPCC Plan before performing any of the following on the Project site:

1. Placing materials or equipment in staging or storage areas;
2. Refueling, washing, or maintaining equipment;
3. Stockpiling contaminated materials.

## **SPCC Plan Trafton Floodplain Restoration**

### **Page**

-----  
**1**

---

**March 20, 2025**

## **SPCC Plan Elements**

### **11. Responsible Personnel**

Table 1 identifies the names, titles, and contact information for the personnel responsible for implementing and updating the SPCC Plan and for responding to spills. Contact information for spill response subcontractors that will be used to respond to spills (as described in Section 8, Spill Response, below) is also included in Table 1.



Table 1 Responsible Personnel		
Responsibility	Name and Title	Contact Information
Implementing and Updating SPCC Plan (Primary person)	Todd Snyder Project Manager/ESC Lead	Company: Trimaxx Construction inc. Office Phone: Cell Phone: (360) 661-6857
Implementing and Updating SPCC Plan (Secondary Contact)	Jon Nichols Foreman/ Alt. ESC lead	Company: Trimaxx Construction Inc. Office Phone: Cell Phone@360) 661-6858
On-Site Spill Responder	Jon Nichols Foreman/ Esc Lead	Company: Trimaxx Construction Office Phone: Cell Phone@360) 661-6858

## 12. Spill Reporting

In the event of a spill, TCI will notify

- The Stillaguamish Tribe Project Manager, Jason Griffith (360) 631-0868
- The Federal, State, and Local Agencies listed in Table 2.

Table 2 Federal, State, and Local Agencies to be Notified in the Event of a Spill		
Agency Name	Agency Notification Telephone Number	When Agency will be Notified
National Response Center	1-800-424-8802	Notify immediately Spill or release to water
Washington state division of emergency management	1-800-258-5990	Notify immediately Spill or release to water
Washington state department of ecology	(425 )649-7000	Notify immediately Spill or release to water
Washington state department of ecology	(425 )649-7000	Immediately if threat to health or environment from spill to soil

**SPCC Plan Trafton Floodplain  
Restoration**

**Page March 20, 2025**  
**2**

Table 2 Federal, State, and Local Agencies to be Notified in the Event of a Spill		
Agency Name	Agency Notification Telephone Number	When Agency will be Notified
Washington state department of ecology	(425 )649-7000	Within 90 days if not immediate threat resulting from spill to soil

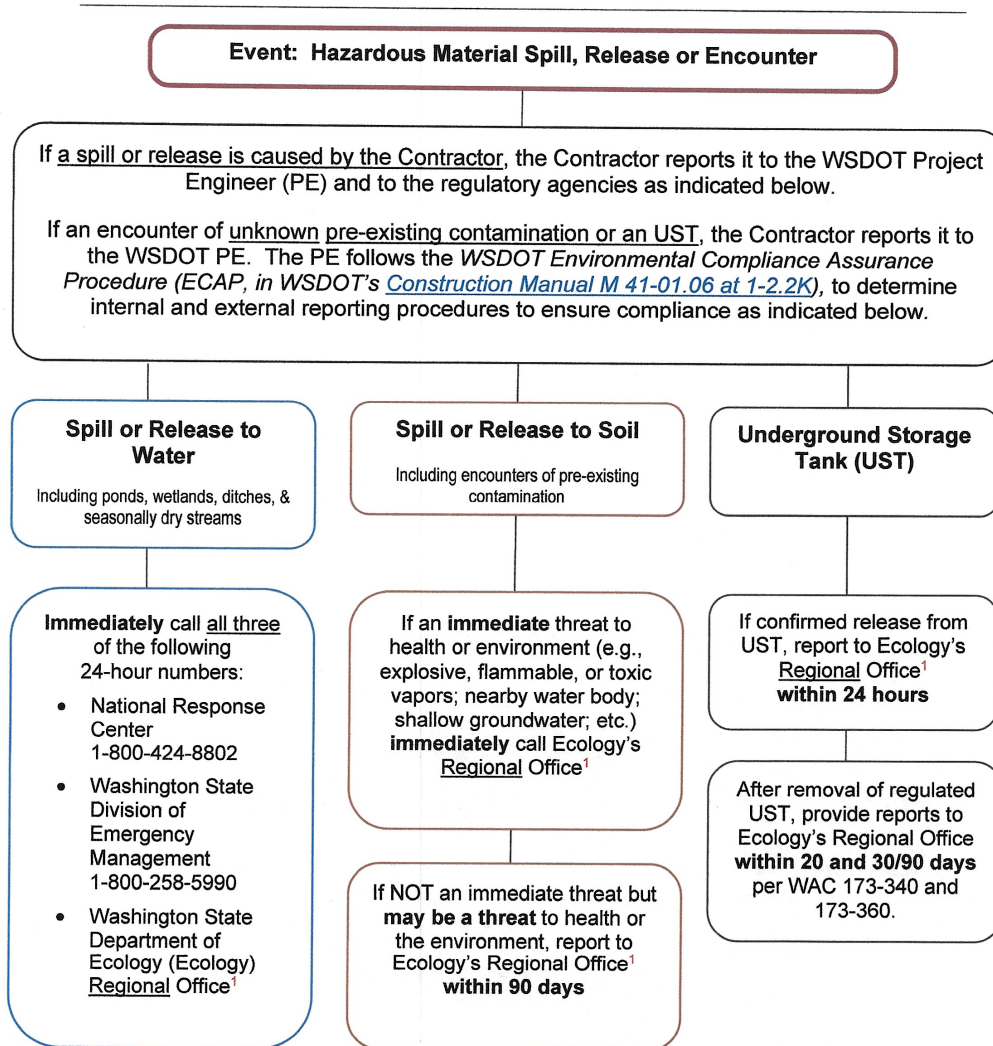


Washington state department of ecology	(425 )649-7000	Within 24 hours if confirmed release from UST
--	----------------	---





**Figure 2 External Regulatory Reporting Requirements**



**1. Ecology Regional Office Numbers**

Eastern (Spokane): 509-329-3400  
Central (Yakima): 509-575-2490

Northwest (Bellevue): 425-649-7000  
Southwest (Lacey): 360-407-6300

Ecology regional lines and the type of information needed is provided on Ecology's spill reporting website at <http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm>.



### 13. Project and Site Information

- The Project work: The Trafton Reach Floodplain Restoration Work will include installing temporary bridges and crossings for access, clearing work areas of vegetation, isolating work areas from the river and other wetted areas (if necessary), constructing 86 log structures, creating new channels, riprap removal and placement, bank stabilization grading and fill, removal of temporary bridges and crossings, and restoring the site.
- 8. The site location and boundaries: Project includes the restoration of approximately 2 miles of the North Fork Stillaguamish River, mid project 26703 115<sup>th</sup> Ave. NE Arlington, WA 98223
- c. The drainage pathways from the site: see Table 3 below.
- d. Nearby waterways and sensitive areas and their distances from the site: see Table 3 below.

Table 3 Drainage Pathways and Nearby Waterways <sup>1</sup> and Sensitive Areas <sup>2</sup>		
Drainage Pathway from Site	Receiving Nearby Waterway <sup>1</sup> or Sensitive Area <sup>2</sup>	Distance of Receiving Waterway or Sensitive Area from Project Site
Site is in North Fork Stillaguamish River	North Fork Stillaguamish River	0 feet

- Waterways include streams, creeks, sloughs, rivers, Puget Sound, etc.
- 2. Sensitive areas are areas that typically contain populations that could be particularly sensitive to a hazardous materials spill or release. Such areas include wetlands, areas that provide habitat for threatened or endangered species, nursing homes, hospitals, child care centers, etc. Sensitive areas also include areas where groundwater is used for drinking water, such as wellhead protection zones and sole source aquifer recharge areas.

### 4. Potential Spill Sources

A description of each potential hazardous material brought or generated on-site is set forth in Table 4, below. The potential hazardous materials listed on Table 4 include materials used for operating, refueling, maintaining, and cleaning all equipment.



Table 4 Hazardous Materials Brought or Generated On-Site				
Hazardous Material Name	Intended Use of Material	Est. Max. Amount of Material On-Site at Any One Time	Material Staging, Use, and Storage Location(s) & Material Storage and Secondary Containment Practices and Structures <sup>1</sup>	Distance of Material Staging, Use, and Storage Locations from Nearby Waterways <sup>2</sup> and Sensitive Areas <sup>3</sup>
Diesel fuel on crew trucks	Fueling the equipment needed to build the project	500 gallons total in various fuel cells	Earth moving equipment will be fueled at a minimum of 150 feet away from any wetland, when refueling secondary containment will be used by the refueling crew truck, spill kits will be located on each fuel truck . When generators or pumps are used they will be placed in secondary containment with a capacity greater than the pump it contains.	Earthmoving equipment will be staged no closer than 50 feet from any wetland
Gasoline and oil	Fuel pumps and saws	10 gallons in 5 gallon approved cans	Gasoline and oil will be stored on crew trucks	

1. Material Storage and Secondary Containment Practices and Structures must meet the requirements of Section 7.C (Spill Prevention, material storage and secondary containment practices and structures), below. These practices and structures may be described in Table 4 or under Section 7.C., below.
2. Waterways include streams, creeks, sloughs, rivers, Puget Sound, etc.
3. Sensitive areas are areas that typically contain populations that could be particularly sensitive to a hazardous materials spill or release. Such areas include wetlands, areas that provide habitat for threatened or endangered species, nursing homes, hospitals, and child care centers. Sensitive areas also include areas where groundwater is used for drinking water, such as wellhead protection zones and sole source aquifer recharge areas.



## 1. Pre-Existing Contamination

Hazardous Material is not expected within the project limits. The removal of any encountered hazardous materials will meet all guidelines and permit requirements, at the direction of the WSDOT engineer.

## 2. Spill Prevention and Response Training

Every Monday morning TCI will have its weekly safety meeting at that time location of spill kits and the contents and usage of the spill kits will be discussed

All personnel and subcontractors will be required to go over the SPCC Plan with either Jon Nichols or Todd Snyder before they will be able to start work on the project. Once they have been informed of the plan, they will sign that they understand the plan and its response procedures. Records of all SPCC site training will be kept in the project site log book.

## 3. Spill Prevention

- A. Spill response kit contents and location(s). See Table 7. Appropriately sized kits will be maintained in close proximity to hazardous materials and equipment and will be immediately accessible to all Project employees.

Table 7 Spill Response Kit Contents and Locations		
Type of Spill Kit	Spill Kit Contents	Spill Kit Location(s)
Drum kit	personal protective equipment (PPE, such as safety glasses, gloves, coveralls, boot covers), spill pads, absorbent, booms, garbage bags, plastic sheeting, overpack or disposal drum, complete copy of SPCC Plan	Located on crew trucks

8. Security measures for potential spill sources. The hazardous materials will be stored on crew trucks and not left onsite at night, equipment will be equipped with locked fuel caps, etc.

- C. Material storage and secondary containment practices and structures.

- Potential hazardous materials will be mixed, located, and stored on diked or contained impervious surfaces capable of handling the maximum volume of material on site at any given time so as to prevent spills from escaping or from entering State waters.



- Drip pans or other protective devices will be used for all hazardous material transfer operations.
  - Oil and fuel transfer valves and fittings, fuel hoses, and the like will be stored to prevent spills into State waters.
- D. Methods used to prevent stormwater contact with hazardous materials. Contaminated soil will be placed on bermed plastic and covered.
- E. Site inspection procedures and frequency.
- hazardous material containers and tanks, fuel hoses, oil or fuel transfer valves and fittings, and the like will be checked regularly for drips or leaks to prevent spills into State waters.
- F. Equipment and structure maintenance practices.
- hazardous material containers and tanks, fuel hoses, oil or fuel transfer valves and fittings, and the like will be maintained to prevent spills into State waters.

## 8. Spill Response

Tables 8.A through 8.E, below, outline the response procedures that TCI will follow for the scenarios described in those tables' titles. The response procedures that are outlined will ensure TCI does everything possible to control and contain hazardous materials until appropriate measures can be taken. The response procedures include a description of the actions that TCI will take to address each task shown in the tables as well as the specific on-site, spill response equipment that will be used to perform each task. If TCI will use a Subcontractor for spill response, the contact information for the Subcontractor is provided in Table 1; when the Subcontractor will be used and the actions that TCI will take at the site while waiting for the Subcontractor to respond are described in the appropriate table below.



**Table 8.A Spill Response Procedures for Spills of Each Type of Hazardous Material at Each Location Identified in Section 4 except: for Spills Occurring During Work with Equipment Used Below the Ordinary High Water Line, see Table 8.E**  
(Including Actions to be Taken and Equipment to be Used)

Note 1: Oil, paint, and solvent spills shall be addressed and shall be prevented from reaching storm drains or other discharge points.  
Note 2: It is acceptable to combine materials covered by the same response procedures, as long as each material is clearly identified.

Hazardous Material and Location	Spill Response Task				Clean Up Spilled Material Decontaminate Equipment Dispose of Spilled & Contaminated Material
	Assess the Spill	Secure the Area	Contain and Eliminate the Spill Source		
diesel fuel or oil from equipment or fuel tanks on crew trucks	Determine approximate amount of material spilled and where spilled material has gone and is going.  Call on-site spill responder listed in Table 1.  If spill is an immediate threat to human health or property, call 911.  Report spill to Nooksack Tribe PE and to agencies as listed in Table 2.)	Shut down work in areas affected by spill, remove non-response personnel from spill area, and prevent access to spill area by non-response personnel.)	If safe to do so, eliminate spill source by shutting off equipment, closing leaking vales, etc.  If safe to do so, contain spill using spill pads, spill booms, and absorbent from spill kits.)	If spill is not too large, dangerous, or involved, clean up spilled material.  If spill is too large, dangerous, work emergency personnel to clean up spill.  Decontaminate all non-disposable equipment used in or contaminated during spill response.  Disposal of spilled and contaminated material and all decontamination fluids in accordance with all regulations at a legally permitted facility. Within 7 days of disposal, provide documentation substantiating such disposal to the Nooksack Tribe inspector .)	



<b>Table 8.B Spill Response Procedures for Stormwater that has Come into Contact with Hazardous Materials</b> <b>(Including Actions to be Taken and Equipment to be Used)</b>			
Assess Contaminated Stormwater	Spill Response Task		
	Secure the Area	Contain and Eliminate the Contaminated Stormwater and its Source	Clean Up Contaminated Stormwater Decontaminate Equipment Dispose of Contaminated Stormwater and Supplies
Determine approximate amount of storm water that has come into contact with contaminants.	Divert any more storm water from coming into contact with the contaminated area	Use plastic and sandbags to create diversion dams and detention ponds for the contaminated water	If spill is not too large, dangerous, or involved, clean up spilled material.
Call on-site spill responder listed in Table 1.			If spill is too large, dangerous, work emergency personnel to clean up spill.
If spill is an immediate threat to human health or property, call 911.			Decontaminate all non-disposable equipment used in or contaminated during spill response.
Report spill to Nooksack Tribe PE and to agencies as listed in Table 2.)			Disposal of spilled and contaminated material and all decontamination fluids in accordance with all regulations at a legally permitted facility. Within 7 days of disposal, provide documentation substantiating such disposal to the Nooksack Tribe Inspector.)



**Table 8.C Spill Response Procedures for Releases or Spills of Any Pre-Existing Contamination and Contaminant Source Described in Section 5  
(Including Actions to be Taken and Equipment to be Used)**

Note: write N/A if no contamination or contaminant source is described in Section 5 and delete the following table (but not the table title, above).

Contamination or Contaminant Source	Assess the Spill	Secure the Area	Spill Response Task		Clean Up Spilled Material Decontaminate Equipment Dispose of Spilled & Contaminated Material
			Contain and Eliminate the Spill Source		
N/A	N/A	N/A	N/A		N/A



<b>Table 8.D Spill Response Procedures for Releases or Spills of Any Unknown Pre-Existing Contamination and Contaminant Sources Encountered During Project Work</b> <b>(Including Actions to be Taken and Equipment to be Used)</b>				
Contamination or Contaminant Source	Assess the Spill	Spill Response Task		
		Secure the Area	Contain and Eliminate the Spill Source	Clean Up Spilled Material Decontaminate Equipment Dispose of Spilled & Contaminated Material
gasoline contaminated soil; buried tanks; buried pipes; etc.)	Determine approximate amount of material spilled and where spilled material has gone and is going.  Call on-site spill responder listed in Table 1.  If spill is an immediate threat to human health or property, call 911.  Report spill to Nooksack Tribe PE and to agencies as listed in Table 2.)	Shut down work in areas affected by spill, remove non-response personnel from spill area, and prevent access to spill area by non-response personnel.)	If safe to do so, eliminate spill source by shutting off equipment, closing leaking vales, etc.  If safe to do so, contain spill using spill pads, spill booms, and absorbent from spill kits.)	If spill is not too large, dangerous, or involved, clean up spilled material.  If spill is too large, dangerous, work emergency personnel to clean up spill.  Decontaminate all non-disposable equipment used in or contaminated during spill response.  Disposal of spilled and contaminated material and all decontamination fluids in accordance with all regulations at a legally permitted facility. Within 7 days of disposal, provide documentation substantiating such disposal to the Nooksack Tribe inspector.)



**Table 8.E Spill Response Procedures for Spills Occurring During Work with Equipment Used Below the Ordinary High Water Line  
(Including Actions to be Taken and Equipment to be Used)**

Note: write N/A if no equipment will be used below the ordinary high water line and delete the following table (but not the table title, above).

Hazardous Material and Location	Assess the Spill	Secure the Area	Spill Response Task	
			Contain and Eliminate the Spill Source	Clean Up Spilled Material Decontaminate Equipment Dispose of Spilled & Contaminated Material
N/A				



## 9. Project Site Map

A Project site map, clearly showing each of the following items, is attached:

- A. Site location and boundaries;
- B. Site access roads;
- C. Drainage pathways from the site;
- D. Nearby waterways<sup>1</sup> and sensitive areas<sup>2</sup>;
- E. Hazardous materials, equipment, and decontamination areas identified in Section 4 (Potential Spill Sources), above;
- F. Pre-existing contamination or contaminant sources described in Section 5 (Pre-Existing Contamination), above; and
- G. Spill prevention and response equipment described in Section 7 (Spill Prevention) and Section 8 (Spill Response), above.

Note:

- 1. Waterways include streams, creeks, sloughs, rivers, Puget Sound, etc.
- 2. Sensitive areas are areas that typically contain populations that could be particularly sensitive to a hazardous materials spill or release. Such areas include wetlands, areas that provide habitat for threatened or endangered species, nursing homes, hospitals, child care centers, etc. Sensitive areas also include areas where groundwater is used for drinking water, such as wellhead protection zones and sole source aquifer recharge areas.


## 10. Spill Report Form(s)

A copy of the spill report form that will be used in the event of a release or spill is attached

## Management Approval

This SPCC Plan is supported by management of TCI having the authority to commit the necessary resources, including labor, equipment, and materials, to expeditiously control and remove any harmful quantity of hazardous materials spilled or released to the waters or land of the State of Washington.

3-20-2025  
Date

  
\_\_\_\_\_  
Todd Snyder  
Secretary  
Trimaxx Construction Incorporated



## EXAMPLE SPILL REPORT FORM

**Instructions:** Complete for any type of hazardous material spill or incident (including spills or incidents involving petroleum products). Provide a copy of this report to management.

1. Contractor:

Name and Title of Person Responsible for Spill Response: \_\_\_\_\_

Phone Number: \_\_\_\_\_

2. WSDOT Personnel Notified of Spill:

Project Office: Name, Title, and Phone Number: \_\_\_\_\_

Regional Environmental Office: Name, Title, and Phone Number: \_\_\_\_\_

3. General Spill Information:

Common Name of Spilled Substance: \_\_\_\_\_

Quantity Spilled (Estimate): \_\_\_\_\_

Describe Concentration of Material (Estimate): \_\_\_\_\_

Date of Spill: \_\_\_\_/\_\_\_\_/\_\_\_\_

Time Spill Started: \_\_\_\_ AM \_\_\_\_ PM

Time Spill Ended: \_\_\_\_ AM \_\_\_\_ PM

4. Spill Location and Conditions:

Project Title: \_\_\_\_\_

Street Address and/or Milepost, City: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

If Spill to Water,

Name of Water Body (if ditch or culvert, identify the water body that the structure discharges to): \_\_\_\_\_

Identify the Discharge Point: \_\_\_\_\_

Estimate the Depth and Width of the Water Body: \_\_\_\_\_

Estimate Flow Rate (i.e. slow, moderate, or fast): \_\_\_\_\_

Describe Environmental Damage (i.e., fish kill?): \_\_\_\_\_

5. Actions taken:

To Contain Spill or Impact of Incident: \_\_\_\_\_

To Cleanup Spill or Recover from Incident: \_\_\_\_\_

To Remove Cleanup Material: \_\_\_\_\_

To Document Disposal: \_\_\_\_\_

To Prevent Reoccurrence: \_\_\_\_\_



6. Agencies Notified of Spill:

**Spills to water:** Immediately call the National Response Center (1-800-424-8802), Emergency Management (1-800-258-5990), and Ecology's Regional Office (see link in note below for phone number).

**Spills to soil that may be an immediate threat to health or the environment** (e.g., explosive, flammable, or toxic vapors; nearby water body; shallow groundwater; etc.): Call Ecology's Regional Office immediately. If not an immediate threat but may be a threat to human health or the environment, report to Ecology's Regional Office within 90 days or as directed by the WSDOT PE.

**Note:**

- Project specific permits may have additional reporting requirements.
- Ecology Regional lines, phone numbers and additional reporting information can be found at: <http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm>

List all agencies contacted; include names, dates, and phone numbers for people you spoke with:

---

---

Record ERTS #, if issued by Ecology: \_\_\_\_\_

7. Person Responsible for Managing Termination/Closure of Incident or Spill:

Name and Phone: \_\_\_\_\_

Address and Fax: \_\_\_\_\_

8. Additional Notes (if any):

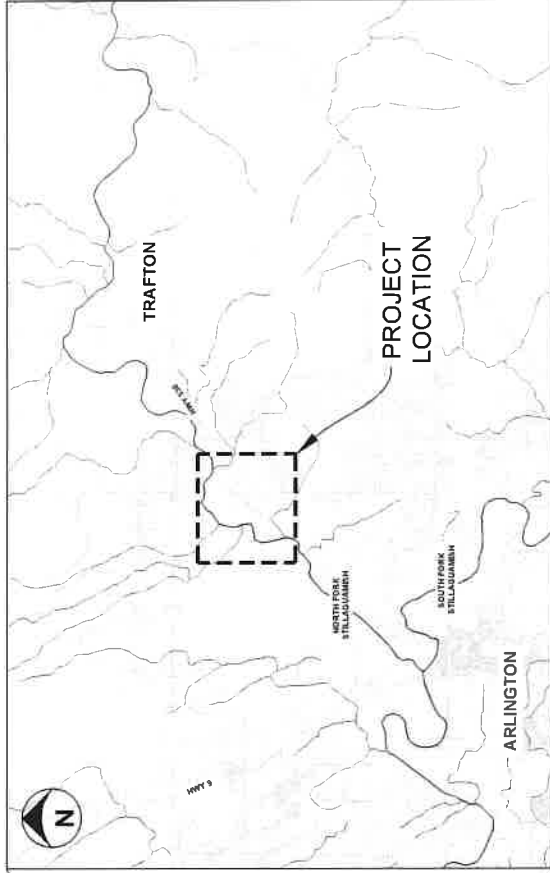


**EXHIBIT C**  
**CONSTRUCTION DOCUMENTS**  
SEE NEXT PAGE



# STILLAGUAMISH TRIBE OF INDIANS TRAFTON FLOODPLAIN RESTORATION

100% DESIGN - FEBRUARY 2025  
PROJECT LOCATION: TRAFTON, WASHINGTON



SHEET INDEX	
SHEET ID	SHEET NAME
G-1	COVER SHEET
G-2	CONSTRUCTION NOTES
G-3	QUANTITIES AND TAKEOUT POINTS
G-4	LEGEND AND ABBREVIATIONS
G-5	EXISTING SITE CONDITIONS
G-6	EXISTING SITE CONDITIONS WITH UBAR
G-7	SITE PLAN OVERVIEW
G-8	SITE PLAN - 1
G-9	SITE PLAN - 2
G-10	SITE PLAN OVERVIEW
G-11	DITCH GRADING PLAN AND DOWNSTREAM ROCK REMOVAL
G-12	LEVEE AND BERM REMOVAL - PLAN
G-13	LEVEE AND BERM REMOVAL - SECTIONS
G-14	SIDE CHANNEL - PROFILE AND SECTIONS
G-15	FILL PLACEMENT - SECTIONS
G-16	SWALE GRADING - PROFILE AND SECTIONS (1)
G-17	SWALE GRADING - PROFILE AND SECTIONS (2)
G-18	GRAVEL TRAIL DETAIL 5
G-19	SUGGESTED SEQUENCING AND TESC OVERVIEW

C-17	SITE PREPARATION AND TESC - 1
C-18	SITE PREPARATION AND TESC - 2
C-19	SITE PREPARATION AND TESC - 3
C-20	TESC DETAILS - 1
C-21	TESC DETAILS - 2
C-22	TESC DETAILS - 3
C-23	TYPE 1 LARGE APEX ELJ DETAIL
C-24	TYPE 1 LARGE APEX ELJ LAYERING PLAN (1)
C-25	TYPE 1 LARGE APEX ELJ LAYERING PLAN (2)
C-26	TYPE 2 SMALL APEX ELJ DETAIL
C-27	TYPE 2 SMALL APEX ELJ LAYERING PLAN (1)
C-28	TYPE 2 SMALL APEX ELJ LAYERING PLAN (2)
C-29	TYPE 3 LARGE DEFLECTOR ELJ DETAIL
C-30	TYPE 3 LARGE DEFLECTOR ELJ LAYER PLAN (1)
C-31	TYPE 3 LARGE DEFLECTOR ELJ LAYER PLAN (2)
C-32	TYPE 4 FLOODPLAIN ROUGHNESS ELJ DETAIL
C-33	TYPE 4 FLOODPLAIN ROUGHNESS ELJ LAYERING PLAN
C-34	TYPE 5 SWALE WOOD
C-35	ELJ DETAILS - 1
C-36	ELJ DETAILS - 2
C-37	PLANTING OVERVIEW
C-38	PLANTING SCHEDULES

## PROJECT TEAM

### PROJECT SPONSOR:

JASON GRIFFITH  
THE STILLAGUAMISH TRIBE OF INDIANS  
3322 28TH ST NE  
ARLINGTON, WA 98221

### PROJECT SPONSOR:

CHARLOTTE SCOFIELD  
THE STILLAGUAMISH TRIBE OF INDIANS  
3322 28TH ST NE  
ARLINGTON, WA 98221

### SENIOR ENGINEER:

SKY MILLER, PE  
ENVIRONMENTAL SCIENCE ASSOCIATES  
2801 ALASKAN WAY, SUITE 200  
SEATTLE, WA 98121

### PROJECT MANAGER/HYDRAULIC ENGINEER:

DAN ELEVANT, PE  
ENVIRONMENTAL SCIENCE ASSOCIATES  
2801 ALASKAN WAY, SUITE 200  
SEATTLE, WA 98121

### HYDRAULIC ENGINEER:

GREG WOLCOWKE, PE  
ENVIRONMENTAL SCIENCE ASSOCIATES  
2801 ALASKAN WAY, SUITE 200  
SEATTLE, WA 98121



THE STILLAGUAMISH TRIBE OF INDIANS  
2801 ALASKAN WAY, SUITE 200  
SEATTLE, WA 98121  
WWW.STILLAGUAMISHTRIBE.COM



TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFTON, WA

PROJECT NAME  
DATE: 2/2/25  
DESCRIPTION: BID ADDENDUM 1

DESIGNED: GW/DE  
DRAWN: GW  
CHECKED: CM  
IN CHARGE: SM

PROJECT NUMBER: D002100A18  
ISSUE DATE: 2/4/2025  
SCALE: 1/8" = 1'-0" (PLAN)  
PLOT TO FULL SIZE (22" x 34")

PHASE:  
100% CONSTRUCTION  
DOCUMENTATION  
SHEET TITLE

COVER SHEET

SHEET NUMBER  
G-1

SHEET 1 OF 42



- PERMIT NOTES:**

- SURVEY NOTES:**

- DATUM NOTES:

- JESC NOTES:**

- TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFTON VIA



## CHANNEL ALIGNMENT CONTROL TABLES

MAIN SIDE CHANNEL 60% ALIGNMENT CONTROL TABLE					
SEGMENT	STATION	EASTING	NORTHING	CURVE RADIUS	DELTA ANGLE
L1	0+00	1,339,160.2	457,014.7	—	—
C1	10+33	1,338,164.1	457,290.0	309.9	121° 31' 09"
L2	16+91	1,337,783.8	456,805.5	—	—
C2	17+06	1,337,788.2	456,880.4	334.0	77° 14' 20"
L3	21+57	1,337,629.3	456,505.3	—	—
C3	21+85	1,337,603.1	456,491.5	450.9	30° 54' 37"
L4	24+29	1,337,309.3	456,435.9	—	—
C4	26+43	1,337,155.4	456,443.7	848.8	52° 31' 36"
L5	34+19	1,336,471.6	456,136.7	—	—
C5	36+28	1,336,336.6	455,875.6	636.4	37° 29' 17"
L6	41+75	1,335,081.2	455,883.2	—	—
C6	41+86	1,335,871.2	455,690.9	523.0	28° 41' 40"
L7	44+57	1,335,634.1	455,585.9	—	—

NORTH SWALE & COUNTY SWALE ALIGNMENT CONTROL TABLE					
SEGMENT	STATION	EASTING	NORTHING	CURVE RADIUS	DELTA ANGLE
L1	0+00	1,336,492.8	456,992.2	—	—
C1	3+61	1,336,386.6	456,647.2	395.8	38° 04' 30"
L2	6+24	1,336,234.6	456,438.7	—	—
C2	7+62	1,336,121.6	456,350.1	321.9	78° 46' 23"
L3	12+10	1,336,012.8	455,961.9	—	—
L4	14+14	1,336,097.9	455,776.0	—	—
L5	15+14	1,336,138.7	455,684.8	—	—
C3	17+76	1,336,217.1	455,435.1	535.9	38° 04' 37"
L6	21+32	1,336,205.9	455,085.7	—	—
C4	24+29	1,336,100.0	454,807.8	664.4	25° 52' 01"
L7	27+29	1,336,059.0	454,513.2	—	—
C5	28+65	1,336,070.8	454,377.7	361.7	65° 42' 37"
L8	32+80	1,335,887.5	454,000.7	—	—
C6	33+59	1,335,816.6	453,692.1	344.3	73° 41' 15"
L9	38+02	1,335,651.5	453,614.4	—	—
C7	38+35	1,335,658.9	453,592.1	307.4	62° 43' 40"
L10	41+72	1,335,558.0	453,278.5	—	—
C8	42+38	1,335,507.6	453,235.8	381.8	37° 04' 10"
L11	44+85	1,335,381.8	453,028.2	—	—
C9	45+52	1,335,367.1	452,862.8	318.5	74° 48' 53"
L12	49+68	1,335,070.3	452,714.5	—	—

COUNTY SWALE INLET ALIGNMENT CONTROL TABLE					
SEGMENT	STATION	EASTING	NORTHING	CURVE RADIUS	DELTA ANGLE
C1	1+87	1,335,519.3	454,192.4	517.1	48° 40' 27"
L1	6+55	1,335,651.6	453,778.7	—	—

## ELJ CONTROL TABLES

TYPE 1 LARGE APEX ELJ CONTROL TABLE					
DESCRIPTION	NORTHING	EASTING	—	—	—
LA-1	457,061.24	1,339,376.89	—	—	—
LA-2	457,166.92	1,339,065.93	—	—	—
LA-3	457,183.31	1,339,605.29	—	—	—
LA-4	457,893.40	1,338,336.57	—	—	—
LA-5	457,937.21	1,337,946.87	—	—	—
LA-6	458,244.82	1,337,767.68	—	—	—
LA-7	457,068.05	1,336,277.56	—	—	—
LA-8	456,926.12	1,336,148.34	—	—	—
LA-9	456,506.61	1,335,684.11	—	—	—
LA-10	454,928.62	1,335,292.65	—	—	—
LA-11	453,982.40	1,335,157.98	—	—	—

TYPE 2 SMALL APEX ELJ CONTROL TABLE					
DESCRIPTION	NORTHING	EASTING	—	—	—
SA-1	458,154.72	1,338,077.21	—	—	—
SA-2	458,076.39	1,337,784.37	—	—	—
SA-3	457,898.60	1,337,613.93	—	—	—
SA-4	457,927.87	1,337,396.30	—	—	—
SA-5	456,218.19	1,335,597.48	—	—	—
SA-6	456,015.80	1,335,475.78	—	—	—
SA-7	455,753.31	1,335,475.86	—	—	—
SA-8	454,656.13	1,335,396.50	—	—	—
SA-9	454,410.44	1,335,360.54	—	—	—
SA-10	453,655.61	1,335,092.48	—	—	—
SA-11	453,400.36	1,334,889.85	—	—	—
SA-12	453,187.29	1,334,784.62	—	—	—

TYPE 3 LARGE DEFLECTOR ELJ CONTROL TABLE					
DESCRIPTION	NORTHING	EASTING	—	—	—
LD-1	456,661.99	1,337,793.72	—	—	—
LD-2	456,616.26	1,337,673.66	—	—	—
LD-3	456,427.10	1,337,482.62	—	—	—
LD-4	456,300.06	1,336,821.85	—	—	—
LD-5	455,852.67	1,336,242.44	—	—	—
LD-6	455,317.66	1,335,399.05	—	—	—
LD-7	456,703.56	1,335,679.58	—	—	—

## GENERAL NOTES.

- THE CONTRACTOR SHALL FLAG THE LOCATIONS OF ELJS AND ALIGNMENT SEGMENTS AS PROVIDED ON THIS SHEET. THE CONTRACT REPRESENTATIVE RESERVES THE RIGHT TO MODIFY THE LOCATION OF ANY OR ALL ELJS AND ALIGNMENT SEGMENTS WITHOUT APPROVAL OF STAKEOUT POINTS FIRST.
- STAKEOUT POINTS ARE NOT PROVIDED FOR ELJS TO BE CONSTRUCTED OUTSIDE THE OHW LINE SHOWN ON THE PLANS. THE LOCATION OF THESE STRUCTURES ARE APPROXIMATE AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTRACT REPRESENTATIVE TO APPROVE PRIOR TO INSTALLATION. THE CONTRACT REPRESENTATIVE RESERVES THE RIGHT TO MODIFY THE LOCATION OF THESE STAKES.

TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFTON, WAPROJECT NAME  
DATE DESCRIPTION  
1 2/2/25 BID ADDENDUM 1DESIGNED GW DE  
DRAWN GW  
CHECKED CM  
IN CHARGE SNPROJECT NUMBER D00100418  
ISSUE DATE 2-4-2025  
SCALE 1/8"=1'-0" (PLAN)  
PLOTTED TO FULL SIZE (24" X 36")PHASE  
100% CONSTRUCTION  
DOCUMENTATION  
SHEET TITLEQUANTITIES AND  
STAKEOUT POINTS

SHEET NUMBER

G-3

SHEET 3 OF 42



FILE: P:\02\2021\000-20210311-20-Stillaguamish\Trafleton\Boulder\2021-04-14\REVISED.dwg PLOT DATE: 7/20/2024 4:12:31 PM PLOTTED BY: GREG VOLZKESE

#### LEGEND - EXISTING CONDITIONS

	PROPERTY LINE
	RIGHT-OF-WAY
	ORDINARY HIGH WATER MARK (OHWM)
	BUILDING / STRUCTURE FOOTPRINT
	EDGE OF PAVEMENT / CONCRETE
	ROCK ARMOR AND RUBBLE / RIPRAP
	DECIDUOUS / CONIFER (DBH)
	BERM REMOVAL HATCH
	CULTURALLY SENSITIVE AREA
	WETLAND

#### LEGEND - SITE PREPARATION, ACCESS, AND TESC

	CLEARING AND GRUBBING
	TEMPORARY WATER CROSSING
	SUGGESTED STAGING AREA
	TEMPORARY CLEARED ACCESS ROUTE
	STABILIZED CONSTRUCTION ENTRANCE
	CLEARING AND GRADING LIMIT
	HI-VISIBILITY CONSTRUCTION FENCE
	TURBIDITY CURTAIN
	PROTECT TREE
	REMOVE / SALVAGE TREE

#### LEGEND - EXISTING UTILITIES

	UTILITY POLE
	OVERHEAD POWER
	UNDERGROUND POWER

#### LEGEND - PROPOSED ENGINEERED LOG JAMS

		TYPE 1 LARGE APEX ELJ
		TYPE 2 SMALL APEX ELJ
		TYPE 3 LARGE DEFLECTOR ELJ
		TYPE 4 FLOODPLAIN ROUGHNESS ELJ
		TYPE 5 SWALE WOOD

#### LEGEND - PROPOSED FILL PLACEMENT

	PRIORITIZED TOPSOIL TYPE B PLACEMENT
	TOPSOIL TYPE B PLACEMENT IF AVAILABLE, OTHERWISE CLEAN FILL
	CLEAN FILL
	WEED PRONE TOPSOIL TYPE B DEEP BURIAL AREA
	SALVAGED RIPRAP PLACEMENT

#### ABBREVIATIONS

APPROX	APPROXIMATE	N	NORTH
BMP	BEST MANAGEMENT PRACTICE	NAD83	NORTH AMERICAN DATUM 1983
CF	CUBIC FEET	NAVD88	NORTH AMERICAN VERTICAL DATUM 1988
CL	CENTERLINE	NIC	NOT IN CONTRACT
CMP	CORRUGATED METAL PIPE	NTS	NOT TO SCALE
CSTC	CRUSHED SURFACING BASE COURSE	OC	ON CENTER
CY	CUBIC YARD	PIP	PROTECT IN PLACE
DBH	DIAMETER BREAST HEIGHT	PR	PROPOSED
DIA	DIAMETER	PREP	PREPARATION
DEM	DIGITAL ELEVATION MODEL	SF	SQUARE FEET
DEMO	DEMOLITION	STA	STATION
EG	EXISTING GRADE	TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
ELEV	ELEVATION	TOB	TOP OF BANK
ELJ	ENGINEERED LOG JAM (ELJ)	TYP	TYPICAL
EX	EXISTING	USACE	US ARMY CORPS OF ENGINEERS
FT	FEET	USGS	US GEOLOGIC SURVEY
FG	FINISHED GRADE	VIF	VERIFY IN FIELD
HPA	HYDRAULIC PROJECT APPROVAL	WA	WASHINGTON
IE	INVERT ELEVATION	WDPW	WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
LF	LINEAR FEET	WSDOT	WASHINGTON DEPARTMENT OF TRANSPORTATION
LS	LUMP SUM	WQ	WATER QUALITY
MAX	MAXIMUM	XH:1V	HORIZONTAL: VERTICAL
MIN	MINIMUM		
NAIP	NATIONAL AGRICULTURE IMAGERY PROGRAM		

#### NOTE / DETAIL REFERENCING

SECTION REFERENCE LETTER →

LOCATION OF SECTION →

DETAIL REFERENCE NUMBER →

LOCATION OF DETAIL →

SECTION / DETAIL REFERENCE →

DRAWING FROM WHICH SECTION / DETAIL WAS TAKEN →

TITLE / NAME

DETAIL / SECTION / ELEVATION

SCALE



2021 ALBANY AVENUE  
SUITE 200  
SEATTLE, WA 98121  
OFFICE: 206.483.9654  
WWW.ESASDC.COM



TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFTON, WA

REVISION	#	DATE	DESCRIPTION
	1	3/2/25	BIG ADDENDUM 1

DESIGNED	GW / DE
DRAWN	GW
CHECKED	CM
IN CHARGE	SM

PROJECT NUMBER D202100418

ISSUE DATE 2/4/2025

SCALE FOR ALL DIMENSIONS  
PROVIDED TO FULL SIZE (24" X 36")

PHASE  
100% CONSTRUCTION  
DOCUMENTATION

SHEET TITLE

LEGEND AND  
ABBREVIATIONS

SHEET NUMBER

G-4

SHEET 4 OF 42

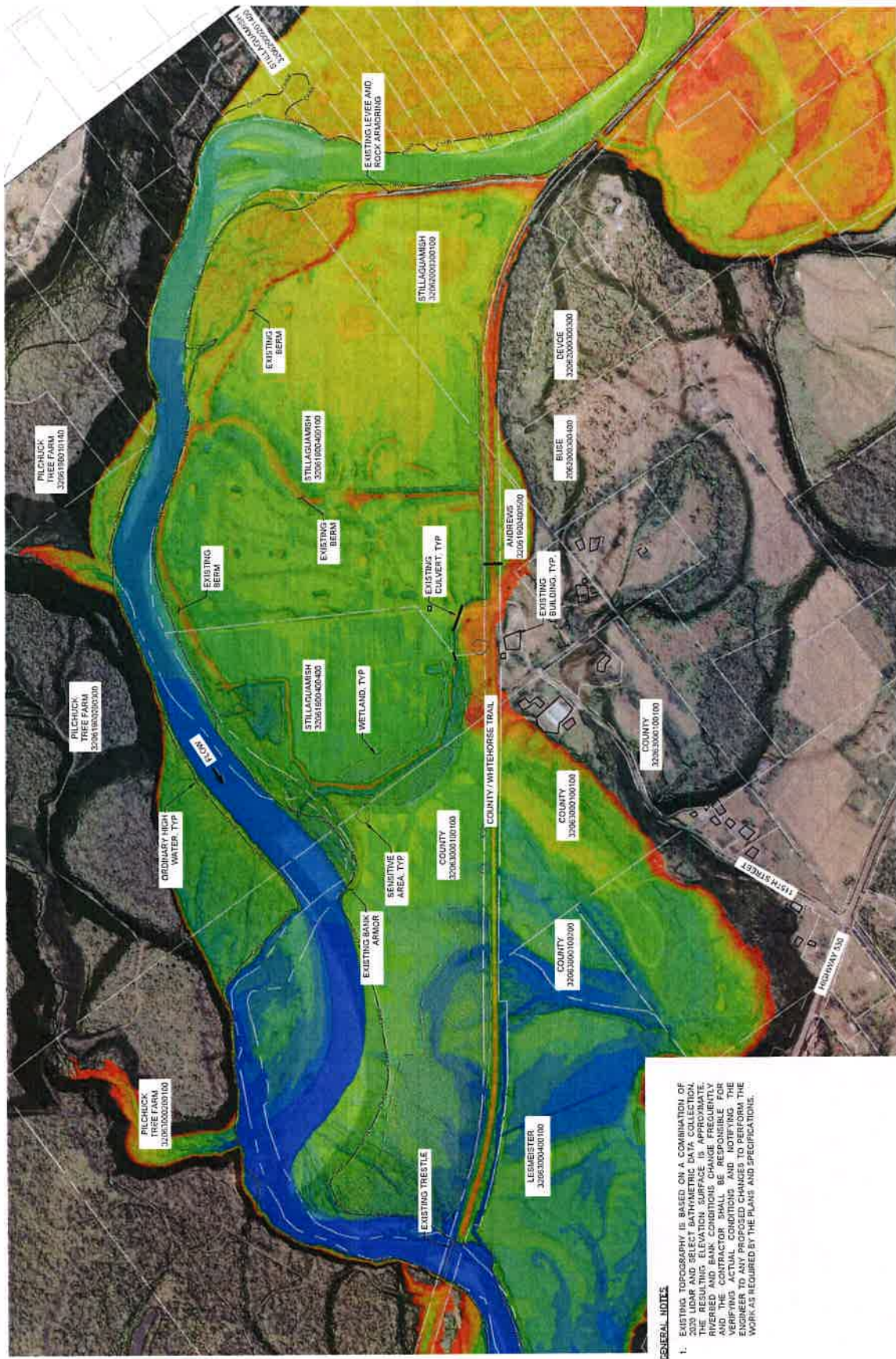




**GENERAL NOTES**

1. NO TOPOGRAPHIC SURVEY WAS PERFORMED AS PART OF THIS PROJECT.
2. EXISTING TOPOGRAPHY IS BASED ON A COMBINATION 2020 LIDAR AND SELECT BATHYMATIC DATA COLLECTION. THE LIDAR DATA IS FROM A 2020 AERIAL PHOTOGRAPHIC SURVEY. THE BATHYMATIC DATA IS FROM A 2020 AERIAL PHOTOGRAPHIC SURVEY. THE LIDAR DATA IS FROM A 2020 AERIAL PHOTOGRAPHIC SURVEY. THE BATHYMATIC DATA IS FROM A 2020 AERIAL PHOTOGRAPHIC SURVEY.
3. 2021 AERIAL IMAGERY OBTAINED FROM NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP).
4. PARCEL LINES ARE PROVIDED BY SNOHOMSH COUNTY GIS DATA AND ARE APPROXIMATE.
5. THE LOCATIONS OF TREES, BUILDINGS, CREEK CHANNEL, AND ALL OTHER SITE FEATURES SHOWN ARE APPROXIMATE AND FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SITE CONDITIONS AND NOTIFYING THE ENGINEER BEFORE ANY CHANGE OF WORK.
6. EXISTING UNDERGROUND UTILITY LOCATIONS HAVE NOT BEEN IDENTIFIED AS PART OF THESE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ANY UTILITIES THAT MAY BE PRESENT PRIOR TO CONSTRUCTION AND PROTECT UTILITIES FOR THE DURATION OF CONSTRUCTION.
7. THE WORK LIMITS ARE LIMITED TO TAX PARCELS OWNED BY THE STILLACUMEN TRIBE AND SNOHOMSH COUNTY. NO OTHER WORK IS PERMITTED OUTSIDE THESE TAX LOTS. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING TAX LOT BOUNDARIES.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PRIVATE PROPERTY, AT NO EXPENSE TO THE OWNER OR OWNER'S REPRESENTATIVES.
9. NO DISTURBANCE TO SENSITIVE AREAS PERMITTED. THE OWNER SHALL FLAG THESE AREAS PRIOR TO WORK COMMENCING.





## GENERAL NOTES

1. EXISTING TOPOGRAPHY IS BASED ON A COMBINATION OF 2030 LIDAR AND SELECT BATHYMETRIC DATA COLLECTION. THE RESULTING ELEVATION SURFACE IS APPROXIMATE. RIVERBED AND BANK CONDITIONS CHANGE FREQUENTLY AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ACTUAL CONDITIONS AND NOTIFYING THE ENGINEER TO ANY PROPOSED CHANGES TO PERFORM THE WORK AS REQUIRED BY THE PLANS AND SPECIFICATIONS.









TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFTON, WA

STATUS	DATE	DESCRIPTION
2025	BID ADDENDUM	

DESIGNED	GW DE
DRAWN	GW
CHECKED	CM
CHARGE	SM

PROJECT NUMBER	DATE
0202102	2.4.2025

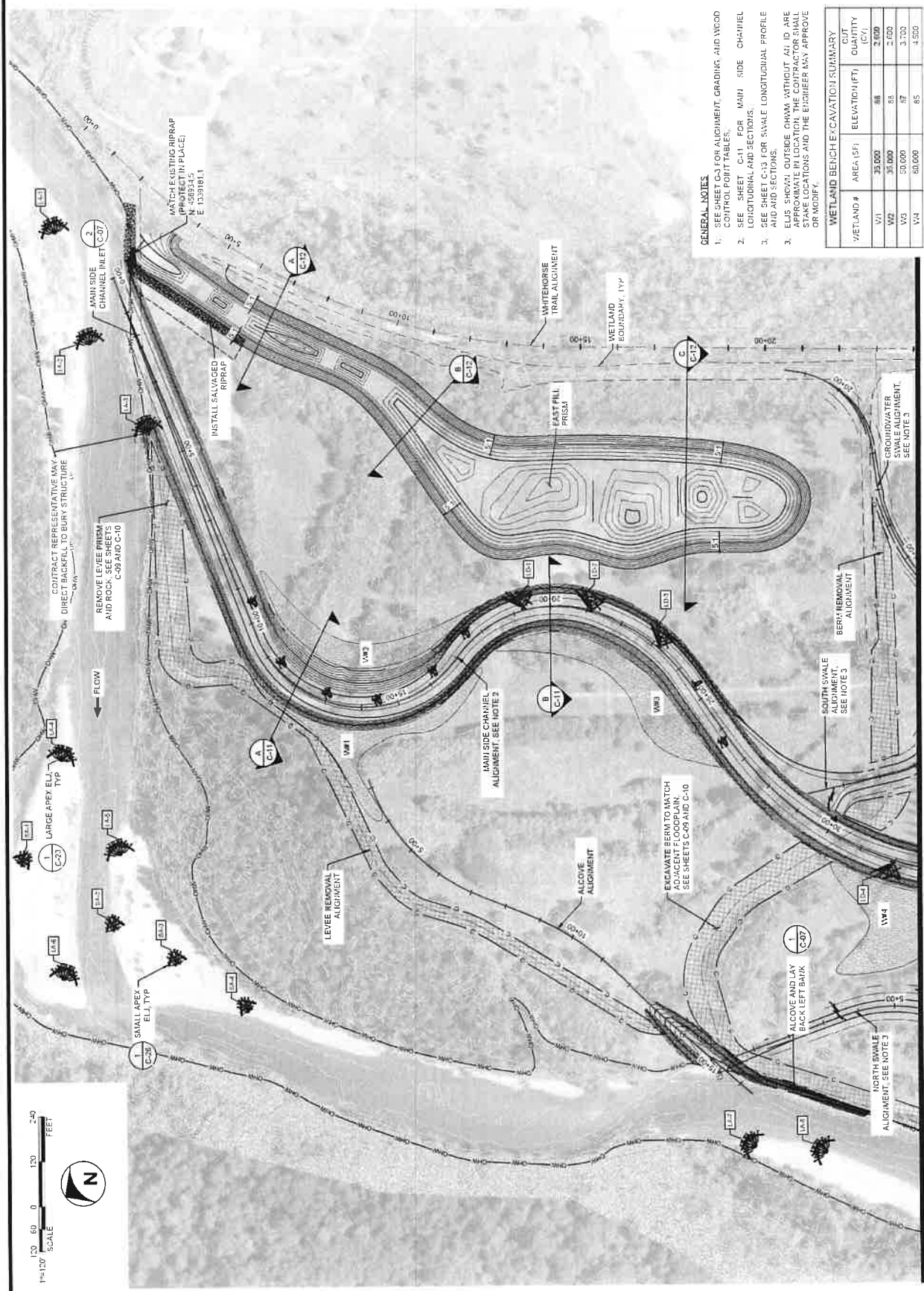
DATE: 04/07/2025  
 PRINTED: 04/07/2025 14:18

30% CONSTRUCTION DOCUMENT  
 SET 1/06

SITE PLAN - 1

C-04

SHEET 8 OF 42



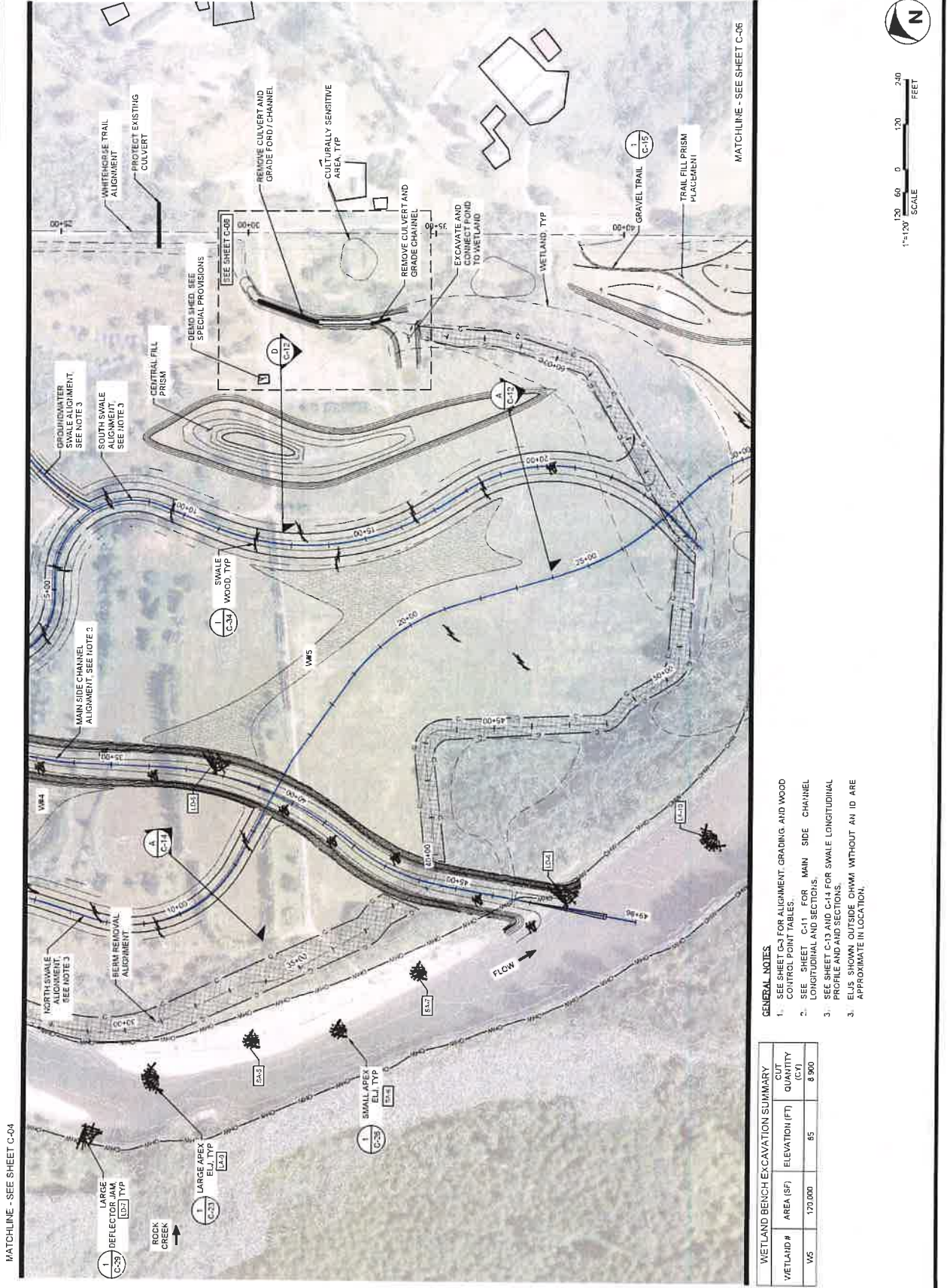
GENERAL NOTES

1. SEE SHEET G-3 FOR ALIGNMENT, GRADING, AND WOOD CONTROL POINT TABLES.
2. SEE SHEET C-11 FOR MAIN SIDE CHANNEL LONGITUDINAL AND SECTIONS.
3. SEE SHEET C-13 FOR SWALE LONGITUDINAL PROFILE AND SECTIONS.
4. EUS SHOWN OUTSIDE CHWM WITHOUT A/I ID ARE APPROXIMATE IN LOCATION. THE CONTRACTOR SHALL STAKE LOCATIONS AND THE ENGINEER MAY APPROVE

WETLAND BENCH E-CAVATION SUMMARY			
WETLAND #	AREA (SF)	ELEVATION (FT)	CUT QUANTITY (CY)
V1	35,000	88	2,600
V2	35,000	88	2,700
V3	50,000	87	3,700
V4	80,000	85	4,500

MATCHLINE - SEE SHEET C-05





- GENERAL NOTES**
- SEE SHEET C-3 FOR ALIGNMENT, GRADING, AND WOOD CONTROL POINT TABLES.
  - SEE SHEET C-11 FOR MAIN SIDE CHANNEL LONGITUDINAL AND SECTIONS.
  - SEE SHEET C-13 AND C-14 FOR SWALE LONGITUDINAL PROFILE AND SECTIONS.
  - ELUS SHOWN OUTSIDE OHWM WITHOUT AN ID ARE APPROXIMATE IN LOCATION.

**WETLAND BENCH EXCAVATION SUMMARY**

WETLAND #	AREA (SF)	ELEVATION (FT)	CUT QUANTITY (CU YD)
W5	170,000	85	8,900







2000 ALASKA DRIVE  
SUITE 200  
ANCHORAGE, AK 99503  
PHONE: 281.4444  
WWW.ESA-USA.COM



11/03/25



# TRAFTON REACH FLOODPLAIN RESTORATION N.F. STILLAGUAMISH RIVER TRAFTON, WA

PROJECT NAME

DATE

DESCRIPTION

1 03/25 BID ADDENDUM 1

DESIGNED

CW/DE

DRAWN

CW

CHECKED

CW

IN CHARGE

SM

PROJECT NUMBER

002106418

ISSUE DATE

2-4-2025

SCALE

AS SHOWN

ADJUSTED TO FULL SIZE (8.5x11)

100% CONSTRUCTION  
DOCUMENTATION

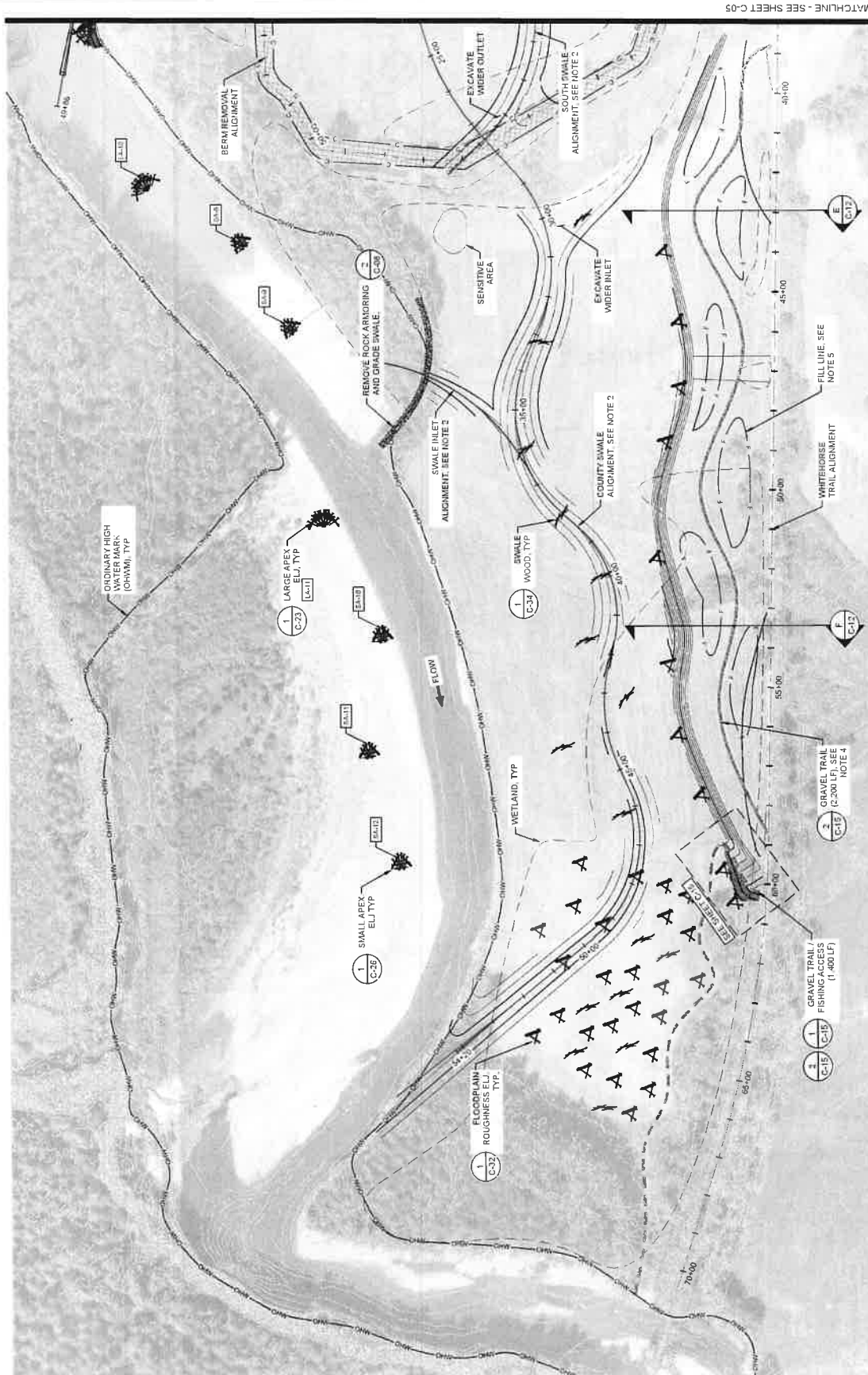
SHEET TITLE

SITE PLAN - 3

SHEET NUMBER

C-06

SHEET 10 OF 42



- GENERAL NOTES**
- SEE SHEET C-3 FOR ALIGNMENT, GRADING, AND WOOD CONTROL POINT TABLES.
  - SEE SHEET C-13 AND C-14 FOR SWALE LONGITUDINAL PROFILE AND SECTIONS.
  - ELUS SHOWN OUTSIDE OHWM WITHOUT AN ID ARE APPROXIMATE IN LOCATION.
  - THE CONTRACTOR SHALL STAKE THE GRAVEL TRAIL FOR APPROVAL BY THE CONTRACT REPRESENTATIVE. THE REPRESENTATIVE RESERVES THE RIGHT TO ADJUST THE LOCATION OF THE TRAIL BEFORE APPROVING.
  - THE CONTRACTOR SHALL GRADE MICROTOPOGRAPHY ATOP THE FILL PRISM.



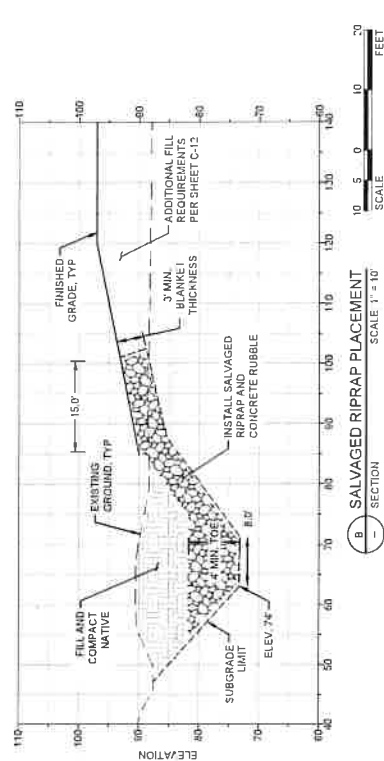
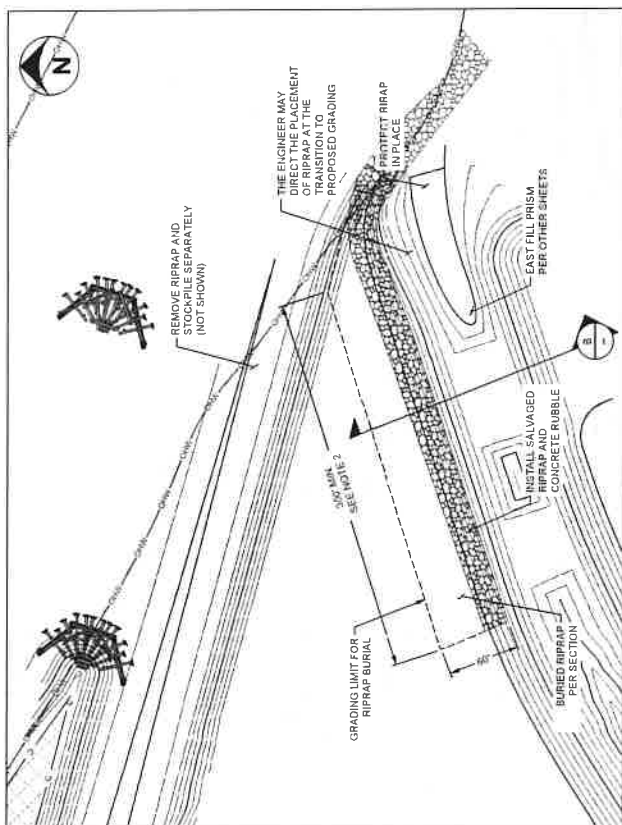
TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFTON WA

REVISIONS	DATE	DESCRIPTION
1	2-25	BID ADDENDUM 1
DESIGNED	GW / DE	
DRAWN	GW	
CHECKED	CM	
IN CHARGE	SM	
PROJECT NUMBER Q202100418		
ISSUE DATE	2-2-2025	
SCALE AS SHOWN PLOT TO FULL SIZE (1" = 4')		
100% CONSTRUCTION DOCUMENTATION		
PHASE		
SHEET TITLE		

SIDE CHANNEL  
NLET AND ALCOVE -  
PLAN

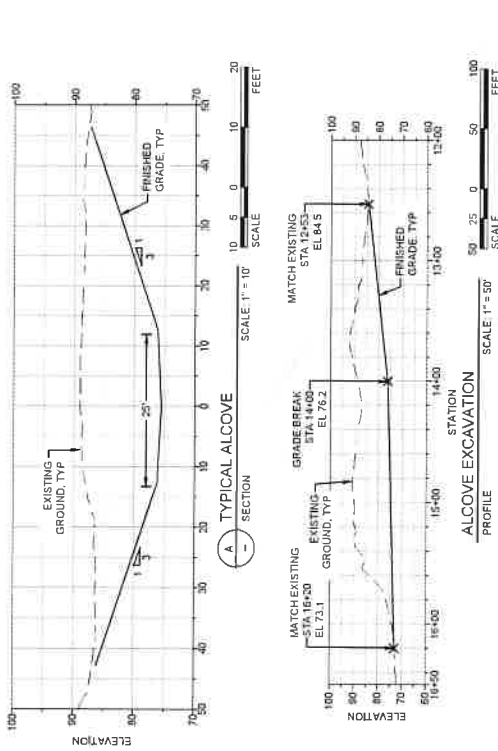
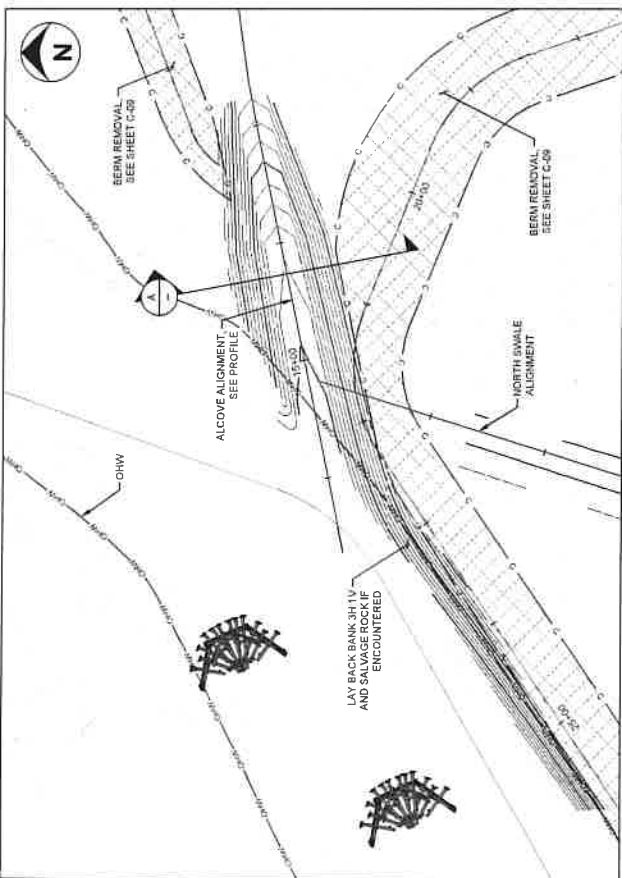
C-07

SHEET 11 OF 42



**GENERAL NOTES**

1. SEE SHEET G-3 FOR ALIGNMENT, GRADING, AND WOOD CONTROL POINT TABLES.
2. THE CONTRACTOR SHALL INSTALL SALVAGED ROCK AND CONCRETE RUBBLE TO THE MINIMUM LENGTH AND THICKNESS ON THIS SHEET. THE CONTRACTOR MAY INCREASE LENGTH AND/OR THICKNESS AS NEEDED BASED ON SALVAGED QUANTITY.



ALCOVE EXCAVATION STATION





201 ALASKA HWY  
SUITE 200  
OFFICE - 200 70 96 24  
WWW.ESA-ALASKA.COM



1/13/25  
C-08.7



# TRAFTON REACH FLOODPLAIN RESTORATION N. F. STILLAGUAMISH RIVER

TRAFTON WA

PROJECT NUMBER

REVISIONS

# DATE DESCRIPTION

1 23-25 BID ADDENDUM 1

DESIGNED CWT/DE

DRAWN CWT

CHECKED CWT

IN CHARGE CWT

PROJECT NUMBER D32100418

ISSUE DATE 24/2025

SCALE AS SHOWN WHEN

PLOTTED TO FULL SIZE 24" x 36"

PHASE 100% CONSTRUCTION

DOCUMENTATION

SHEET TITLE

DITCH GRADING

PLAN AND

DOWNSIDE

ROCK REMOVAL

ROCK REMOVAL

ROCK REMOVAL

ROCK REMOVAL

ROCK REMOVAL

ROCK REMOVAL

ROCK REMOVAL

ROCK REMOVAL

ROCK REMOVAL

ROCK REMOVAL

ROCK REMOVAL

ROCK REMOVAL

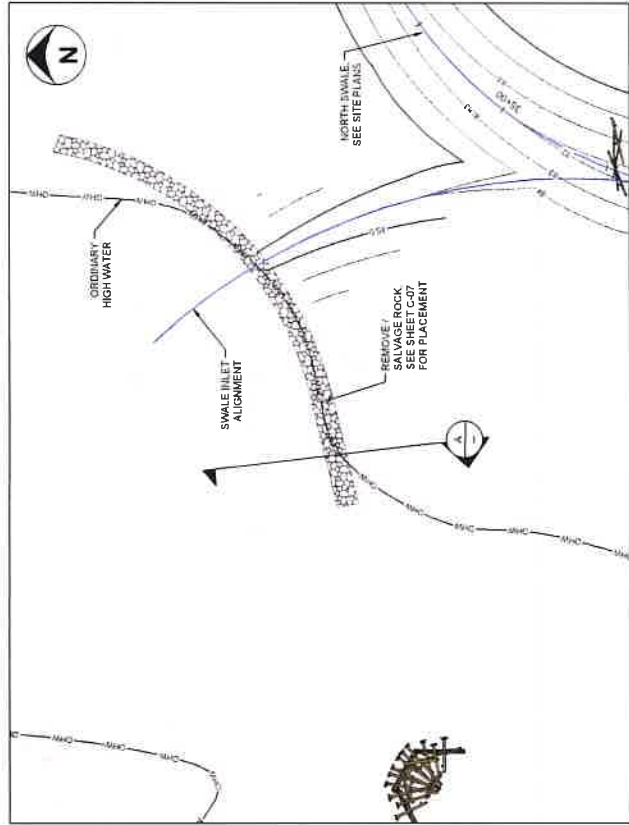
ROCK REMOVAL

ROCK REMOVAL

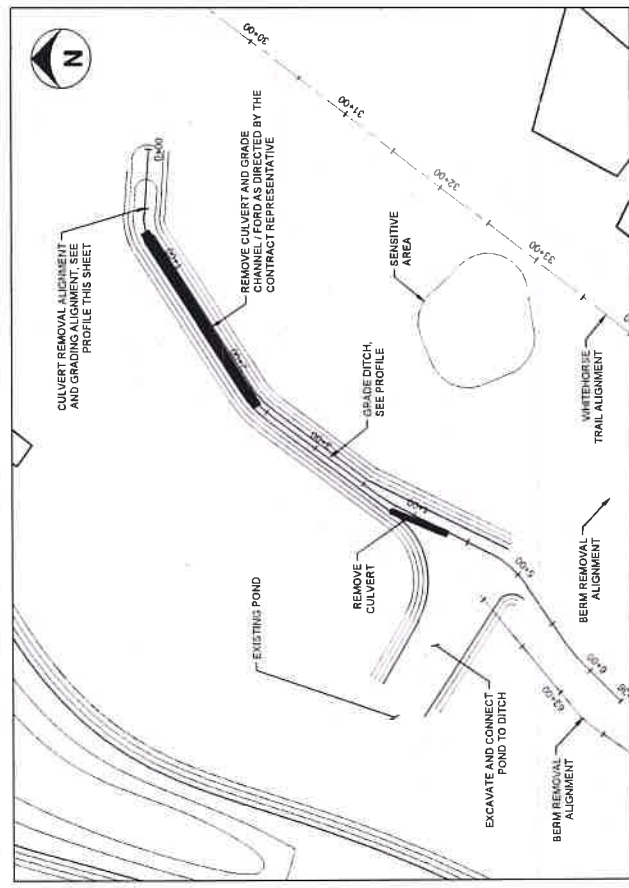
ROCK REMOVAL

ROCK REMOVAL

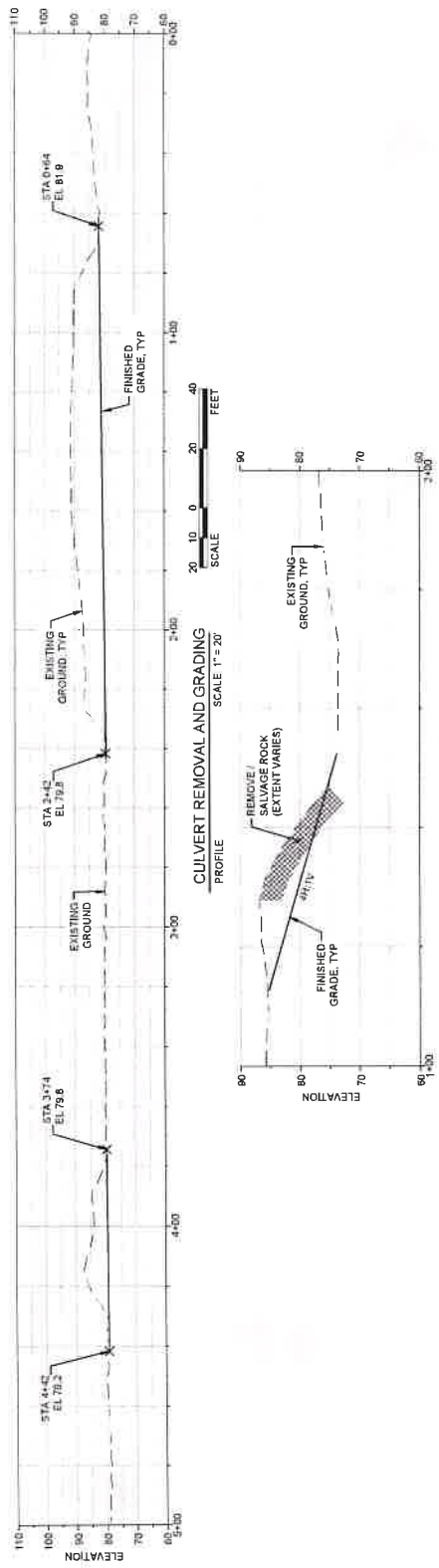
ROCK REMOVAL



2 DOWNSTREAM ROCK REMOVAL  
SCALE 1" = 50'



1 CULVERT REMOVAL AND GRADING  
SCALE 1" = 50'



CULVERT REMOVAL AND GRADING  
SCALE 1" = 20'



DOWNSTREAM ROCK REMOVAL  
SCALE 1" = 10'



DOWNSTREAM ROCK REMOVAL  
SCALE 1" = 10'





20700 HILLVIEW DRIVE  
SEATTLE, WA 98148  
206.465.1100  
WWW.ESACORP.COM



11/3/25



# TRAFTON REACH FLOODPLAIN RESTORATION N.F. STILLAGUAMISH RIVER TRAFTON WA

PROJECT NAME

REVISIONS  
# DATE DESCRIPTION  
1 3/2/25 RHD ADDENDUM 1

DESIGNED GW/DE  
DRAWN GW  
CHECKED CM  
IN CHARGE SM

PROJECT NUMBER 0302100418  
ISSUE DATE 2/4/2025

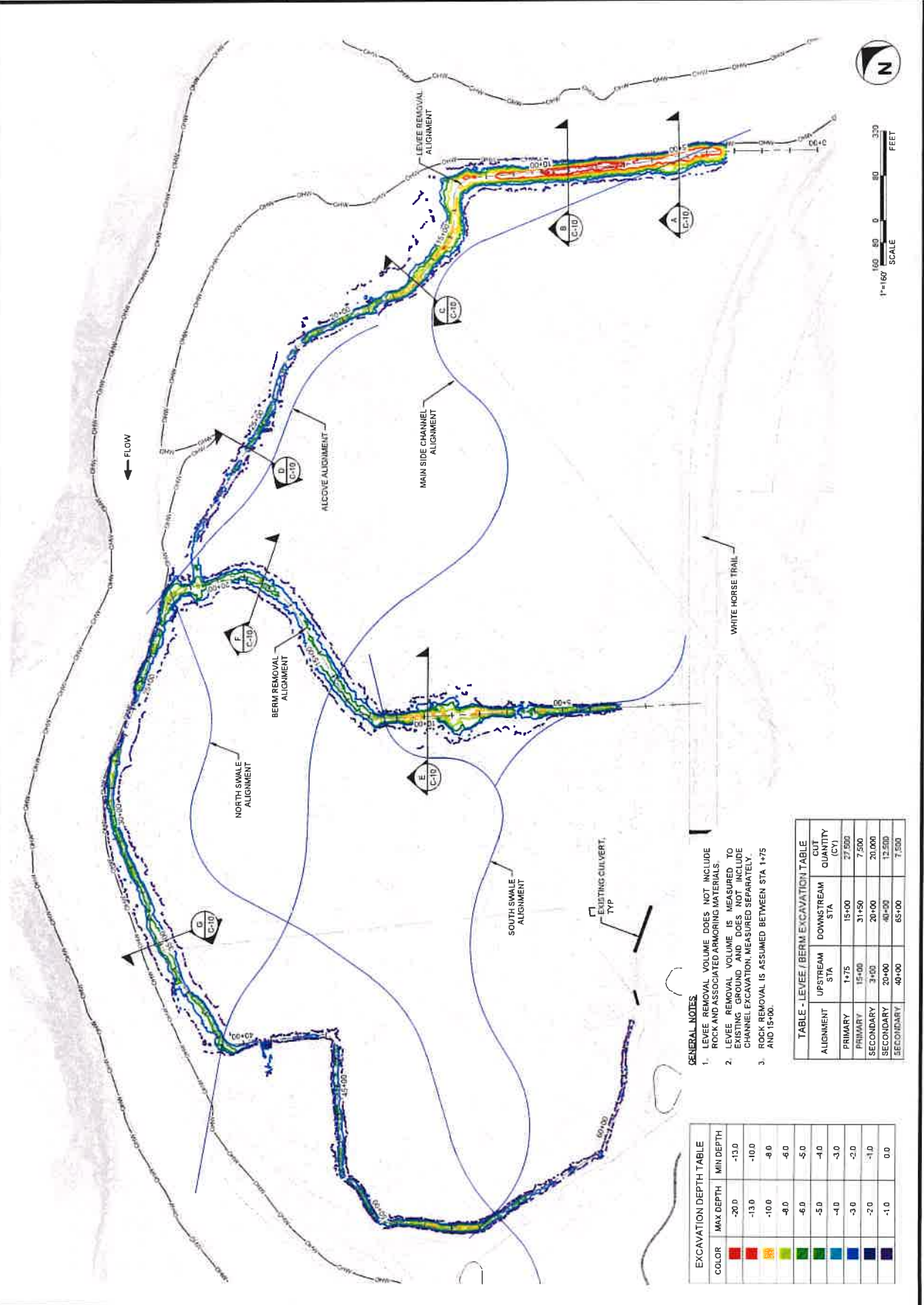
TEAM LEAD AS CONSULTANT  
PLOT TO FULL SIZE (2" = 1')

PHASE  
100% CONSTRUCTION  
DOCUMENTATION  
SHEET TITLE

LEVEE AND BERM  
REMOVAL PLAN

SHEET NUMBER  
C-09

SHEET 13 OF 42



## GENERAL NOTES

1. LEVEE REMOVAL VOLUME DOES NOT INCLUDE ROCK AND ASSOCIATED ARMORING MATERIALS.
2. LEVEE REMOVAL VOLUME IS MEASURED TO EXISTING GROUND AND DOES NOT INCLUDE CHANNEL EXCAVATION MEASURED SEPARATELY.
3. ROCK REMOVAL IS ASSUMED BETWEEN STA 1+75 AND 15+00.

## EXCAVATION DEPTH TABLE

COLOR	MAX DEPTH	MIN DEPTH
Red	-20.0	-13.0
Orange	-13.0	-10.0
Yellow	-10.0	-8.0
Light Green	-8.0	-6.0
Green	-6.0	-5.0
Dark Green	-5.0	-4.0
Blue	-4.0	-3.0
Dark Blue	-3.0	-2.0
Very Dark Blue	-2.0	-1.0
Black	-1.0	0.0

## TABLE - LEVEE / BERM EXCAVATION TABLE

ALIGNMENT	UPSTREAM STA	DOWNSTREAM STA	EXCAVATION QUANTITY (CY)
PRIMARY	1+75	15+00	27,500
PRIMARY	15+00	31+50	7,500
SECONDARY	3+00	20+00	20,000
SECONDARY	20+00	40+00	13,500
SECONDARY	40+00	65+00	7,500





235 CALLEMAN WAY  
SUITE 100  
OFFICE - 360.762.4444  
WWW.ESA-SBC.COM



11/13/25



TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUMISH RIVER  
TRAFTON WA

PROJECT NAME

DATE

DESCRIPTION

1 2/2/25 BID ADDENDUM 1

DESIGNED

GN/DE

DRAWN

GN

CHECKED

GN

IN CHARGE

SM

PROJECT NUMBER

02021004148

ISSUE DATE

2-4-2025

SEALER'S SIGNATURE

PRINTED SIGNATURE

100% CONSTRUCTION

DOCUMENTATION

SHEET TITLE

LEVEE AND BERM

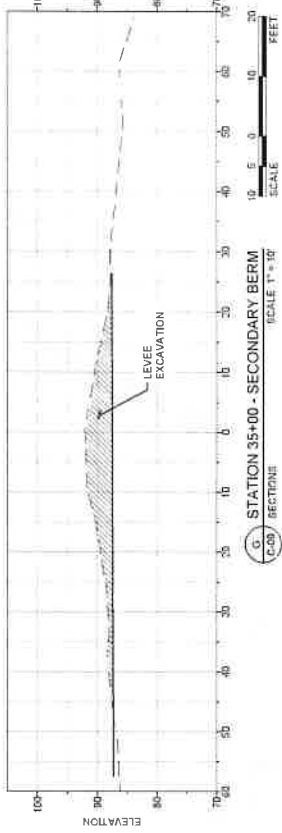
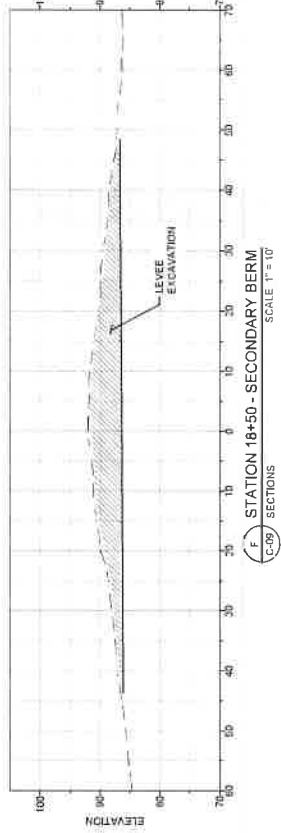
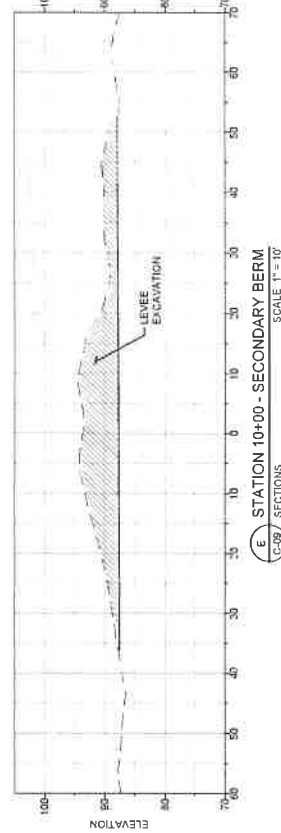
REMOVAL -

SECTIONS

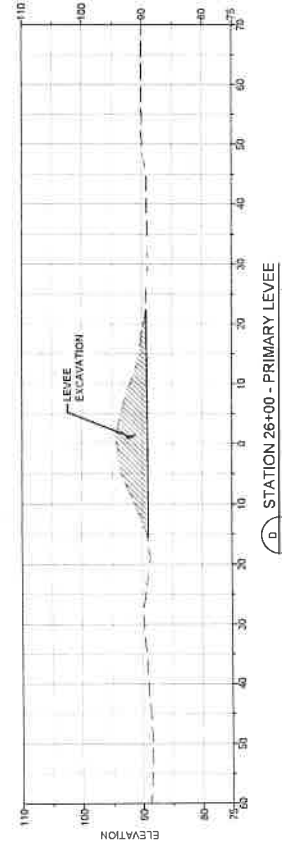
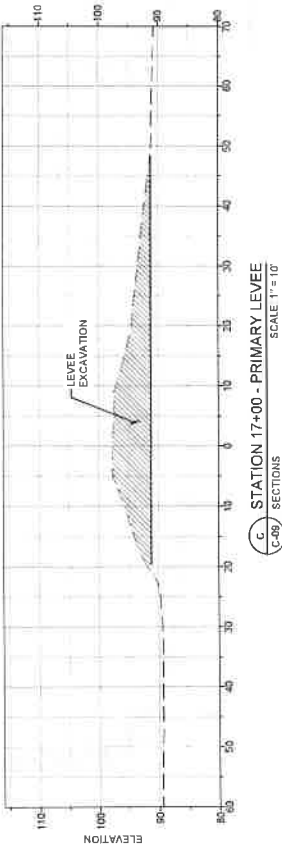
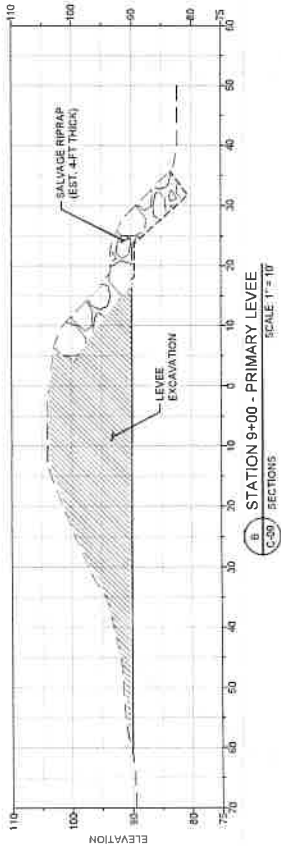
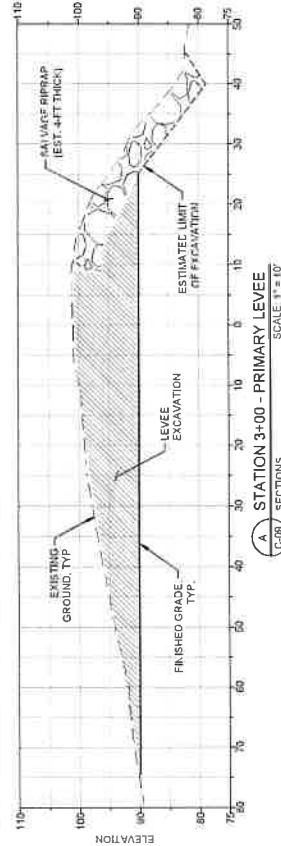
SHEET NUMBER

C-10

SHEET 14 OF 42



- GENERAL NOTES**
1. SECTIONS ARE ORIENTED LOOKING DOWNSTREAM (LEFT TO RIGHT).
  2. SECTIONS DEPICT LEVEE EXCAVATION AND ROCK REMOVAL ONLY. CHANNEL EXCAVATION, ASSOCIATED FLOODPLAIN GRADING, OR FILL FEATURES ARE NOT SHOWN. REFER TO THE SITE PLAN FOR ADDITIONAL REQUIREMENTS.
  3. SEE SECTION 243.320 OF THE PROJECT SPECIFICATIONS FOR RIPRAP REMOVAL AND SALVAGE REQUIREMENTS.







NOV 14, 2014  
SEATTLE, WASHINGTON  
WWW.ESA-USA.COM



# TRAFTON REACH FLOODPLAIN RESTORATION N.F. STILLEQUAMISH RIVER

REVISION	DATE	DESCRIPTION
1	3/2/25	BID ADDENDUM 1

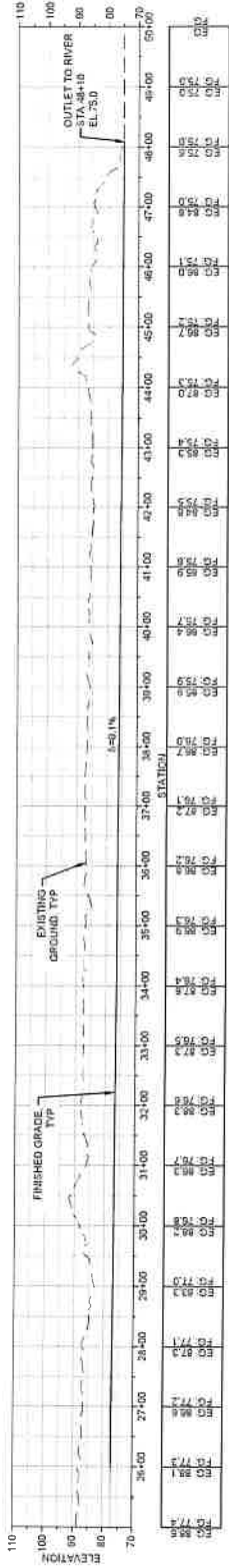
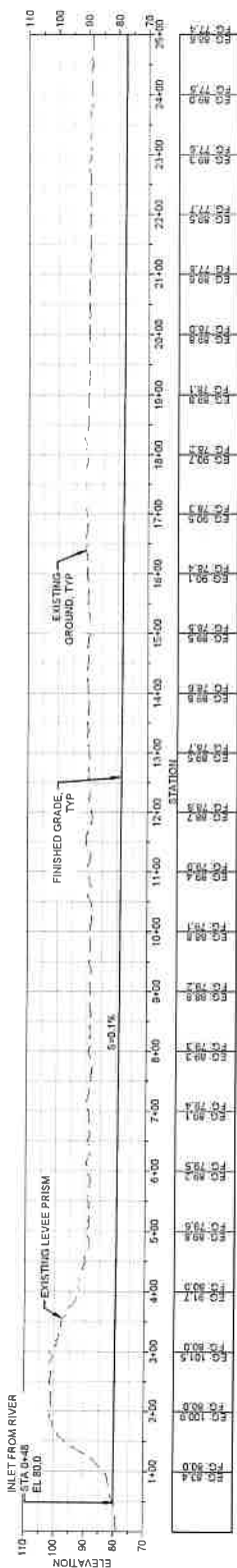
DESIGNED	GW/DE
DRAWN	GW
CHECKED	CM
IN CHARGE	SM

PROJECT NUMBER	D022100416
ISSUE DATE	2/4/2025
SCALE	AS SHOWN
PLOTTED TO	PL 1/4" = 1' - 0"

PHASE	100% CONSTRUCTION DOCUMENTATION
SHEET TITLE	

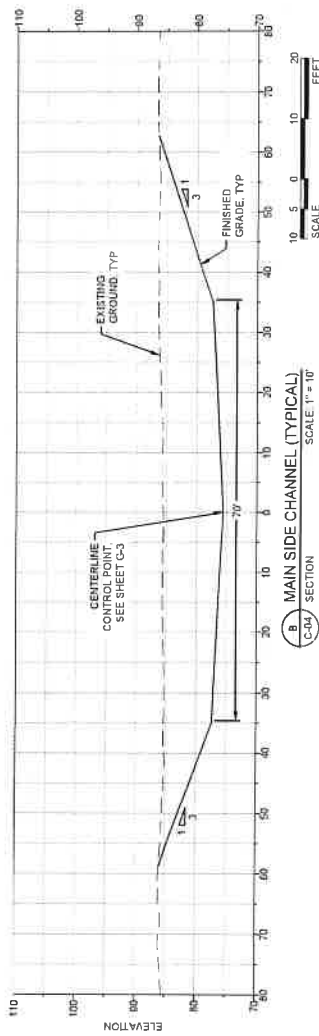
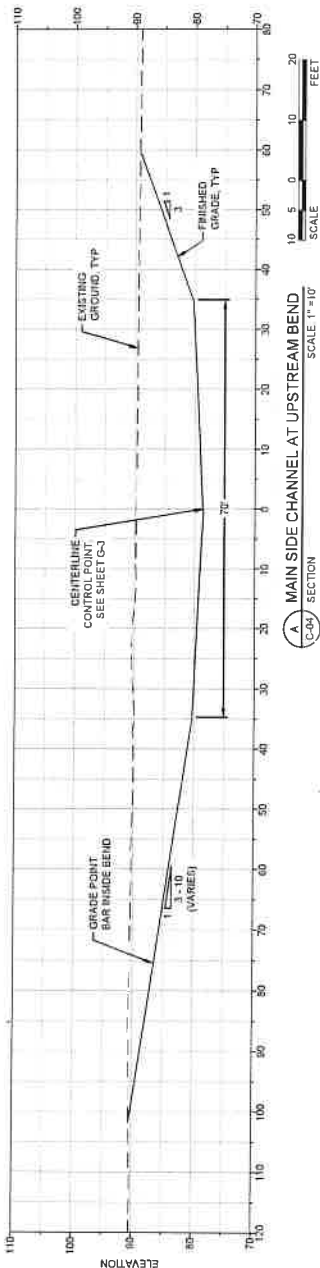
SIDE CHANNEL -  
PROFILE AND  
SECTIONS

SHEET NUMBER  
**C-11**  
SHEET 15 OF 42



- GENERAL NOTES
1. SECTIONS ARE ORIENTED LOOKING DOWNSTREAM (LEFT TO RIGHT).
  2. LOW FLOW CHANNEL AND LOCALIZED POOLS NEAR EL 74 NOT SHOWN. CONTRACTOR TO GRADE LOW FLOW CHANNEL COMPLEXITY AS DIRECTED BY THE ENGINEER.

PI MAIN SIDE CHANNEL  
C-06 PROFILE  
SCALE 1" = 100'



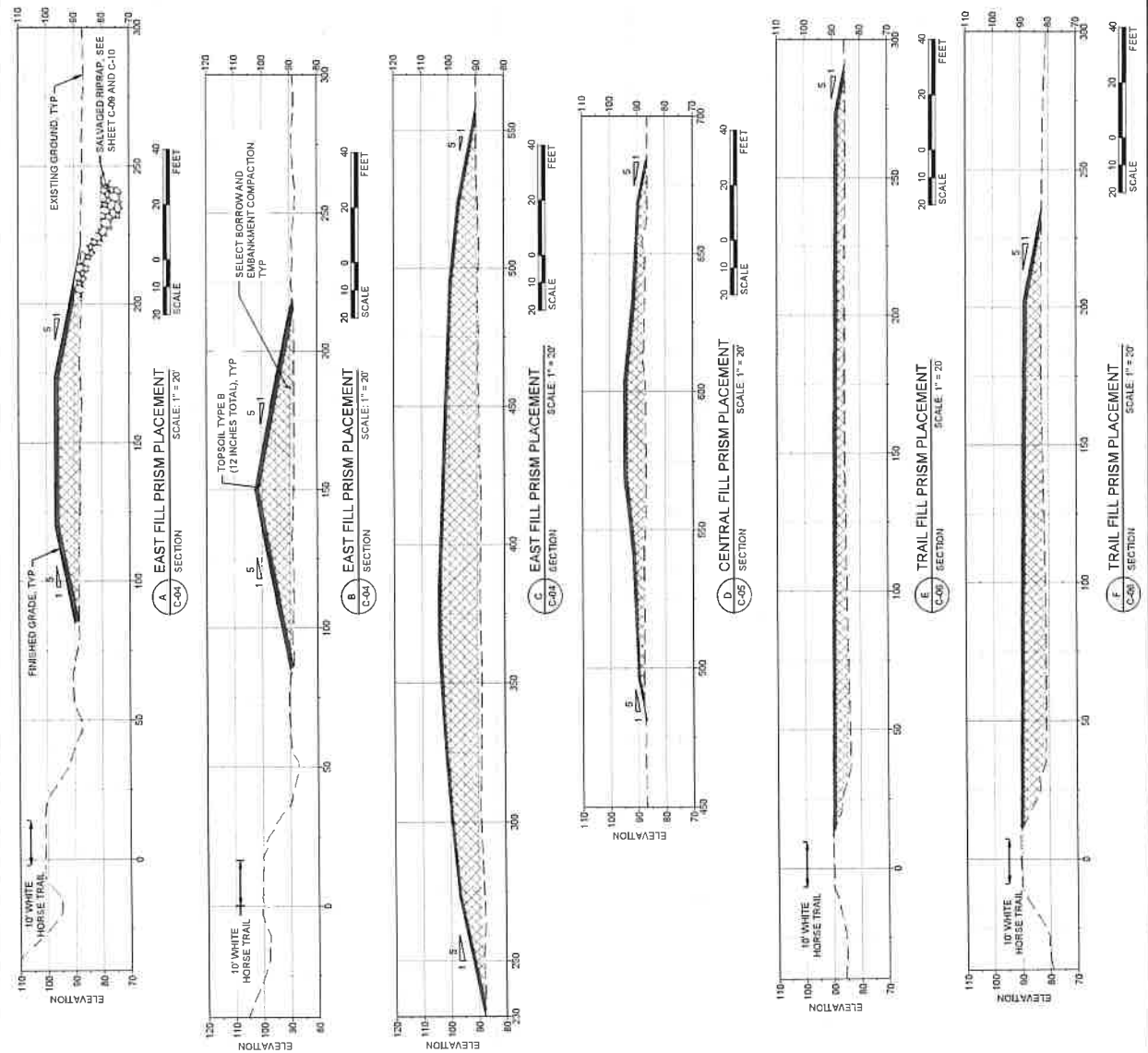


**LEGEND**

- TOPSOIL TYPE B PLACEMENT
- SELECT BORROW

**GENERAL NOTES**

- SOIL PLACEMENT AREAS ARE APPROXIMATE. THE INTENT IS TO BALANCE ALL EXCAVATION GENERATED ON-SITE AND PLACE SELECT BORROW UNDERNEATH TOPSOIL.
- SELECT BORROW SHALL BE GENERATED FROM EXCAVATION AND COMPACTED PER STANDARD SPECIFICATIONS.
- TOPSOIL TYPE B SHALL BE GENERATED FROM CLEARING AND GRUBBING OPERATIONS AND COMPACTED TO 85% RELATIVE DENSITY.
- REFER TO SECTION B42 IN THE SPECIAL PROVISIONS FOR TOPSOIL PLACEMENT REQUIREMENTS.
- THE OWNER SHALL WORK WITH THE CONTRACTOR TO BURY IDENTIFY TOPSOIL THAT IS WEED-PRONE FOR DEEP BURIAL A MINIMUM OF 4 FEET BELOW FINISHED GRADE. BURIAL OF THIS MATERIAL IS NOT SHOWN ON THIS SHEET.
- THE PROJECT REPRESENTATIVE MAY DIRECT OPERATIONS TO CREATE MICRO-TOPOGRAPHY AT THE TOP OF FILL PRISMS.





TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFTON WA

REF ID	N	DATE	DESCRIPTION
	1	2/2/25	BID ADDENDUM 1

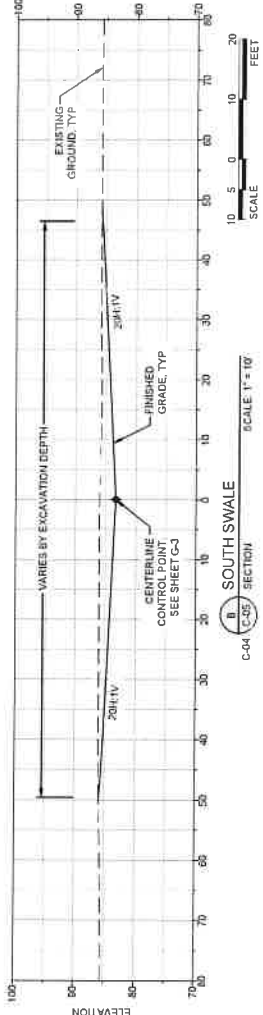
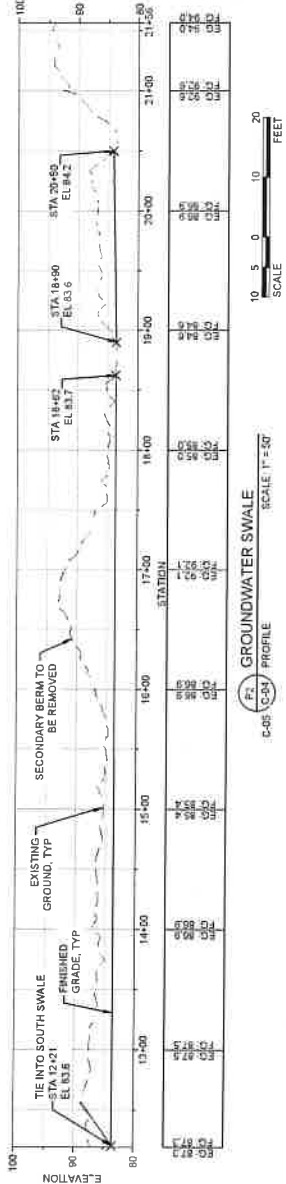
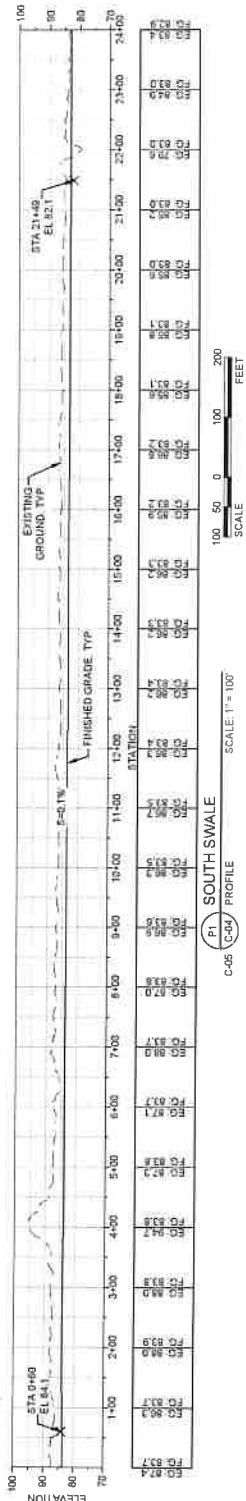
DESIGNED	GW/DE
DRAWN	GW
CHECKED	GM
IN CHARGE	SM

PROJECT NUMBER	0702100418
ISSUE DATE	3/4/2025
SCALE IS AS SHOWN WHEN PLOTTED AT FULL SIZE (1"=1'-0")	

PRICE	100% CONSTRUCTION
	DOCUMENTATION
SHEET TITLE	

SWALE GRADING -  
PROFILE AND  
SECTIONS (1)C-13  
STATE HOUSE

SHEET 17 OF 42



**GENERAL NOTES**

1. SECTIONS ARE ORIENTED LOOKING DOWNSTREAM (LEFT TO RIGHT).





207 ALASKA HWY  
SUITE 220  
ANCHORAGE, AK 99501  
OFFICE: 206.788.9458  
WWW.ESA-SC.COM



TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFTON WA

PROJECT NAME

SUBSECTION

# DATE DESCRIPTION

1 3/2/25 BID ADDENDUM 1

DESIGNED GW/DE

DRAWN GW

CHECKED GW

IN CHARGE SM

PROJECT NUMBER D202100418

ISSUE DATE 2/4/2025

DESIGNED BY INDIANAPOLIS

PROJECTED TO FULL SIZE (24" X 36")

SCALE

100% CONSTRUCTION

DOCUMENTATION

SHEET TITLE

SWALE GRADING -

PROFILE AND

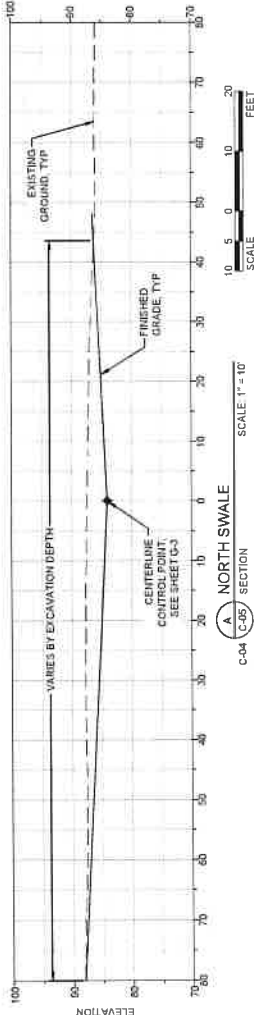
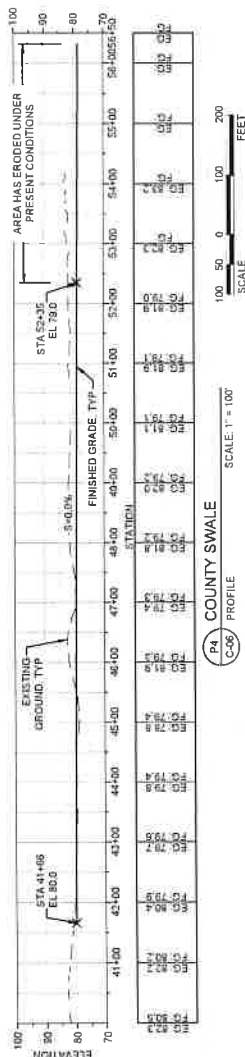
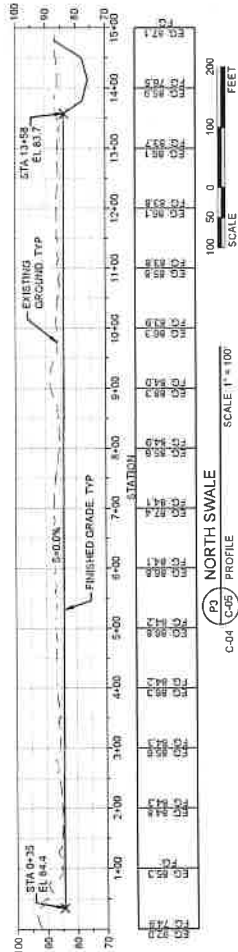
SECTIONS (2)

SHEET NUMBER

C-14

SHEET 18 OF 42

GENERAL NOTES  
1. SECTIONS ARE ORIENTED LOOKING DOWNSTREAM  
(LEFT TO RIGHT).







TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLEAGUMISH RIVER  
TRAFTON, VA

REVISION	DATE	DESCRIPTION
1	2/2/23	BID ADDENDUM 1

DESIGNED	GW/DE
DRAWN	GW
CHECKED	CM
IN CHARGE	SM

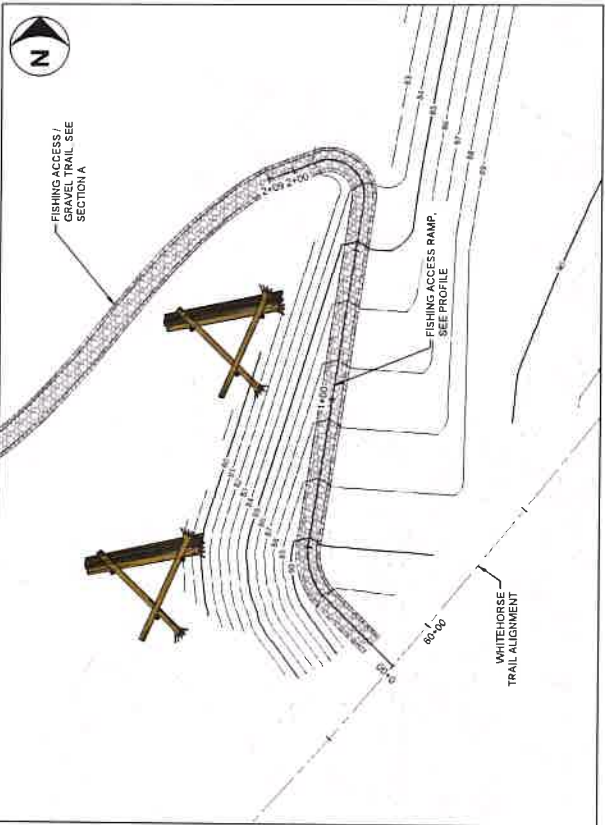
PROJECT NUMBER: D03200418  
ISSUE DATE: 2/4/2025  
SCALE: AS SHOWN  
PRINTED TO SCALE (2"=1')

PHASE:  
100% CONSTRUCTION  
DOCUMENTATION  
SHEET TITLE

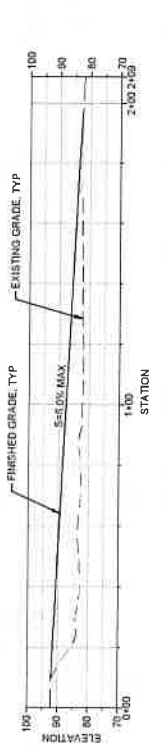
GRAVEL TRAIL  
DETAILS

C-15

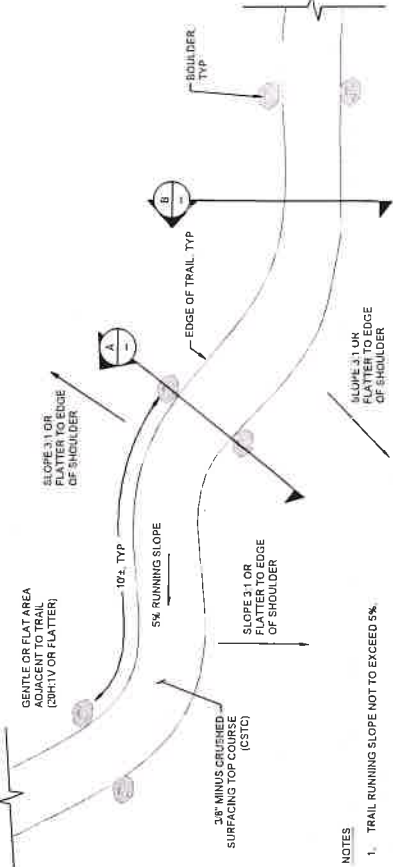
SHEET 19 OF 42



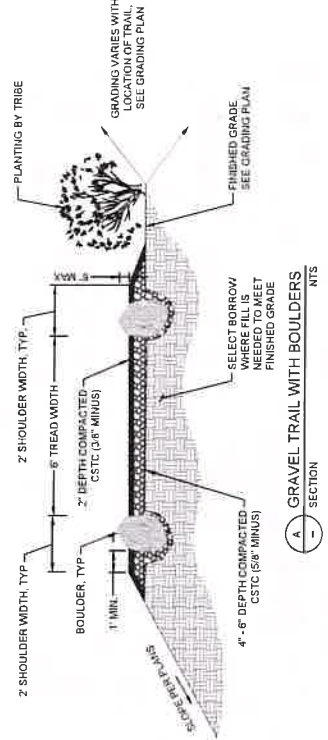
1. FISHING ACCESS RAMP  
SCALE 1" = 20'



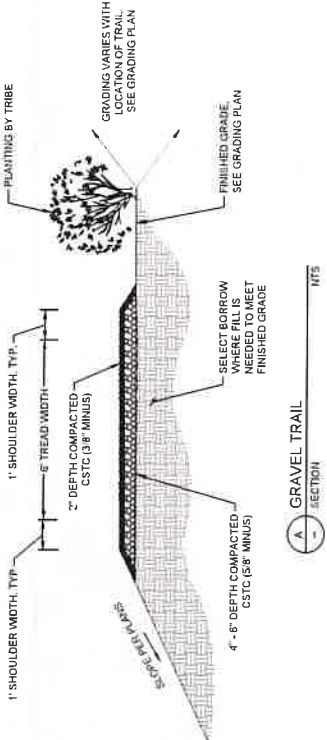
3. GRAVEL TRAIL / FISHING ACCESS  
SCALE 1" = 20'



2. GRAVEL TRAIL  
DETAIL



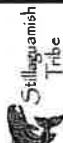
A. GRAVEL TRAIL WITH BOULDERS  
SECTION



A. GRAVEL TRAIL  
SECTION

- NOTES
1. TRAIL RUNNING SLOPE NOT TO EXCEED 5%.





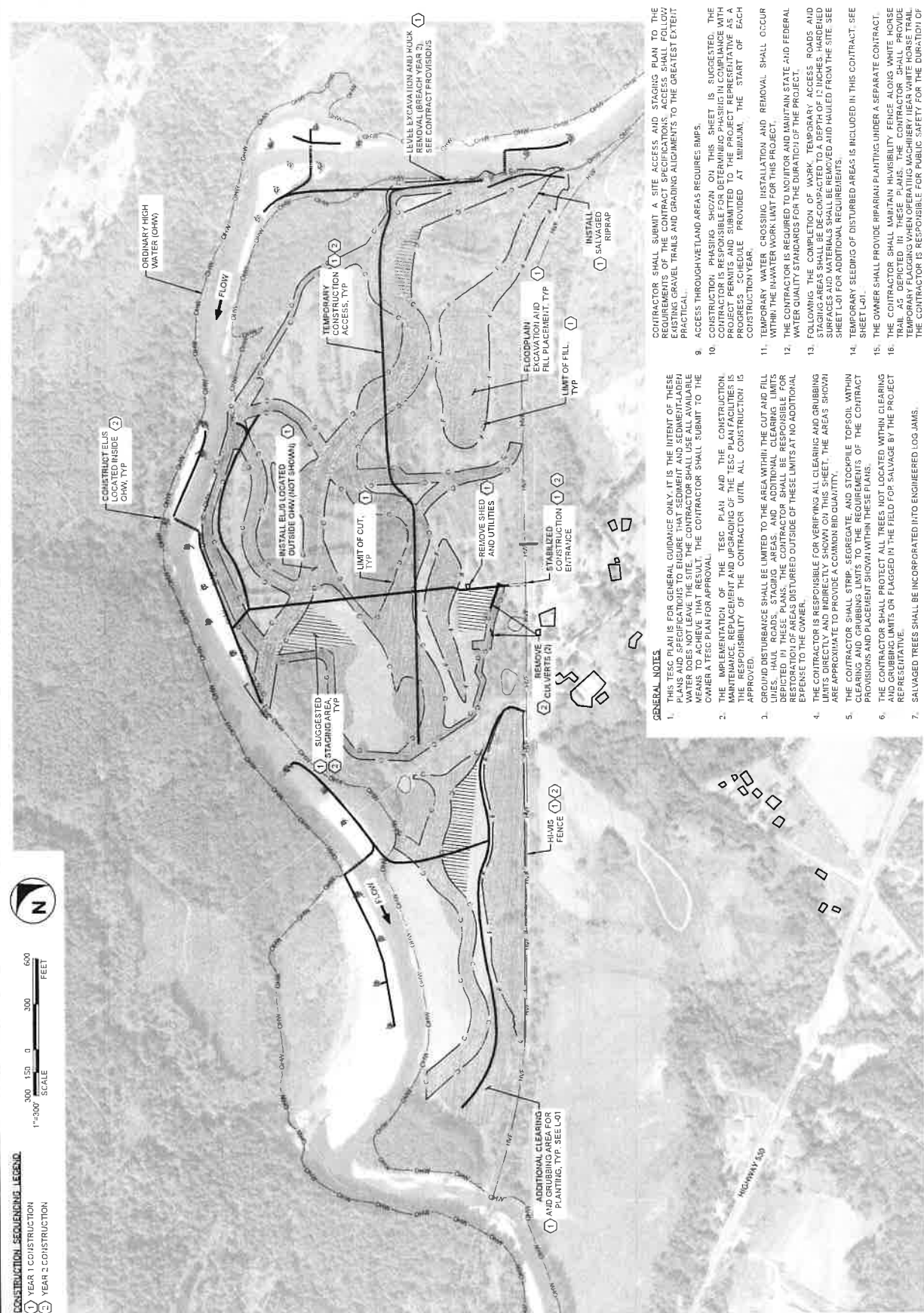
TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFTON WA

DATE	DESCRIPTION
3-22-25	BID ADJUDICUM 1
DESIGNED	GW / DE
DRAWN	GW
CHECKED	CM
CHARGE	SM
PROJECT NUMBER	D302100418
ISSUE DATE	2-4-2025
100% CONSTRUCTION DOCUMENTATION	
100% CONSTRUCTION DOCUMENTATION	

SUGGESTED  
SEQUENCING AND  
TESSC OVERVIEW

C-16

SHEET 20 OF 42



THE CONTRACTOR SHALL SUBMIT A SITEPLAN AND DESIGN PLAN TO THE DISTRICT ENGINEER FOR REVIEW AND APPROVAL. THE CONTRACT SPECIFICATIONS SHALL FOLLOW THE DISTRICT ENGINEER'S APPROVAL. THE CONTRACTOR SHALL FOLLOW THE DISTRICT ENGINEER'S APPROVAL OF THE DESIGN PLAN, THE EXISTING GRAVEL TRAILS AND GRADING ALIGNMENTS TO THE GREATEST EXTENT PRACTICAL.

ACCESS THROUGH VETLAND AREAS REQUIRES IMPS.

CONSTRUCTION PHASING SHOWN ON THIS SHEET IS SUGGESTED. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING PHASING IN COMPLIANCE WITH THE DISTRICT ENGINEER'S APPROVAL. THE CONTRACTOR SHALL SUBMIT A PROJECT PERMITS AND SUBMITTED TO THE PROJECT REPRESENTATIVE AS A PROJECT PROGRESS SCHEDULE PROVIDED AT MINIMUM, THE START OF EACH CONSTRUCTION PHASE.

THE CONTRACTOR SHALL PROVIDE CROSSING INSTALLATION AND REMOVAL SHALL OCCUR WITHIN THE WATERWAY WORK LIMIT FOR THIS PROJECT.

THE CONTRACTOR IS REQUIRED TO MAINTAIN AND MAINTAIN STATE AND FEDERAL WATER QUALITY STANDARDS FOR THE DURATION OF THE PROJECT.

FOLLOWING THE COMPLETION OF WORK, TEMPORARY ACCESS ROADS AND OUTSAGGING AREAS SHALL BE DECOMPACTED TO A DEPTH OF 12 INCHES. HARDENED SURFACES AND MATERIALS SHALL BE REMOVED AND HAULED FROM THE SITE. SEE SHEET L-01 FOR ADDITIONAL REQUIREMENTS.

TEMPORARY SEEDING OF DISTURBED AREAS IS INCLUDED IN THIS CONTRACT. SEE SHEET L-01.

THE OWNER SHALL PROVIDE RIPARIAN PLANTING UNDER A SEPARATE CONTRACT.

THE CONTRACTOR SHALL MAINTAIN HAVABILITY FENCE ALONG WHITE HORSE TRAIL AS DEPICTED IN THIS PLAN. THE CONTRACTOR SHALL PROVIDE TEMPORARY PLANTING WHEN OPERATING EQUIPMENT NEAR WHITE HORSE TRAIL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PUBLIC SAFETY FOR THE DURATION OF THE PROJECT.

**GENERAL NOTES**

1. THIS TESC PLAN IS FOR GENERAL GUIDANCE ONLY. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO REQUIRE THE CONTRACTOR SHALL CONSIDER ALL AVAILABLE MEANS TO ACHIEVE THAT RESULT. THE CONTRACTOR SHALL SUBMIT TO THE OWNER A TESC PLAN FOR APPROVAL.

2. THE IMPLEMENTATION OF THE TESC PLAN AND THE CONSTRUCTION OF MAINTENANCE, REPLACEMENT AND UPGRADING OF THE TESC PLAN FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.

3. GROUND DISTURBANCE SHALL BE LIMITED TO THE AREA WITHIN THE CUT AND FILL DEPOSITED IN THESE PLANS. ADDITIONAL CLEARING LIMITS SPECIFIED IN THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF AREAS DISTURBED OUTSIDE OF THESE LIMITS AT NO ADDITIONAL EXPENSE TO THE OWNER.

4. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL CLEARING AND GRUBBING LIMITS DIRECTLY AND INDIRECTLY SHOWN ON THIS SHEET. THE AREAS SHOWN ARE APPROXIMATE TO PROVIDE A COMMON REFERENCE QUANTITY.

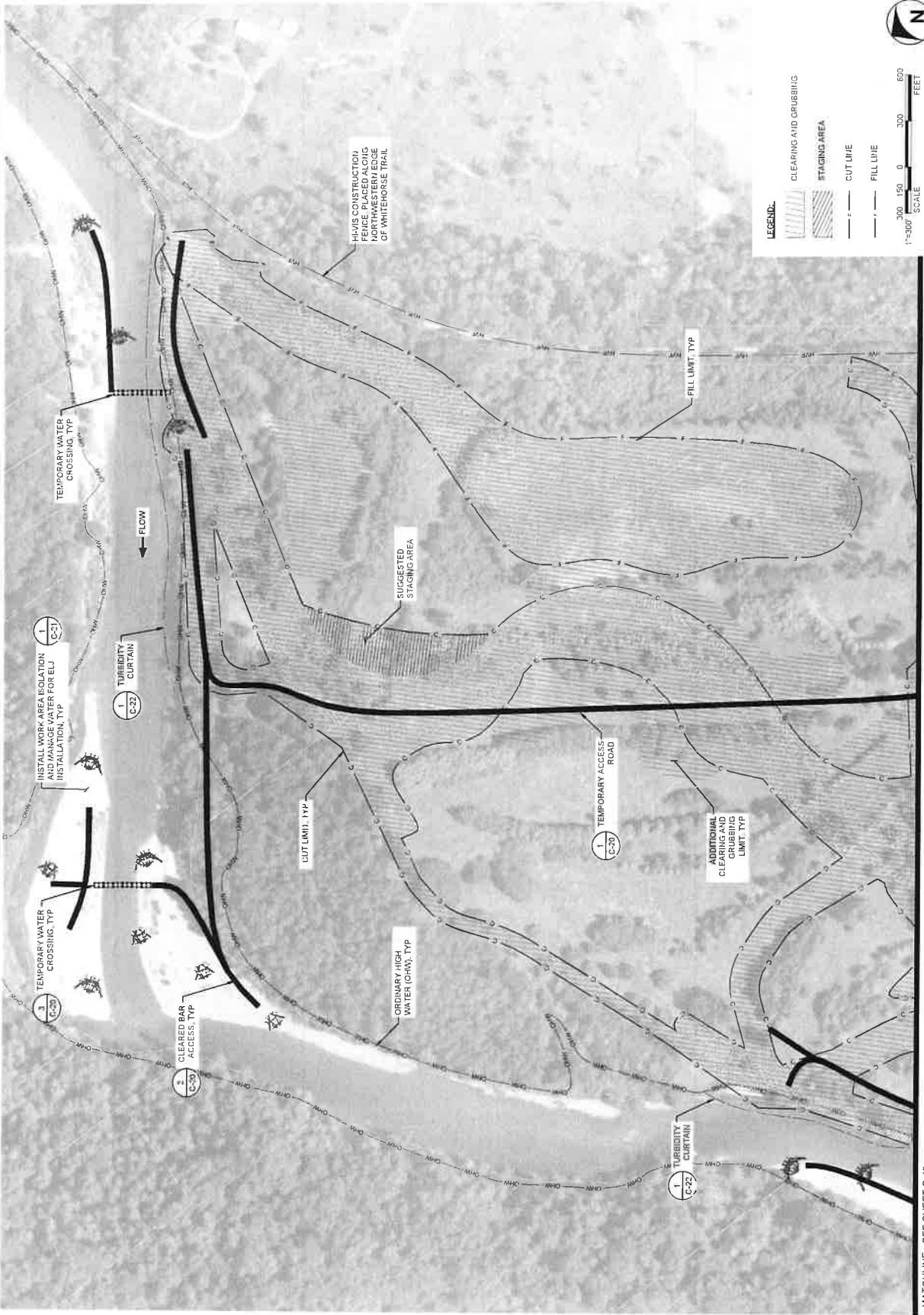
5. THE CONTRACTOR SHALL STAKE AND SURVEY ALL SURVEYABLE TOPSOIL WITHIN THE TESC PLAN. THE CONTRACTOR SHALL IDENTIFY THE REQUIREMENTS OF THE CONTRACT PROVISIONS AND PLACE THEM SHOWN WITHIN THESE PLANS.

6. THE CONTRACTOR SHALL PROTECT ALL TREES NOT LOCATED WITHIN CLEARING AND GRUBBING LIMITS OR FLAGGED IN THE FIELD FOR SALVAGE BY THE PROJECT REPRESENTATIVE.

7. SALVAGED TREES SHALL BE INCORPORATED INTO ENGINEERED LOG JAMS.

8. TEMPORARY CONSTRUCTION ACCESS AND STAGING IS SUGGESTED.





MATCHLINE - SEE SHEET C-18





200 ALLEGANY  
COUNTY, PA  
OFFICE OF THE  
SHERIFF



11/1/25  
Sullivan  
Tribe

TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFTON, VA

PROJECT NAME  
DATE  
DESCRIPTION  
1 2/2/25 BID ADDENDUM 1

DESIGNED BY/DE  
DRAWN BY/CM  
CHECKED BY/CM  
IN CHARGE SM

PROJECT NUMBER 000100418  
ISSUE DATE 2-4-2025  
ISSUED FOR THE TOWN OF  
TRAFTON, VA

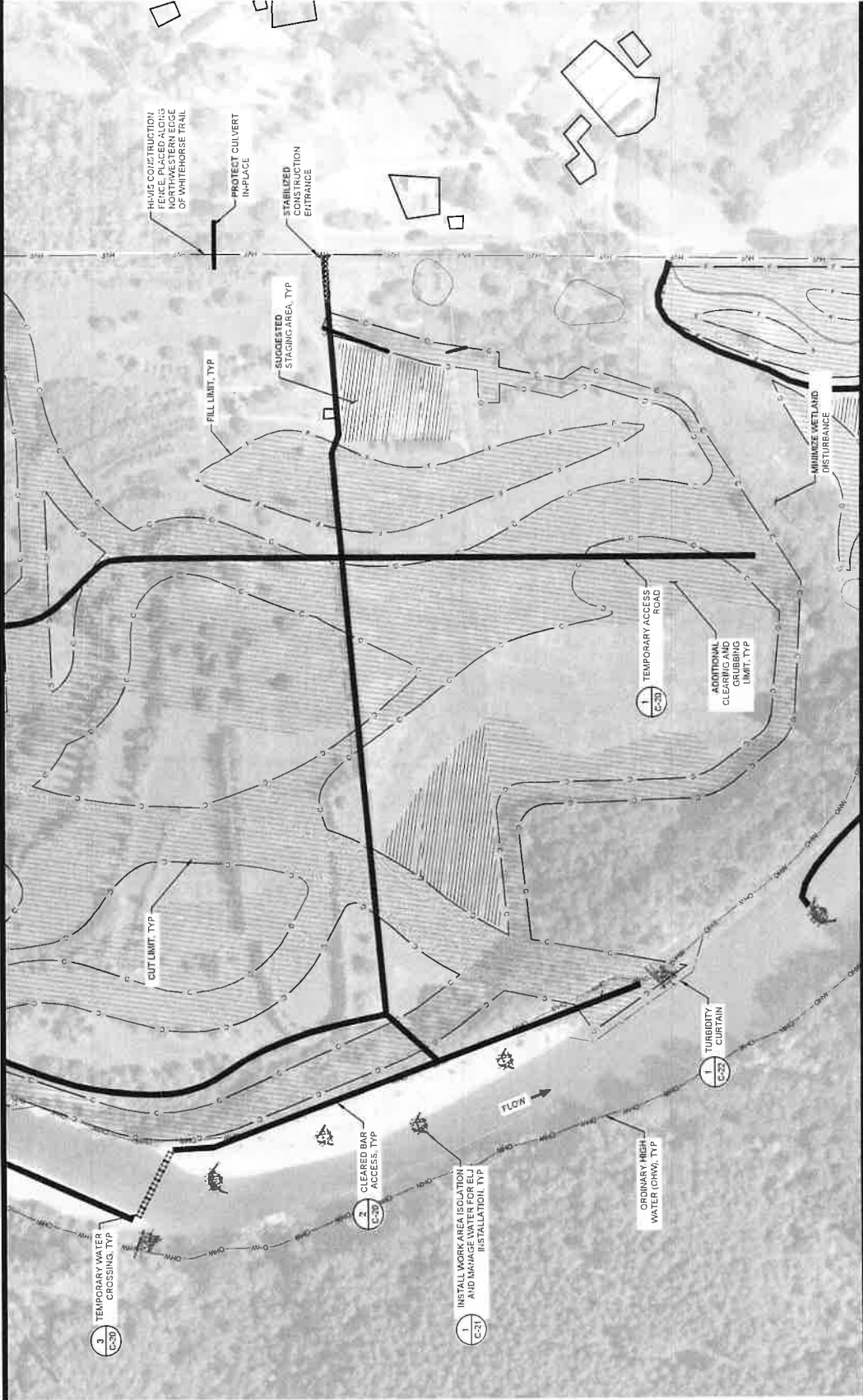
100% CONSTRUCTION  
DOCUMENTATION  
SHEET NAME

SITE PREPARATION  
AND TESC - 2

SHEET NUMBER  
C-18

SHEET 22 OF 42

MATCHLINE - SEE SHEET C-17




MATCHLINE - SEE SHEET C-19



1"=120' SCALE  
0 60 120 240  
FEET





Stilaguamish  
Tribe

TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFTON, WA

REVISED	#	DATE	DESCRIPTION
	1	2-2-25	BID ADDENDUM 1

DESIGNED	GWJDE
DRAWN	GW
CHECKED	CM
IN CHARGE	SM

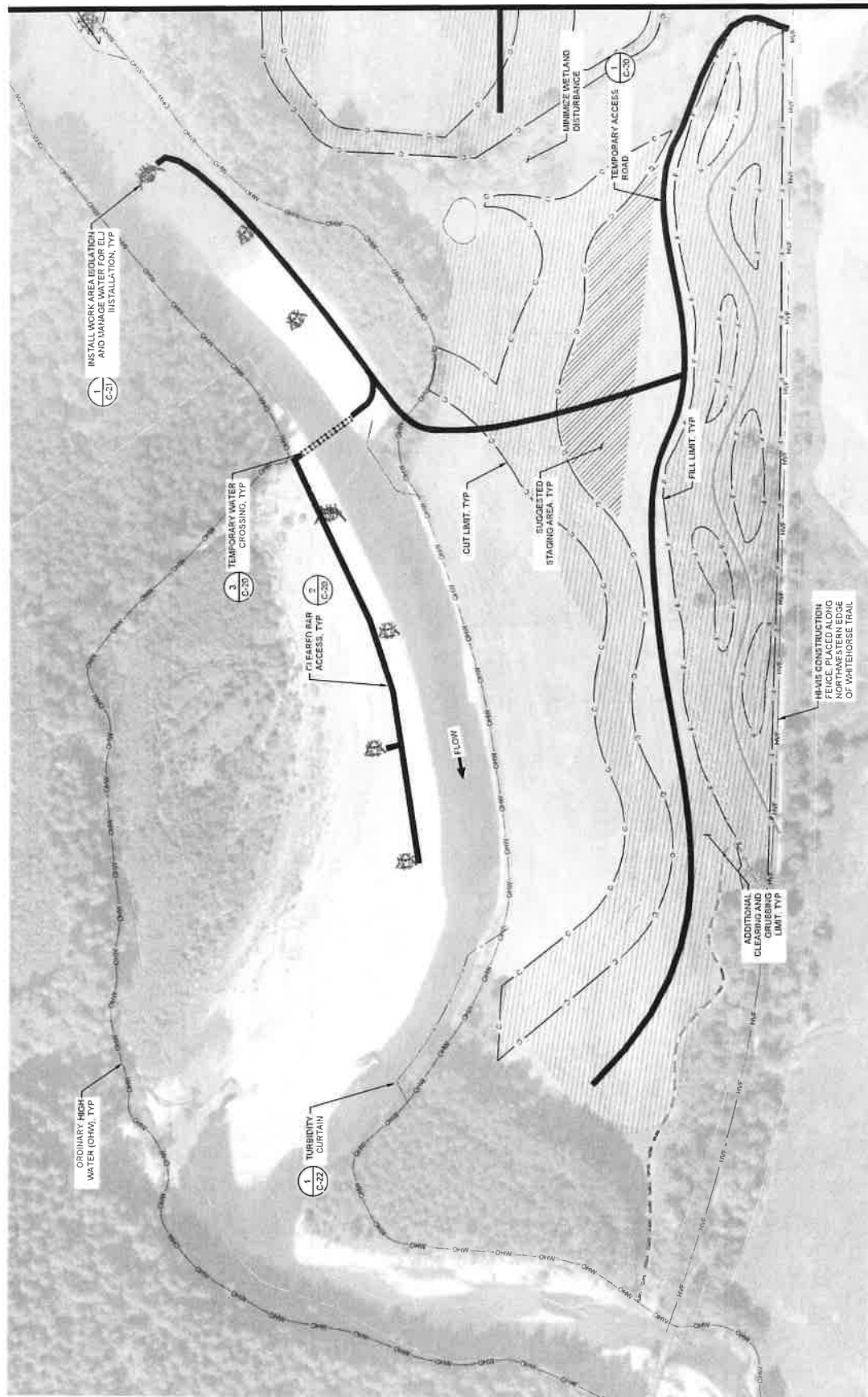
PROBECT HANDED 0302100418  
ISSUE DATE 2-4-2025  
SCALE 1:500000  
PLOTED TO FINAL DATE 02-04-2025

100% CONSTRUCTION  
DOCUMENTATION  
PAGE 111

### SITE PREPARATION AND TESC - 3

C-19

SHEET 23 OF 42



MATCHLINE - SEE SHEET C-13



1" = 120'

0 120 240

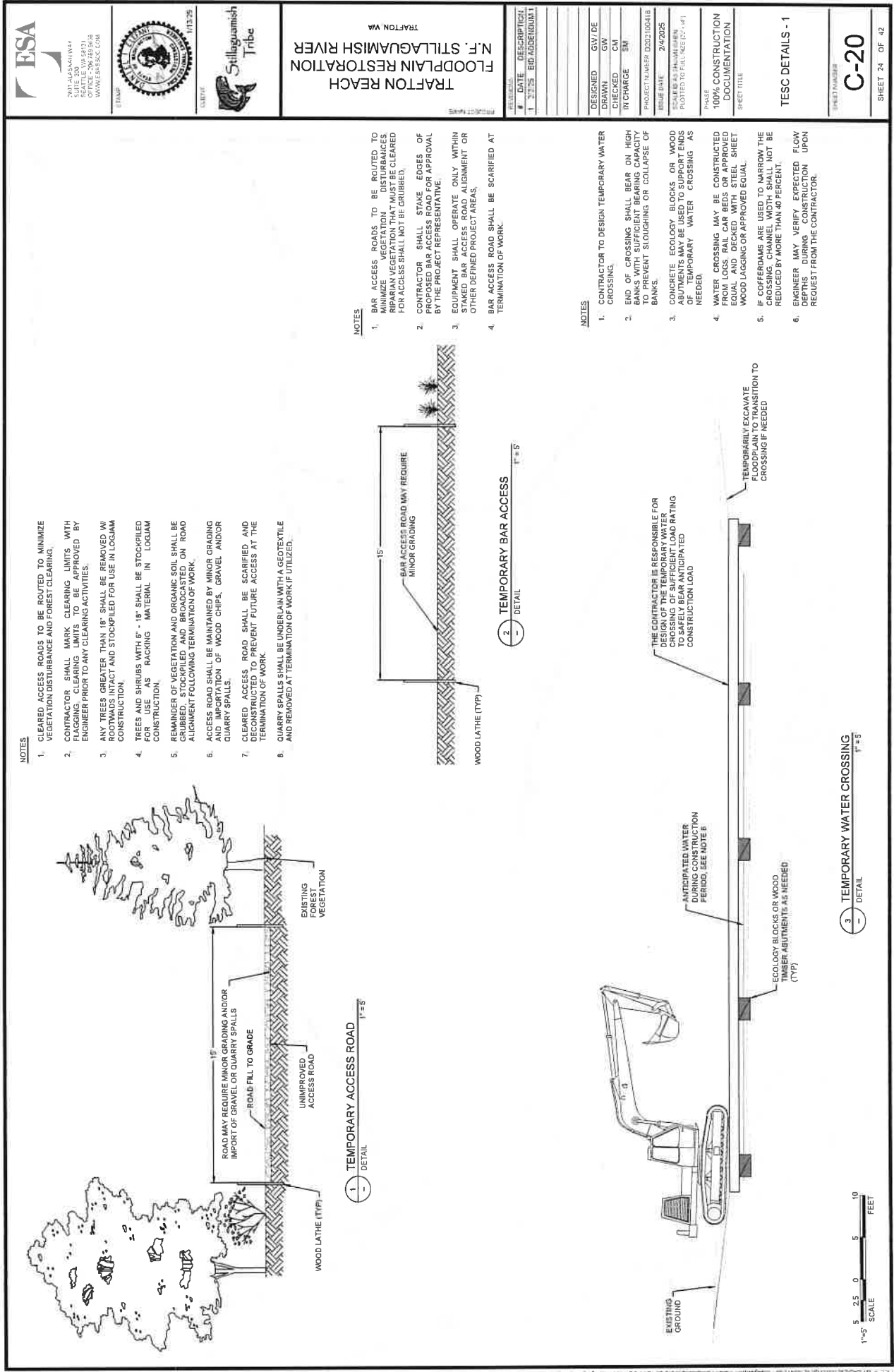
SCALE FEET

LEGEND:

CLEARING AND GRUBBING  
CUT LINE  
FILL LINE  
STAGING AREA

This document contains neither recommendations nor conclusions of the FBI. It is the property of the FBI and is loaned to your agency; it and its contents are not to be distributed outside your agency.





NOTES

1. CLEARED ACCESS ROADS TO BE ROUTED TO MINIMIZE VEGETATION DISTURBANCE AND FOREST CLEARING.
2. CONTRACTOR SHALL MARK CLEARING LIMITS WITH FLAGGING CLEARING LIMITS TO BE APPROVED BY ENGINEER PRIOR TO ANY CLEARING ACTIVITIES.
3. ANY TREES GREATER THAN 18" SHALL BE REMOVED W/ REMOVAL CONTRACT AND STOCKPILED FOR USE IN LOGJAM CONSTRUCTION.
4. TREES AND SHRUBS WITH 6" - 18" SHALL BE STOCKPILED FOR USE AS RACKING MATERIAL IN LOGJAM CONSTRUCTION.
5. REMAINDER OF VEGETATION AND ORGANIC SOIL SHALL BE GRUBBED, STOCKPILED AND BROADCASTED ON ROAD ALIGNMENT FOLLOWING TERMINATION OF WORK.
6. ACCESS ROAD SHALL BE MAINTAINED BY MINOR GRADING AND IMPORTATION OF WOOD CHIPS, GRAVEL AND/OR QUARRY SPALLS.
7. CLEARED ACCESS ROAD SHALL BE SCARIFIED AND DECONSTRUCTED TO PREVENT FUTURE ACCESS AT THE TERMINATION OF WORK.
8. QUARRY SPALLS SHALL BE UNDERLAIN WITH A GEOTEXTILE AND REMOVED AT TERMINATION OF WORK IF UTILIZED.

NOTES

1. BAR ACCESS ROADS TO BE ROUTED TO MINIMIZE DISTURBANCE TO RIPARIAN VEGETATION THAT MUST BE CLEARED FOR ACCESS SHALL NOT BE GRUBBED.
2. CONTRACTOR SHALL STAKE EDGES OF ROAD AND ACCESS ROAD FOR APPROVAL BY THE PROJECT REPRESENTATIVE.
3. EQUIPMENT SHALL OPERATE ONLY WITHIN STAKED BAR ACCESS ROAD ALIGNMENT OR OTHER DEFINED PROJECT AREAS.
4. BAR ACCESS ROAD SHALL BE SCARIFIED AT TERMINATION OF WORK.

NOTES

1. CONTRACTOR TO DESIGN TEMPORARY WATER CROSSING.
2. END OF CROSSING SHALL BEAR ON HIGH BANKS WITH SUFFICIENT BEARING CAPACITY TO PREVENT SLOUGHING OR COLLAPSE OF BANKS.
3. CONCRETE ECOLOGY BLOCKS OR WOOD ABUTMENTS MAY BE USED TO SUPPORT ENDS OF TEMPORARY WATER CROSSING AS NEEDED.
4. WATER CROSSING MAY BE CONSTRUCTED FROM LOGS, RAIL CAR BEDS OR APPROVED EQUAL AND DECAYED WITH STEEL SHEET PILING OR APPROVED EQUAL.
5. IF COFFERDAMS ARE USED TO NARROW THE CROSSING, CHANNEL WIDTH SHALL NOT BE REDUCED BY MORE THAN 40 PERCENT.
6. ENGINEER MAY VERIFY EXPECTED FLOW DEPTHS DURING CONSTRUCTION UPON REQUEST FROM THE CONTRACTOR.



TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFTON WA

REV	DATE	DESCRIPTION
1	2/2/25	BID ADDENDUM 1

DESIGNED	GW/DE
DRAWN	GW
CHECKED	CM
IN CHARGE	EM
PROJECT NUMBER	D022100418
ISSUE DATE	2/4/2025
SCALE	AS SHOWN
PLotted TO FULL SIZE	(24" x 48")

100% CONSTRUCTION  
DOCUMENTATION  
SHEET TITLE

TESC DETAILS - 1

C-20

SHEET 24 OF 42





ES&S  
ENVIRONMENTAL  
SCIENCE & SERVICES  
10000 13TH AVENUE  
SUITE 200  
DENVER, CO 80202  
WWW.ESA-INC.COM



CLIENT  
Stillaguamish  
Tribe

# TRAFTON REACH FLOODPLAIN RESTORATION N.F. STILLAGUAMISH RIVER TRAFTON, WA

REVISION	DATE	DESCRIPTION
1	2/2/25	BID ADDENDUM 1

DESIGNED	GW/DE
DRAWN	GW
CHECKED	CM
IN CHARGE	SM

PROJECT NUMBER D302100418  
ISSUE DATE 2/4/2025  
SCALE AS SHOWN  
PLOT TO FULL SIZE (2" = 1')

100% CONSTRUCTION  
DOCUMENTATION  
SHEET TITLE

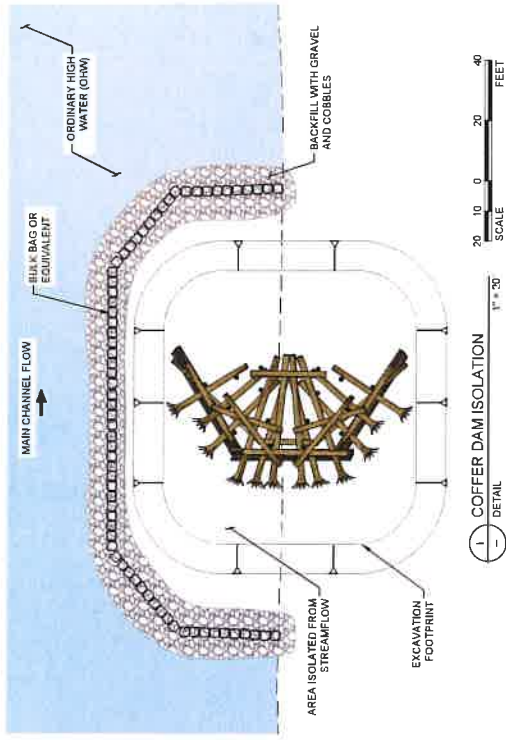
TESC DETAILS - 2

C-21

SHEET 25 OF 42

## NOTES

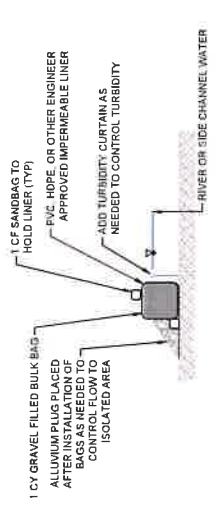
- SAMPLE SITE ISOLATION METHODS LISTED IN THE TESC SHALL BE USED TO ISOLATE RIVER CHANNELS DURING CONSTRUCTION. RIVER CHANNELS ARE SUBJECT TO CHANGE BASED ON SITE CONDITIONS AND DESIGN. THE CONTRACTOR'S RESPONSIBILITY IS TO DESIGN AND MANAGE WATER MANAGEMENT METHODS TO MEET THE REQUIREMENTS OF ALL PERMITS AND STATE WATER QUALITY REQUIREMENTS.



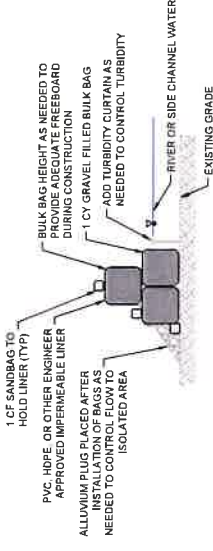
## NOTES

- PLACER REMOVE ALLUVIUM AS LAST/FIRST STEP OF BULK BAG ISOLATION SYSTEM INSTALLATION/REMOVAL.
- ONLY INSTALL SINGLE BULK BAG ISOLATION WHERE WATER DEPTH IS EXPECTED TO BE LESS THAN 2 FEET. IF GREATER THAN 2 FEET, USE MULTIPLE BULK BAG COFFER DAM.

1 COFFER DAM ISOLATION  
1" = 30'  
SCALE  
DETAIL



2 EXAMPLE SINGLE BULK BAG COFFERDAM  
NOT TO SCALE  
DETAIL



3 EXAMPLE MULTIPLE BULK BAG COFFERDAM  
NOT TO SCALE  
DETAIL





PROJECT NAME  
TRAFON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER  
TRAFON, WA

REV	DATE	DESCRIPTION
1	2/2/25	REVISED

DESIGNED	GW/DE
DRAWN	GW/DE
CHECKED	GW/DE
IN CHARGE	GW/DE

PROJECT NUMBER: D00100418  
ISSUE DATE: 2-4-2025  
SCALE: AS SHOWN  
PLOT FILE: 19-001-00418.dwg

DATE: 100% CONSTRUCTION DOCUMENTATION  
SHEET TITLE

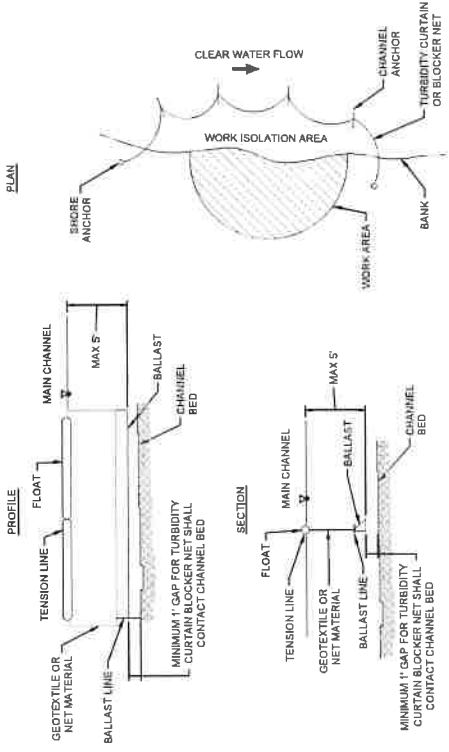
TESC DETAILS - 3

SHEET NUMBER  
C-22

SHEET 26 OF 42

NOTES

1. BLOCKER NETS SHALL EXTEND MIN. 5' ABOVE THE WATER SURFACE TO PREVENT FISH FROM JUMPING.
2. IN AREAS OF HIGH VELOCITY OR UNEVEN BED, PILE BLOCKER NETS SHALL BE ANCHORED TO THE BED. IT TIGHTLY TO THE BED.



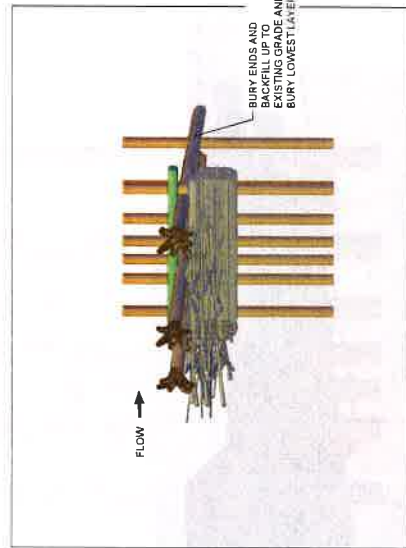
1. TURBIDITY CURTAIN OR BLOCK NET  
NOT TO SCALE  
ALL WORK SHOWN ON THIS  
DETAIL IS WITHIN CHW



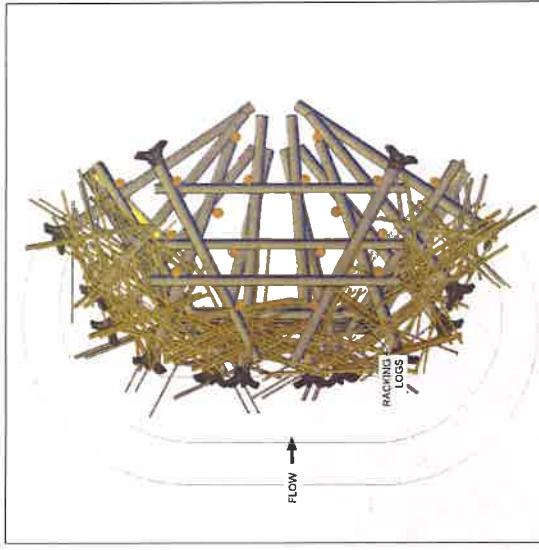


TYPE 1 LARGE APEX JAM - MATERIAL SCHEDULE				
MATERIAL ID	DIAMETER (IN)	LENGTH (FT)	QTY-PER STRUCTURE	
KEY LOG (K1)	16 - 24	30 - 50	14	
KEY LOG (K2)	12 - 15	30 - 50	0	
LOG MEMBER (L1)	12 - 18	30 - 50	8	
TIMBER PIE (P1)	2" BUTT	50	1	
RACKING BUNDLE	48	30 - 40	6	
RACKING LOGS	4 - 8	20 - 40	150	
WOODY SLASH	-	-	150 C1	
HARDWARE CONNECTION	-	-	18	



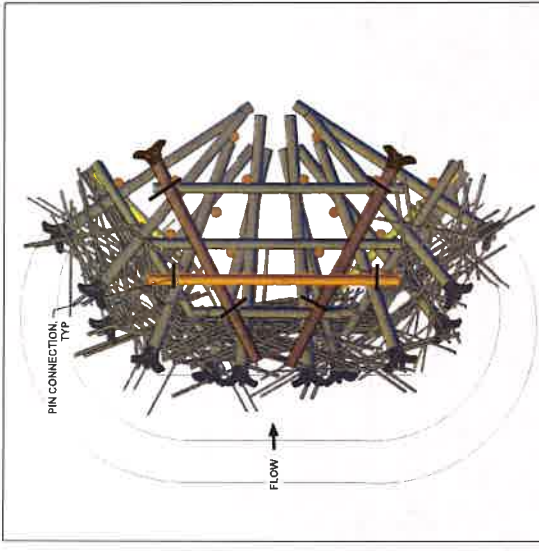
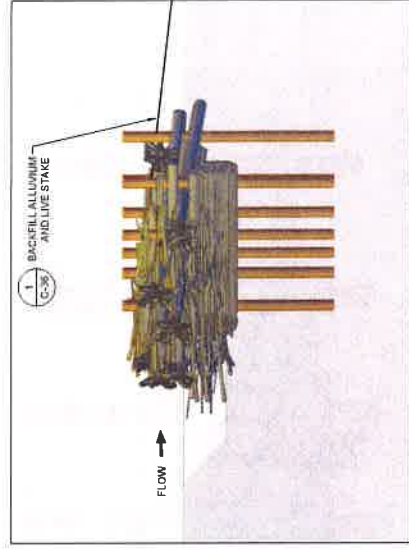






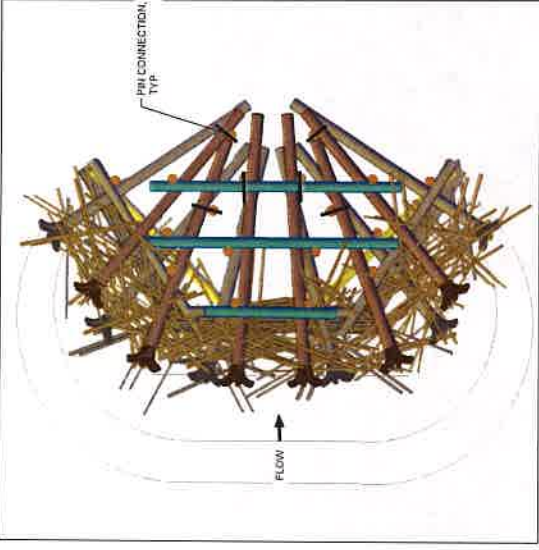
LAYER 5

1. BACKFILL THE STRUCTURE WITH ALLUVIUM AND SLASH UNTIL MATERIAL CRESTS ABOVE THE CURRENT LAYER.
2. LIVE STAKE STRUCTURE PER SHEET C-36.



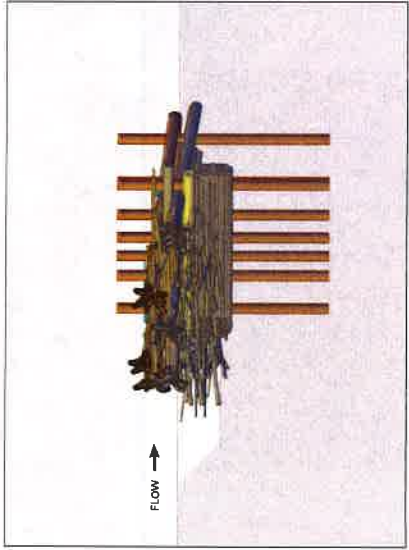
LAYER 4

1. PLACE 2 KEY LOGS.
2. PLACE 1 LOG MEMBER.
3. BACKFILL THE STRUCTURE WITH ALLUVIUM AND SLASH UNTIL MATERIAL CRESTS ABOVE THE CURRENT LAYER.
4. INSTALL 8 PIN CONNECTIONS WHERE SHOWN.



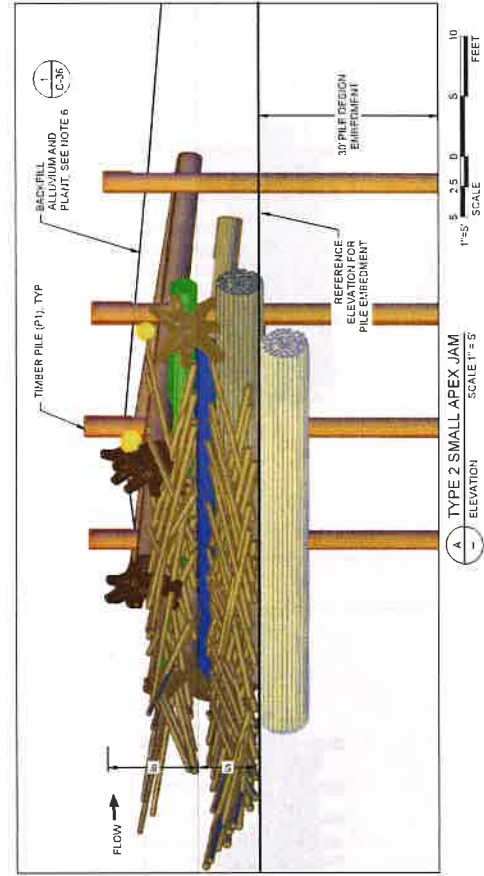
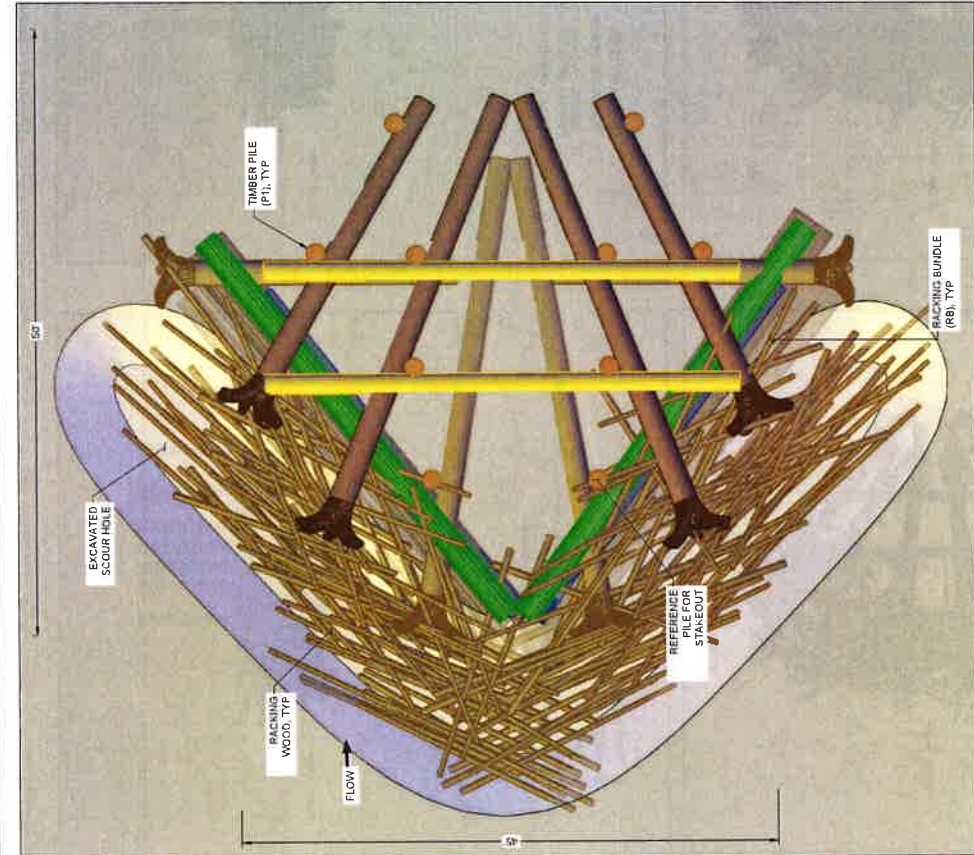
LAYER 3

1. PLACE RACKING LOGS IN FRONT OF STRUCTURE.
2. PLACE 8 KEY LOGS.
3. PLACE 3 LOG MEMBERS.
4. BACKFILL THE STRUCTURE WITH ALLUVIUM AND SLASH UNTIL MATERIAL CRESTS ABOVE THE CURRENT LAYER.
5. INSTALL 8 PIN CONNECTIONS WHERE SHOWN.



ELEVATIONS





1 TYPE 2 SMALL APEX JAM  
PLAN VIEW  
SCALE 1"=5'

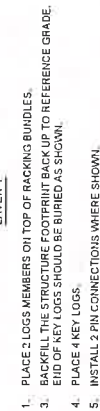
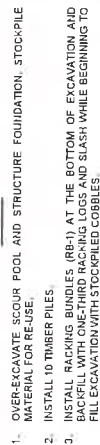
1 TYPE 2 SMALL APEX JAM  
ELEVATION  
SCALE 1"=5'

TYPE 2 SMALL APEX JAM - MATERIAL SCHEDULE			
MATERIAL ID	DIMETER (IN)	LENGTH (FT)	QUANTITY PER STRUCTURE
KEY LOG (K1)	16 - 24	30 - 50	6
KEY LOG (K2)	12 - 15	30 - 35	2
LOG MEMBER	12 - 18	30 - 50	5
TIMBER PILE (P1)	24 BUTT	45	10
PACKING BUNDLE	48	30 - 40	6
PACKING LOGS	4 - 8	20 - 40	110
WOODY SLASH	-	-	40 CY
HARDWARE CONNECTION	-	-	12

NOTES

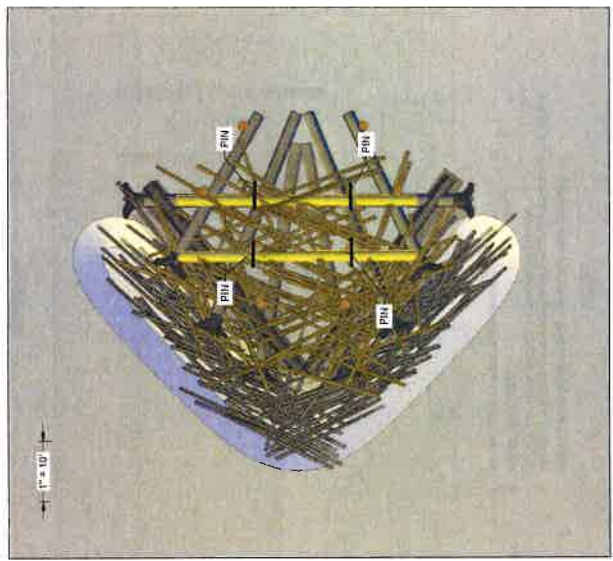
1. SEE LAYERING PLANS FOR PILE CONNECTIONS TO TIMBER PILES.
2. LAYERING PLANS MAY NOT SHOW ALL REQUIRED TEMPORARY SUB-GRADE EXCAVATION.
3. SEE SECTION 6 OF THE SPECIAL PROVISIONS FOR PILE DRIVING REQUIREMENTS.
4. REFER TO SECTION 6-3 IN THE SPECIAL PROVISIONS FOR PILE INSTALLATION REQUIREMENTS, INCLUDING TARGET DEPTH, MINIMUM DEPTH, AND PILE CONTINGENCY AND INSTALLATION PLAN.
5. LOG LENGTHS ARE SPECIFIED TO PROVIDE EXTRA LENGTH TO ALLOW FOR EMBEDEDMENT. THE CONTRACTOR IS EXPECTED TO TRIM LOGS AS NEEDED TO FIT.
6. BACKFILL STRUCTURES WITH LOCALLY EXCAVATED SEDIMENTS, WOODY SLASH AND STAKE WILLOWS.





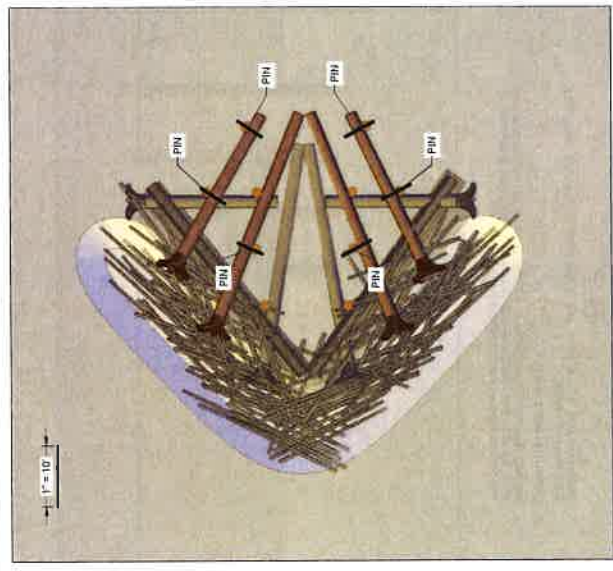
## ELEVATIONS





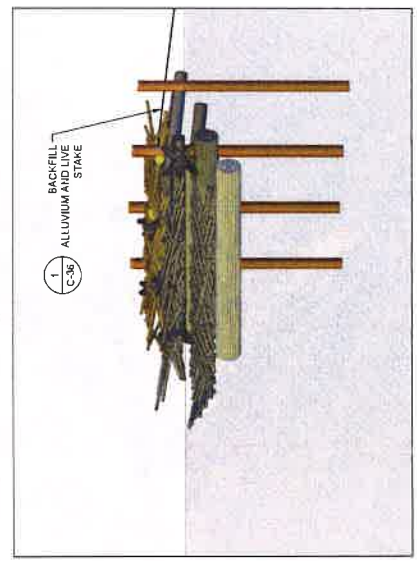
LAYER 4

1. INSTALL FINAL THIRD OF BACKING LOGS AND SLASH
2. INSTALL 2 LOGS. THESE LOGS MAY BE FIELD ADJUSTED TO DIFFERENT ELEVATIONS AS TO CREATE A SOLID (TOUCHING) CONNECTIONS BETWEEN 2 PILES
3. INSTALL 2 PINS PER LOG WHERE IN CONTACT WITH PILE LOGS (4 PINS TOTAL)
4. BACKFILL ALLUVIUM, SLASH, AND LIVE STAKE PER SHEET C-36.



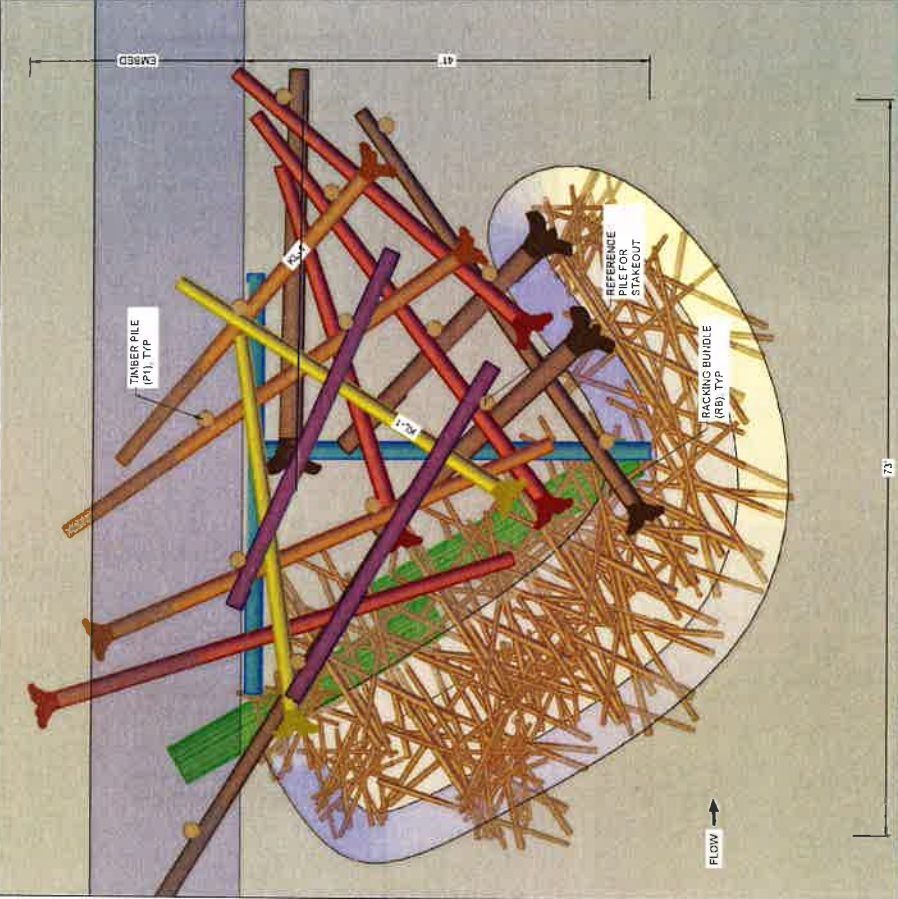
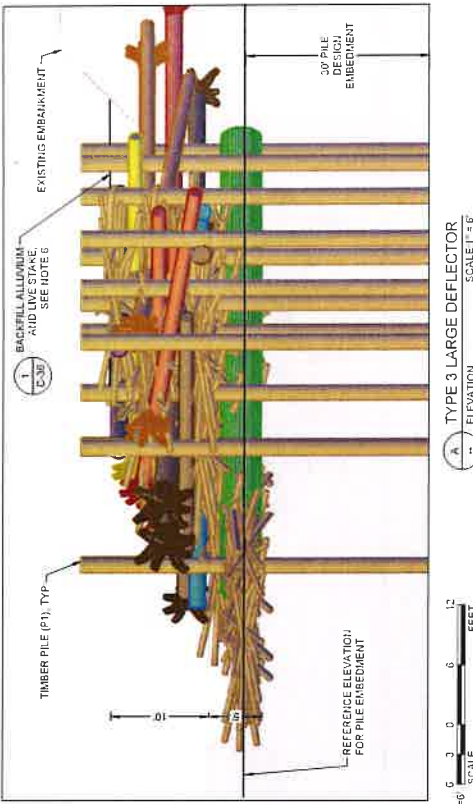
LAYER 3

1. INSTALL 4 KEY LOGS.
2. INSTALL 6 PIN CONNECTIONS WHERE SHOWN.



ELEVATIONS

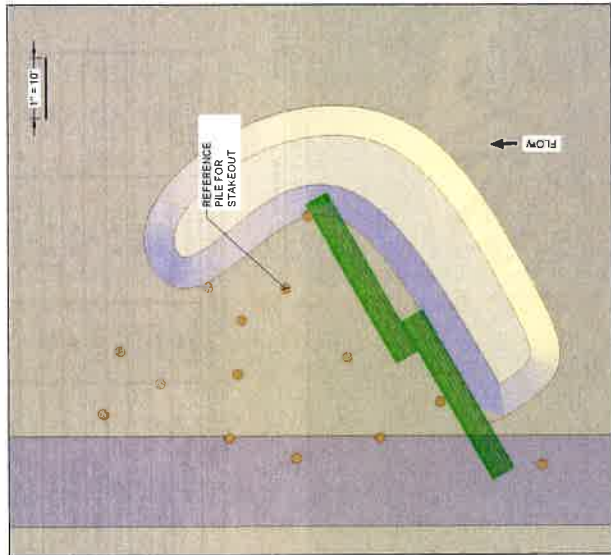




- NOTES
- SEE LAYERING PLANS FOR PILE CONNECTIONS TO TIMBER PILES.
  - LAYERING PLANS MAY NOT SHOW ALL REQUIRED TEMPORARY SUB-GRADE EXCAVATION REQUIRED TO EMBED WOOD.
  - SEE SECTION 6 OF THE SPECIAL PROVISIONS FOR PILE DRIVING REQUIREMENTS.
  - REFER TO SECTION 6.36 IN THE SPECIAL PREVIOUS FOR PILE INSTALLATION REQUIREMENTS, INCLUDING TARGET DEPTH, MINIMUM DEPTH AND PILE CONTINGENCY AND INSTALLATION PLAN.
  - LOG LENGTHS ARE SPECIFIED TO PROVIDE EXTRA LENGTH AND FLEXIBILITY FOR PLACEMENT THE LOGS EXPECTED TO YIELD LOSSES AS NEEDED TO FIT.
  - BACKFILL STRUCTURES WITH LOCALLY EXCAVATED SEDIMENTS, WOODY SLASH, AND STAKE WILLOWS.

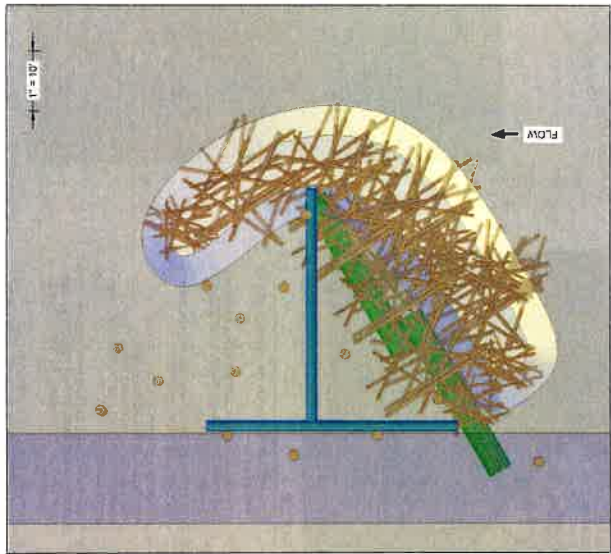
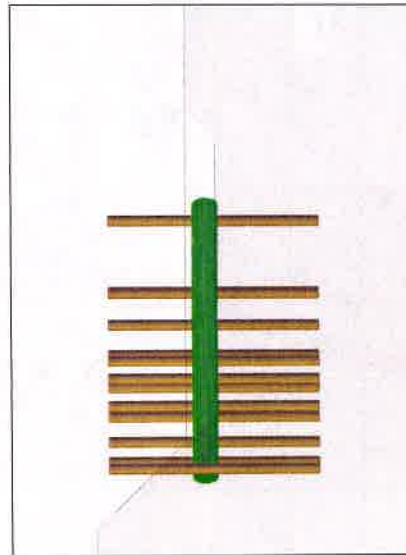
TYPE 3 LARGE DEFLECTOR - MATERIAL SCHEDULE			
MATERIAL ID	DIAMETER (IN)	LENGTH (FT)	QUANTITY PER STRUCTURE
KEY LOG (K1)	18 - 24	30 - 50	14
KEY LOG (K2)	12 - 15	30 - 50	0
LOG MEMBER	12 - 18	30 - 50	4
TIMBER PILE (P1)	24" BUTT	45	14
RACKING BUNDLE	48	30 - 40	2
RACKING LOGS	4 - 6	20 - 40	150
WOODY SLASH	-	-	75 CY
HARDWARE CONNECTION	-	-	16





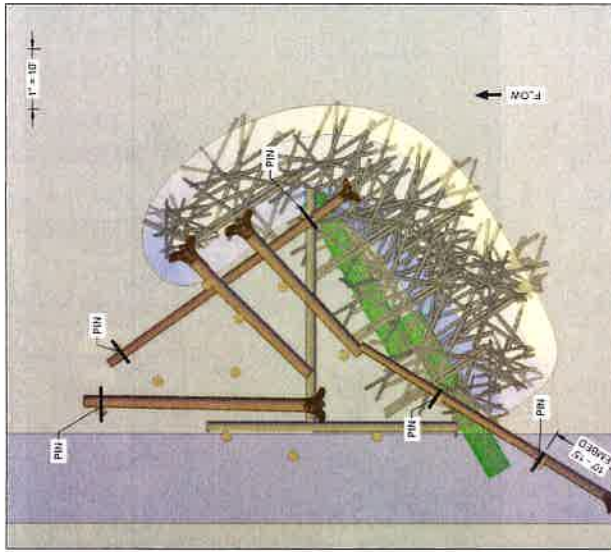
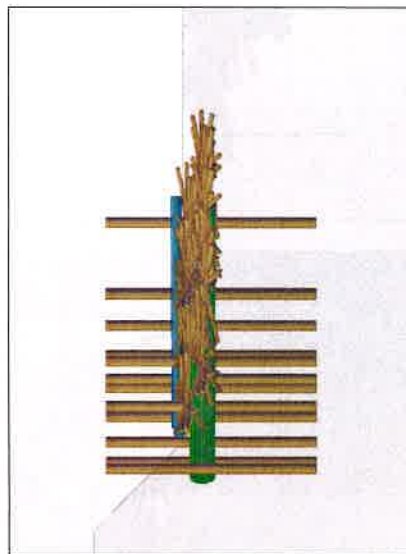
LAYER 0

1. OVER-EXCAVATE SCOUR POOL AND STRUCTURE FOUNDATION, STOCKPILE MATERIAL FOR RE-USE.
2. INSTALL 14 TIMBER PILES.
3. INSTALL 2 RACKING BUNDLES III OVER-EXCAVATION, BRACE AGAINST PILES.



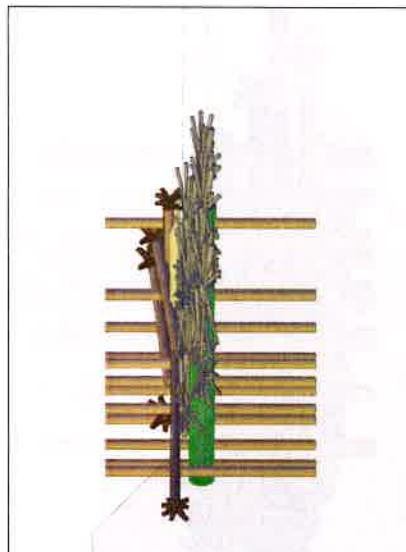
LAYER 1

1. PLACE 2 LOGS PERPENDICULAR TO EACH OTHER.
2. INSTALL ONE-THIRD RACKING RACKING LOGS AND SLASH WHILE BEGINNING TO FILL EXCAVATION WITH STOCKPILED COBBLES.



LAYER 2

1. PLACE 4 KEY LOGS. SMALLER KEY LOGS WILL OVERLAP LARGER ROOTWAD.
2. PLACE 1 KEY WITH ROOTWAD EMBEDDED IN BANK AND BANKFILL.
3. INSTALL 5 PILE CONNECTIONS WHERE SHOWN.



### ELEVATIONS



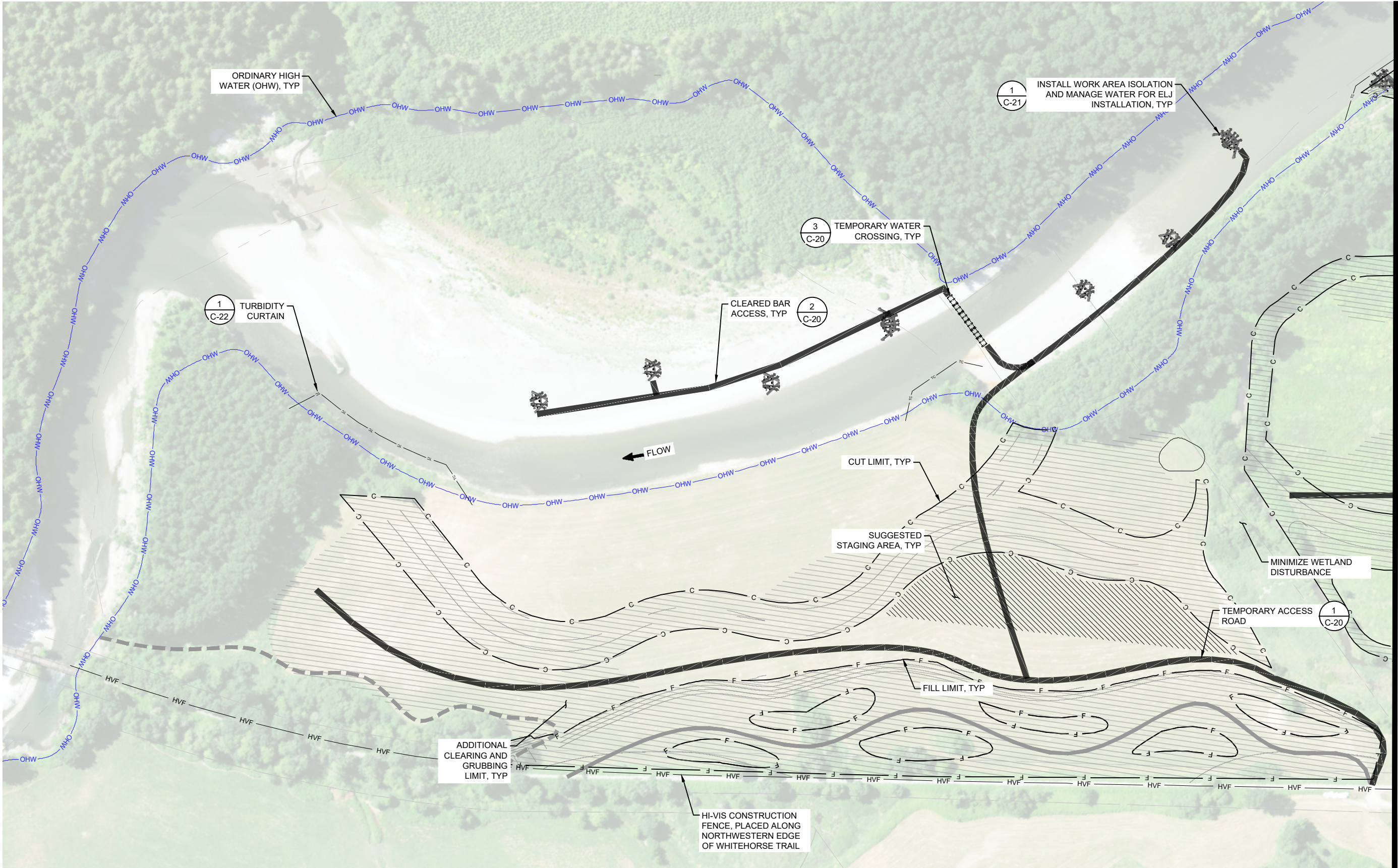




**EXHIBIT E**  
**STAGING AREA PLAN**

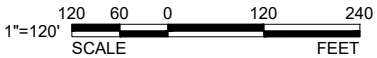


FILE: P:\01 CAD\2021\xxxx\202100418.00 - Stillaguamish Trafton Floodplain DWG-C-16 SUGGESTED SEQUENCING AND TESC OVERVIEW.dwg PLOT DATE: 2/6/2025 4:20:16 PM PLOTTED BY: GREG WOLOVEKE



**LEGEND:**

	CLEARING AND GRUBBING		CUT LINE
	STAGING AREA		FILL LINE



MATCHLINE - SEE SHEET C-18

**ESA**  
2801 ALASKAN WAY,  
SUITE. 200  
SEATTLE, WA 98121  
OFFICE - 206.789.9658  
WWW.ESASSOC.COM

STAMP

CLIENT

PROJECT NAME  
**TRAFTON REACH  
FLOODPLAIN RESTORATION  
N.F. STILLAGUAMISH RIVER**  
TRAFTON, WA

REVISIONS		
#	DATE	DESCRIPTION
1	2/2/25	BID ADDENDUM 1

DESIGNED	GW / DE
DRAWN	GW
CHECKED	CM
IN CHARGE	SM

PROJECT NUMBER	D202100418
ISSUE DATE	2/4/2025
SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")	

PHASE	100% CONSTRUCTION DOCUMENTATION
-------	---------------------------------

SHEET TITLE

**SITE PREPARATION  
AND TESC - 3**

SHEET NUMBER  
**C-19**  
SHEET 23 OF 42



Spill kits located on crew trailers and staging areas.

